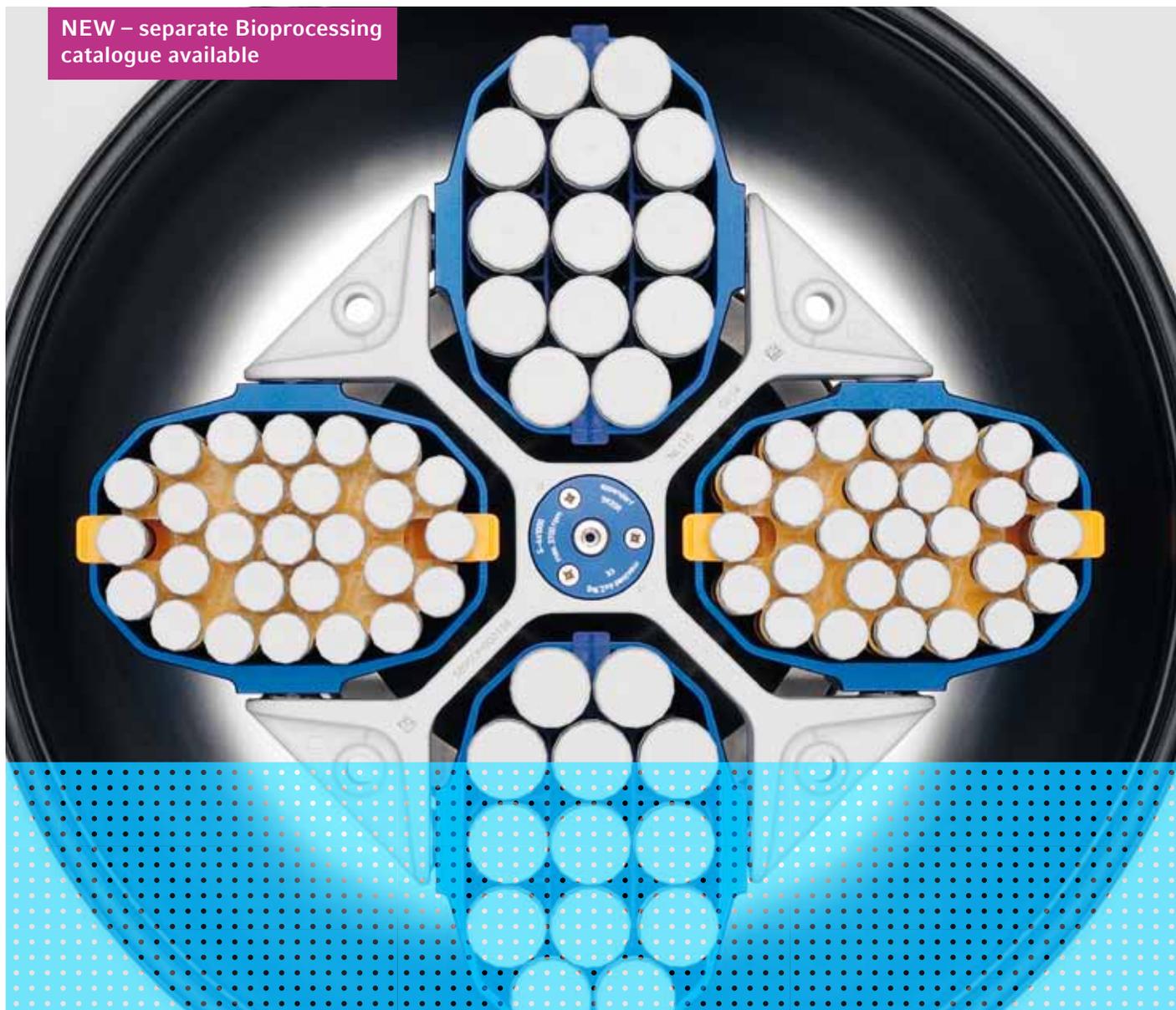


NEW – separate Bioprocessing catalogue available



# Catalogue 2015

Liquid Handling, Sample Handling, Cell Handling



# The Eppendorf Online Experience

Find out more information about our products and about services online using the QR-codes displayed in this catalog.

Or visit our website at [www.eppendorf.com](http://www.eppendorf.com)

# Welcome to Eppendorf!

Our solutions for liquid handling, cell handling and sample handling already comprehensively address the day-to-day processes and workflows of laboratories of all kinds. Yet we continue to develop our well-meshed portfolio of laboratory instruments, consumables and matching accessories for your benefit, and this year as well, you will find a number of product innovations in this catalog.

We take a process-oriented approach to laboratory equipment to enable you to make targeted selections of products for specific work steps in your laboratory. And all our products are designed to make your daily workflows easier, safer and more efficient. You can read more about this on page 4.

Along with your traditional favorites, this catalog contains a number of new products to discover. For example, the new Centrifuge 5920 R allows you to centrifuge up to four liters at one time – a substantial advantage for everyone who works with large volumes and high throughputs. You will also find new possibilities for optimizing your liquid handling applications with our new epMotion® 96 pipetting station – a good example of the intuitive software operation and easy handling of Eppendorf products. And we would particularly like to recommend the Eppendorf Cell Imaging Consumables: along with other new products such as conical tubes and cryo vials, they represent the next logical step in the ongoing development of our cell culture portfolio. Together with our differentiated CO<sub>2</sub> incubators and pipetting helpers, these consumables ensure significantly safer and more efficient workflows in your cell culture laboratory.

Ensuring that your laboratory workflows are as safe, efficient and easy as possible requires more than just products. This is why we have also expanded our extensive service and training program – epServices. Browse through pages 70, 116, 118, 146, 256, 258, 284, 320, 346, 375, 376, 412 and 454 to discover the training programs offered in your area.

Our website is another source of valuable information on our products and services. Here you will also find our easy-to-use eShop. In many countries you can already register for the eShop, order products conveniently online, and even participate in our bonus program by collecting epPoints®.

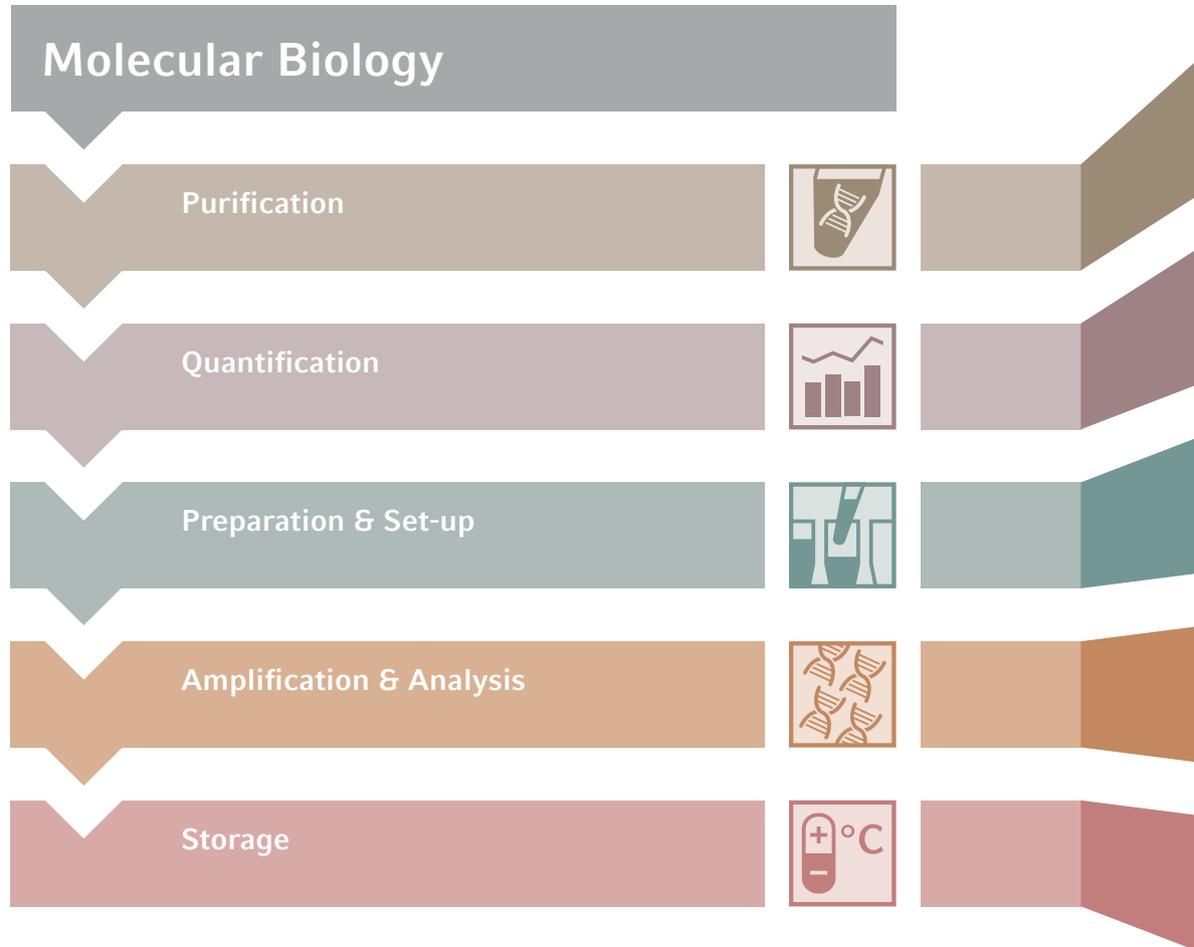
In addition to the general laboratory products listed here, you can find new items for bioprocess applications in our special bioprocessing catalog. Examples include the new BioBLU® 1f, 3f and 10f single-use bioreactors for microbiological applications, and the BioFlo® 320 controller with new functions that extend the functional spectrum of our bioprocess portfolio in a unique way.

If you have questions or suggestions, please don't hesitate to contact your local Eppendorf representative or Eppendorf sales and service partner. You will find the contact information for your partner on page 502-510. We hope you enjoy our latest catalog, and look forward to your visit on our website.

Sincerely yours,

The Executive Board of the Eppendorf Group

# Eppendorf for Central Work Steps in Your Laboratory



## Exemplary workflow

### Workflow solutions for your daily lab work

As a workflow-oriented provider of laboratory equipment, Eppendorf offers instruments, consumables and accessories that fit your lab processes and daily lab work perfectly. With their smart innovations, they simplify or even eliminate cumbersome lab work.

Our product portfolio offers flexible solutions for preparing, handling, and analyzing your samples and cells. Aside from the right consumables, you can choose between several liquid handling solutions, instruments for different applications, and a variety of accessories to optimize your lab routines. Different maintenance and service contracts are available for the verification and calibration of your instruments in a frequency that fits the needs of your laboratory.

### Example: Workflow Molecular Biology

One of the focuses of molecular biology is the study of processes at the intracellular level. Mechanisms and processes are broken down into their individual steps and the components involved in them are analyzed. Very frequently, nucleic acids and/or proteins play a decisive role here. This is why the purification and analysis of these central components are among the most frequent tasks in modern molecular biology laboratories. In this first work step, it is essential that reliable data is obtained and that none of the valuable sample material is lost.



Automation

Centrifuges

Pipettes &amp; Tips

Tubes &amp; Plates

Accessories



Photometer

Cuvettes

Microvolume options

Plate Reader

Reader plates



Thermomixer

Centrifuges

Tubes &amp; Plates

Pipettes &amp; Tips

Automation



Thermocycler

PCR consumables

Pipettes &amp; Tips

Plate Reader

Photometer



Freezer

Deepwell Plates

Conical tubes

Sealing options

Concentrator

In addition, laboratory work must often be performed with sample volumes and/or concentrations in differing amounts and qualities that must be determined precisely and with a high degree of sensitivity. Eppendorf offers absolutely reliable devices for these laboratory requirements. They deliver reproducible data and process samples under constant conditions. Moreover, high-quality consumables with innovative solutions such as the LoBind surfaces ensure the best conditions for processing, analyzing and storing valuable samples without changes or influences.

The dosing of small volumes makes particular demands on liquid handling in the laboratory. Here Eppendorf offers both electronic and manual pipettes as well as automatic liquid handling stations. Special solutions – such as those for centrifuging spin columns or the photometric quantification of even the tiniest volumes – likewise make daily laboratory work easier. Gradient cyclers from Eppendorf, which greatly simplify the optimization of polymerase chain reactions (PCR), are a good example of this. They save valuable time, and the determination of the optimal test parameters ensures that results are more reliable and reproducible.

# Pure Quality

## Eppendorf purity grades for consumables

Eppendorf consumables stand for the highest quality and purity achieved by:

- > using the purest raw materials
- > automatic production in clean room conditions
- > quality and functional checks of all lots
- > continuous quality assurance throughout the entire production process

With the strictest control criteria, internally and externally monitored, we guarantee consistently high quality of our products – lot by lot.

Our consumables are available in a variety of purity grades: “Eppendorf Quality™” as well as advanced purity grades like “sterile”, “protein-free”, “PCR clean” and “Biopur®”. In addition to our internal process controls, each lot of these products are tested and certified by an accredited external laboratory. This allows us to ensure that we consistently meet our customer’s high demands when it comes to the high quality and purity of our products. As a special service, we make the inspection certificate for each delivered lot available online. The lot-specific certificates are available on request and on our website ([www.eppendorf.com/certificates](http://www.eppendorf.com/certificates))

### A good basis: Top-quality material!

- > All plastics used by Eppendorf to produce consumables comply with international purity criteria.

- > The dyes used to color consumables are free of organic substances and substances containing heavy metals.
- > Plastics, such as polypropylene, have a high chemical resistance to organic and inorganic acids/bases and organic solvents commonly used in laboratories.

### Eppendorf Quality:

The purity grade Eppendorf Quality are ideal for many tasks in the lab. To meet consistently our customer’s high demands on quality further measurements are performed specifically for individual product groups:

- > Precise molding guarantees high precision and accuracy. Each lot of tips is subject to gravimetric measurement during final testing. Low wetting ensures reliable volume readings and minimal adhesion.
- > Eppendorf Tubes® have to be opened and closed by one hand only; without sample material being contaminated. They are highly stable, even when exposed to extreme mechanical or thermal strain. Therefore, on a daily basis we check vapor tightness, lid-opening force, wall strength, force required to pierce the lid as well as resistance to centrifugation.
- > We check high resistance to centrifugation and sealability of deepwell plates and microplates.
- > All production tools are subject to frequent checks at regular intervals in order to guarantee consistent quality throughout the entire production period.



The Eppendorf purity grade “Eppendorf Quality” fulfill everything expected of reliable, easy-to-handle consumables. With the aid of high-quality base material and permanent checks during production, Eppendorf consumables in Eppendorf Quality are ideal for many tasks in the lab.



Eppendorf consumables with the purity grade “Sterile” are sterilized in accordance with ISO 11137 or ISO 11135 with a Sterility Assurance Level (SAL) of  $10^{-6}$ . Each lot of sterile products is tested for sterility and for the absence of endotoxins in accordance with Ph. Eur. 2.6.14 (free of pyrogens).

**Sterile:**

Besides fulfilling the quality criteria of "Eppendorf Quality" Eppendorf consumables with the purity grade "sterile" are sterilized and free of pyrogens. Each lot is tested and certified by an external accredited laboratory. Only those consumables that have passed all the necessary tests shall be labeled "sterile", a quality seal which assures customers of the suitability of their Eppendorf consumables for direct use in experiments and analysis without the need for further treatment. Lot-specific certificates are available on request and on our website.

**PCR clean:**

All Eppendorf consumables with the purity grade "PCR clean" ensure not to interfere with the PCR reaction. Furthermore, all Eppendorf PCR clean products fulfill the quality criteria defined for our standard consumables (Purity grade "Eppendorf Quality").

The purity grade "PCR clean" is essentially achieved in not even letting contamination develop. Therefore, the corresponding plastic items are manufactured comparable to clean-room conditions. The manufacturing areas are spatially separated and only personnel in special protective clothing are granted access. Each lot with the purity grade PCR clean is tested and certified by an external accredited laboratory. Only those consumables that have passed all the necessary

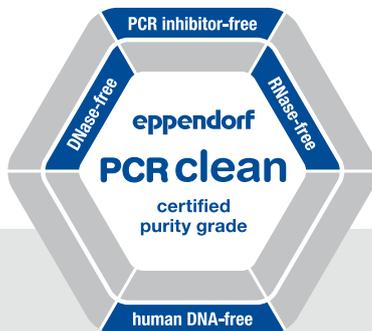
tests shall be labeled "PCR clean", a quality seal which assures customers of the suitability of their Eppendorf consumables for direct use in experiments and analysis. Lot-specific certificates are available on request and on our website.

**Eppendorf Biopur®:**

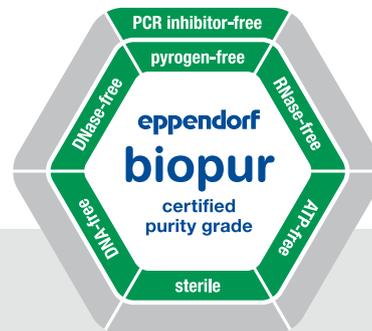
To meet the highest demands of the medical, pharmaceutical, cosmetic, food industries and others, the quality and purity grade "Eppendorf Biopur" was defined. This purity is ensured by an elaborate, automated manufacturing process which safeguards the product against any contamination with biological substances. Furthermore, all "Eppendorf Biopur" products fulfill the quality standards defined for our standard consumables (Purity grade "Eppendorf Quality").

Each lot is tested and certified by an external accredited laboratory. Only those consumables that have passed all the necessary tests shall be labeled "biopur", a quality seal which assures customers of the suitability of their Eppendorf consumables for direct use in experiments and analysis. Lot-specific certificates are available on request and on our website.

**For further details please read page 72-73 and 150.**



All Eppendorf consumables with the purity grade "PCR clean" are DNase and RNase free, and free of any PCR inhibitors. It is also guaranteed that the consumables are free of contaminating human DNA.



Consumables available in this highest possible degree of purity are guaranteed to be sterile and free of pyrogens, RNases, DNases, DNA and ATP as well as PCR inhibitors. Individually blistered or "micro batches" in re-sealable boxes provide effective protection against soiling and contamination.

**Eppendorf Training Center**

Optimally serviced premium products alone do not provide for reliable results. The operator's experience is just as important. With the new Eppendorf Training Center, we extend your knowledge to ensure that you use the full potential of our products in the most efficient and easy way. In our practice oriented seminars, you will learn the operation of our devices, understand specific workflows and receive valuable assistance to run applications in your lab properly. Eppendorf application specialists will support you in small groups. Learn something new or replenish your knowledge and get your certificate for successful participation.

Find more information about our training offering at [www.eppendorf.com/training](http://www.eppendorf.com/training)

# More Than Reliable Products



**eppendorf**

Performance tested on

Model: \_\_\_\_\_

Serial no.: \_\_\_\_\_

Serviced by: \_\_\_\_\_

Service no.: \_\_\_\_\_

Next service: \_\_\_\_\_

Date: \_\_\_\_\_

**epServices**  
for premium performance



- > **Application support**  
Our specialists are here to help
- > **Technical support**  
Contact your local technical support
- > **Quality and regulatory support**  
Clarify all questions on quality or regulatory matters
- > **Training**  
Increase your knowledge and abilities
- > **Installation and operational qualification (IQ/OQ)**  
Be prepared for your audits
- > **Preventive maintenance**  
Keep your instruments in top working order
- > **Calibration and validation**  
Ensure that your instruments are functioning precisely and accurately

## Premium services for your lab

Preventive maintenance ensures system reliability by early detection and solving of problems. Our certification packages provide calibration, verification, installation qualification/operational qualification (IQ/OQ) services for your instruments ensuring precision and accuracy according to manufacturer or customer requirements. Complete documentation is provided in compliance with legal guidelines and standards.

With the new global service programs for our ultra-low temperature freezers, CO<sub>2</sub> incubators and biological shaker instruments a comprehensive range of service programs build the basis for the premium support from Eppendorf worldwide. These services are available through Eppendorf performance plans, the packages for preventive maintenance and certification services for your instruments.

For further information please visit  
[www.eppendorf.com/epservices](http://www.eppendorf.com/epservices)



# New Highlights 2015





## Liquid Handling



### **Eppendorf epMotion® 96 - see page 86**

The new Eppendorf epMotion 96 is an easy to use bench top system for high precision pipetting in 96- and 384-well plates. As an affordable solution it overcomes the limits of manual multichannel pipetting. Its ergonomic design and intuitive handling makes epMotion 96 a great tool for anyone who needs fast and precise liquid handling in a 96-well format. Save time and money while getting better reproducibility of your results from cell based assays, ELISA, cell seeding, nucleic acid quantification, plate reformatting or other applications.



## Sample Handling



### **Eppendorf Conical Tubes 15 mL and 50 mL - see page 158**

Now even for larger volumes. You can rely on the same outstanding performance for which Eppendorf Tubes® are globally recognized as a premium standard. The Eppendorf Conical Tubes 15 mL and 50 mL represent the optimal solution for cell biology applications as well as for protocols in microbiology and molecular biology laboratories.



## Sample Handling



### **Eppendorf Centrifuge 5920 R - see page 230**

Centrifuge 5920 R delivers extraordinary high capacity in a very compact and ergonomic product design. It has similar dimensions as competing refrigerated 3 Liter models and yet features a superior capacity of up to 4 x 1000 mL; thus making it the ideal instrument for high-throughput applications. It features a powerful state-of-the-art refrigeration system with advanced temperature management to keep your samples safe.

## Sample Handling



### Eppendorf Mastercycler® nexus X2 - see page 266

The Mastercycler nexus X2 gives you the ability to run two totally independent protocols at the same time. Smaller assays fit nicely on the 32-well-block – larger assays can exceed 48 samples and run on the 64-well-block. The larger block is available with a gradient function. As every member of the Mastercycler nexus family, the Mastercycler nexus X2 can be combined with all other family members in a network of up to 3 units. That allows you to install the best solution for your needs and benefit from the same intuitive software on all your PCR devices.

## Sample Handling



### Eppendorf Freezers CryoCube™ - see page 286 onward

The new CryoCube ultra-low temperature freezers from Eppendorf combine maximum sample security with increased energy efficiency. New vent, compressor, condenser, and fan technology decrease power consumption. Noise reduction and a more ergonomic handle make CryoCube freezers easier to use. Eppendorf quality means years of trouble free operation, trusted sample security, and excellent energy efficiency.

## Sample Handling



### Available soon - Eppendorf Storage Boxes

The Eppendorf Storage Box provides safe storage of your sample tubes in a space-saving design.

Our extensive portfolio offers a selection for tubes from 0.5 mL to 50 mL.

For further information visit:

[www.eppendorf.com/consumables](http://www.eppendorf.com/consumables)

 Cell Handling



**Eppendorf FemtoJet® 4i/4x - see page 364**

Eppendorf's electronic microinjectors FemtoJet 4i and FemtoJet 4x with their simple operation and wide range of functionality are perfectly suited for injecting small to intermediate volumes. With a built-in compressor, the FemtoJet 4i is the tool of choice for injecting small volumes of up to ~100 pL into adherent cells and suspension cells. If your research demands injecting larger volumes and/ or longer series at higher pressures, FemtoJet 4x with its external pressure supply delivers the precise and continuous pressure required. Best of all, the new FemtoJets are so quiet that even the refilling steps of the compressor of the FemtoJet 4i are barely audible.

 Cell Handling



**Eppendorf Cell Imaging Consumables - see page 386**

Eppendorf Cell Imaging Consumables allow sophisticated imaging and microscopy applications on expert level. The products combine premium performance with innovative solutions for demanding optical analysis and fluorescent stainings. Whether you perform inverse microscopy, life cell imaging or fluorescence-based analysis: Find tailored solutions for single and parallel analysis as well as High Content Analysis (HCA) with Eppendorf Cell Imaging Consumables.

# Eppendorf CatalogApp



**Our catalog is going digital**

In addition to our printed catalog, we now want to provide you with a digital version of our product catalog and develop it together with you:

- > Get animated information and view products from all sides
- > Stay up to date about our latest products

- > Use little helpers for your daily laboratory work (laboratory tools)
- > These and other useful functions will be available soon

We will notify you in good time when the app is available to download via our usual communication channels.

Please send any suggestions you might have on how we can make the presentation of our product information even better to [catalog@epppendorf.de](mailto:catalog@epppendorf.de)

# And more Highlights 2015



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**Your opinion**

Dear readers,  
We would like to invite you to participate in a survey about the media you use.

Answering the questions will take about 10 minutes.

**All participants in this survey will receive 50 epPoints for our bonus program.** If you don't yet have an account, you can set up one for yourself quickly and free of charge. **In addition, all participants will be included in a prize draw to win an iPad Mini.**

Your information will be kept confidential in accordance with data protection regulations and not disclosed to third parties.

For more details visit [www.eppendorf.com/catalogsurvey](http://www.eppendorf.com/catalogsurvey) or page 253

# Virtual-Reality – Coming Soon



## Take a new look at transparency

We're making the presentation of our products even more transparent.

Experience digitally the functions of our rotors with their vessels and plates, for example, based on the Centrifuges 5424 and 5424 R.

**For more details visit our product pages on our website**

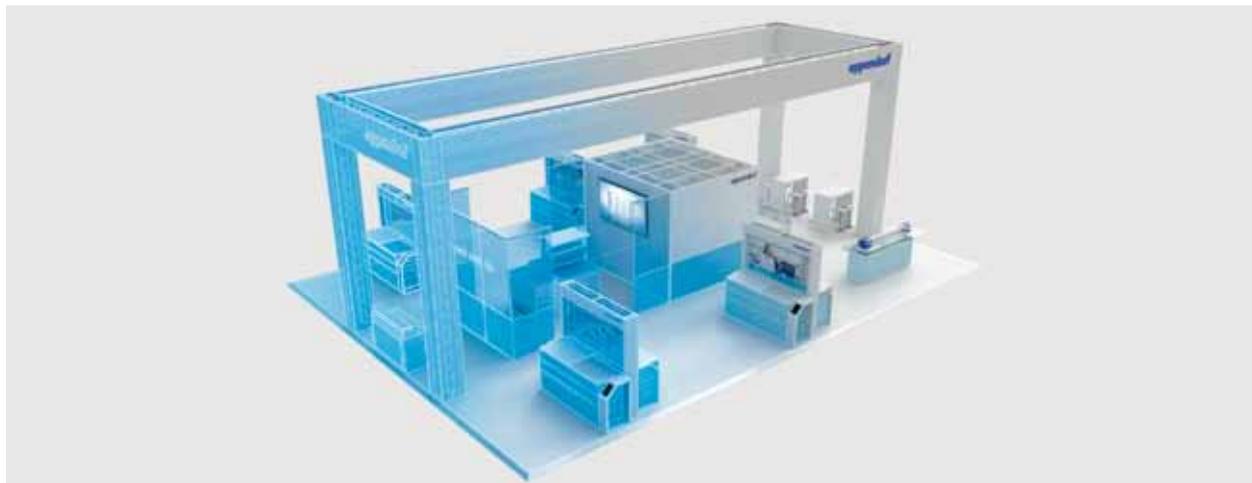


## 360-degree views

New 360-degree views show our products from all sides for a better overview.

- > Creates improved transparency and greater orientation
- > Explore our products virtually and gain first impressions

**For more details visit our product pages on our website**



Eppendorf is to present a virtual booth on their website for the first time.

Designed entirely in 3D, you can now experience our booth virtually, get an idea of the extensive Eppendorf product families and access a wide range of information

on Eppendorf products. Make your fair visit easy, efficient and quick.

**For more details visit [www.eppendorf.com/virtualbooth](http://www.eppendorf.com/virtualbooth)**

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### Cover image:

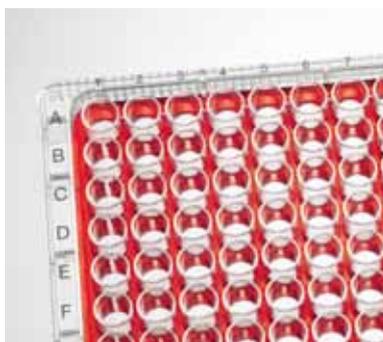
Centrifuge 5920 R delivers extraordinary high capacity in a very compact and ergonomic product design. It has similar dimensions as competing refrigerated 3 Liter models and yet features a superior capacity of up to 4 x 1,000 mL; thus making it the ideal instrument for high-throughput applications. It features a powerful state-of-the-art refrigeration system with advanced temperature management to keep your samples safe.

More on page 230 onward



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»In search for bioprocess products? Don't miss the 2015 bioprocess catalog«

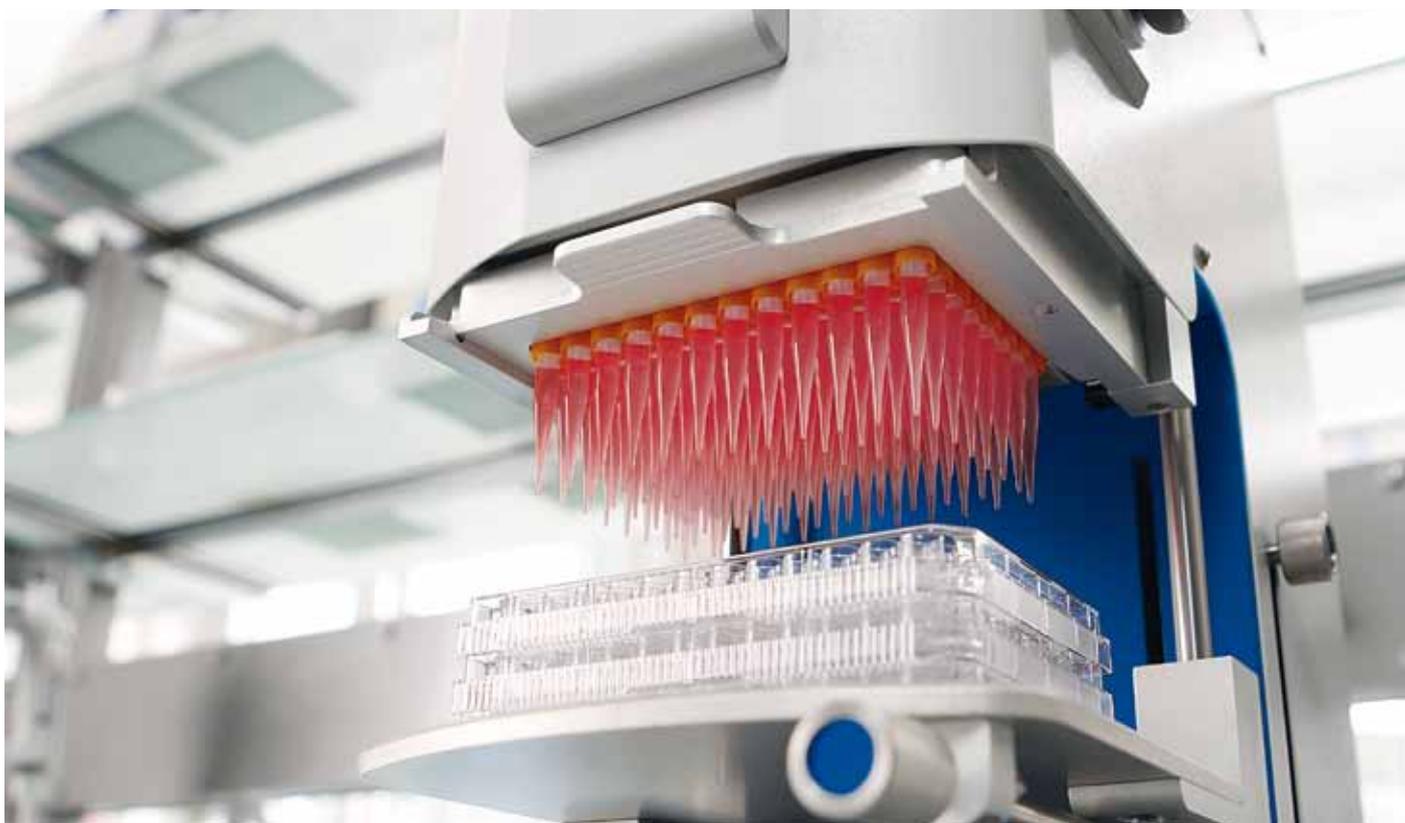


Find out about our comprehensive offering of fermentors, bioreactors, single-use vessels and bioprocess accessories for your fermentation and cell culture applications.

- > Scalable bioreactor systems from mini to production scale, all the way from research through process development to pilot and production
- > Glass, single-use and stainless steel options
- > Comprehensive software solutions for advanced process control and data & information management

**Two catalogs, one source: Eppendorf**  
**More info at [www.eppendorf.com/catalog](http://www.eppendorf.com/catalog)**

# Liquid Handling



## **Trailblazer in liquid handling for more than 50 years ...**

In 1961, Eppendorf launched the first piston-stroke pipette. Today, our broad product offerings in liquid handling range from manual pipettes to electronic pipettes, dispensers and burettes to automated pipetting systems. Eppendorf products are associated with state-of-the-art technology, outstanding ergonomics and award-winning design. This applies to both devices and the requisite consumables such as pipette tips and Combitips®.

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<b>Model</b>	Reference 2	Research plus	Xplorer/Xplorer plus	epMotion® 96	Biomaster®/Varipette®
<b>Page(s)</b>	22	27	32, 36	86	74, 75
<b>Product type</b>	Pipette	Pipette	Pipette	Semi-automated Pipette	Pipette
<b>Operation</b>	manual	manual	electronic	electronic	manual
<b>Pipetting type</b>	air-cushion	air-cushion	air-cushion	air-cushion	positive displacement
<b>Positioning</b>	Reliability in robustness and results	Ultra light weight and pipetting forces for ultimate ergonomics	Intuitive and fast pipetting	Intuitive and fast pipetting in 96 and 384 format	Fault tolerant pipetting of small/large volumes, independent of external effects
<b>Application</b>	pipetting of aqueous liquids	contamination-free pipetting of aqueous, viscous and volatile liquids			
<b>Volume range</b>	10 mL	10 mL	0.5 µL – 10 mL	0.5 – 300 µL	1-20 µL/1 – 10 mL
<b>Avialable options</b>	1-channel 8-channel 12-channel	1-channel 8-channel 12-channel	1-channel 8-channel 12-channel	96-channel	1-channel
<b>RFID tracking</b>	yes (read & write option)	yes (read option)	yes (read & write option)	no	no
<b>Autoclavable</b>	yes	yes	yes (lower part)	no	yes/no
<b>Consumables</b>	epT.I.P.S.® and other pipette tips	epT.I.P.S.® and other pipette tips	epT.I.P.S.® and other pipette tips	epT.I.P.S.® motion reload system	Mastertips/Varitips
<b>Purity grades of consumables</b>	> Eppendorf Quality™ > PCR clean > Eppendorf Biopur® > Sterile	> Eppendorf Quality™ > PCR clean > Eppendorf Biopur® > Sterile	> Eppendorf Quality™ > PCR clean > Eppendorf Biopur® > Sterile	> Eppendorf Quality™ > PCR clean > PCR clean & sterile	> Eppendorf Quality™



						
<b>Multipipette® M4</b>	<b>Multipipette stream®/ Multipipette Xstream®</b>	<b>Varispenser/ Varispenser plus</b>	<b>Top Buret</b>	<b>Easypet® 3</b>	<b>Eppendorf Pipet Helper®</b>	<b>epMotion® Systems</b>
<b>58</b>	<b>62</b>	<b>81</b>	<b>81</b>	<b>76</b>	<b>80</b>	<b>84</b>
Dispenser	Dispenser	Bottle-top dispenser	Bottle-top burette	Pipette controller	Pipette controller	Automated Liquid Handling automation
manual	electronic	manual	manual	electronic	manual	air-cushion
positive displacement	positive displacement	positive displacement	positive displacement	air-cushion	air-cushion	air-cushion
Time saving by acceleration of long pipetting series with low outside fault effects	Time saving by acceleration of long pipetting series, with highest volume flexibility and lowest outside fault effects	Dispense small amounts of dangerous chemicals like acids or bases from large supply bottles	Continuously and puls-free manual titration	Overall ergonomic concept with new speed control for stress-free pipetting	A perfect instrument for inexperienced users because of its robust and intuitive design	Automated, reproducible, contamination-free, contactless free-jet pipetting at highest precision and accuracy
contamination-free dispensing (up to 100 steps per Combitip filling) of aqueous, viscous and volatile liquids	contamination-free dispensing (up to 100 steps per Combitip filling) of aqueous, viscous and volatile liquids	single stroke dispensing of acids, bases and other aqueous liquids	titration of aqueous liquids	pipetting of aqueous liquids with serological and volumetric pipettes	pipetting of aqueous liquids with serological and volumetric pipettes	serial pipetting of aqueous, viscous and volatile liquids
1 µL – 10 mL	1 µL – 50 mL	0.5 – 100 mL	0.1 – 999.9 mL	0.1 – 100 mL	0.1 – 200 mL	1 µL – 1 mL
1-channel	1-channel	1-channel	1-channel	1-channel	1-channel	1-channel 8-channel Gripper to move
yes (read option)	no	no	no	yes (read option)	no	no - but chip tool identification & calibration warning
no	no	yes	no	no (yes: pipette adapter and aspirating cone)	yes	yes (tools)
Combitips advanced®	Combitips advanced®	–	–	Eppendorf Serological Pipettes and other volumetric and serological pipettes	Eppendorf Serological Pipettes and other volumetric and serological pipettes	epT.I.P.S. motion tips as racks or reload
> Eppendorf Quality™ > PCR clean > Eppendorf Biopur®	> Eppendorf Quality™ > PCR clean > Eppendorf Biopur®	–	–	> Sterile > free of detectable Rnase & Dnase > free of detectable pyrogens > free of detectable DNA	> Sterile > free of detectable Rnase & Dnase > free of detectable pyrogens > free of detectable DNA	> Sterile > PCR clean > Eppendorf Quality™

## Eppendorf Reference<sup>®</sup> 2

Sturdy upper handle including stainless steel and bumper system guarantees long service life and increased robustness

Highest precision and accuracy in the Eppendorf portfolio provides reliable pipetting results

Smooth surface without grooves where bacteria could hide allows easy and safe cleaning

Embedded RFID data chip for heightened traceability in combination with Eppendorf TrackIT

Fully autoclavable without disassembly

Single button operation: Quick and easy tip ejection immediately following dispensing saves unergonomic side movement of thumb and actively reduces aerosols re-entering the pipette

Quick and secure volume setting including volume lock to prevent unwanted change

Userfriendly secondary adjustment to non-aqueous liquids allows return to factory adjustment without calibration

Serial number is printed on upper and lower part to avoid a mixup of volume determining parts

Spring-loaded tip cone: improved reproducibility and ergonomics



i For more information go to [www.eppendorf.com/Reference2](http://www.eppendorf.com/Reference2)

► Pipette service and maintenance contracts can be found on page 70. Pipette tips can be found on page 40 onward. Further information about IVD products see on page 511.



### Description

The Eppendorf Reference 2 is the newest pipette family at Eppendorf and it is our premium product. Besides improvement of its ergonomics the focus of its design lay on providing the most accurate results possible, optimum user safety, reliability and robustness for a long service life. The innovative single button operation is not only fast and easy, but it also allows active aerosol reduction and thus protects the user, the sample and the pipette. The sturdy handle manufactured with stainless steel protects the pipette from impact and in combination with the spring loaded bumpers the Reference 2 is likely to stay within calibration even if it takes a fall. These high levels of security make the Reference 2 ideal for use with precious liquids, or in any application requiring extremely high levels of accuracy. When there can be no compromise on quality and reproducibility, Eppendorf's new Reference 2 is an ideal instrument for these liquid handling applications.

One of a kind: The only single button multichannel pipette in the world for faster pipetting and active aerosol reduction.

### Applications

- > Pipetting liquids
- > Volume determination
- > Mixing liquids
- > Filling of plates, gels, and reaction vessels
- > Phase extraction and removal of supernatants

### Ordering information

Volume range	Color code	Rel. systematic error <sup>1)</sup>	Abs. systematic error <sup>1)</sup>	Rel. random error <sup>1)</sup>	Abs. random error <sup>1)</sup>	Order no.	Price
<b>Eppendorf Reference® 2, single-channel, fixed</b>							
1 µL	■ dark gray	±2.5 %	±0.025 µL	±1.8 %	±0.018 µL	4921 000.010	143.00 £
2 µL	■ dark gray	±2.0 %	±0.04 µL	±1.2 %	±0.024 µL	4921 000.028	143.00 £
5 µL	■ medium gray	±1.2 %	±0.06 µL	±0.6 %	±0.03 µL	4921 000.036	143.00 £
10 µL	■ medium gray	±1.0 %	±0.1 µL	±0.5 %	±0.05 µL	4921 000.044	143.00 £
20 µL	■ light gray	±0.8 %	±0.16 µL	±0.3 %	±0.06 µL	4921 000.060	143.00 £
10 µL	■ yellow	±1.2 %	±0.12 µL	±0.5 %	±0.05 µL	4921 000.052	143.00 £
20 µL	■ yellow	±1.0 %	±0.2 µL	±0.3 %	±0.06 µL	4921 000.079	143.00 £
25 µL	■ yellow	±1.0 %	±0.25 µL	±0.3 %	±0.075 µL	4921 000.087	143.00 £
50 µL	■ yellow	±0.7 %	±0.35 µL	±0.3 %	±0.15 µL	4921 000.095	143.00 £
100 µL	■ yellow	±0.6 %	±0.6 µL	±0.2 %	±0.2 µL	4921 000.109	143.00 £
200 µL	■ yellow	±0.6 %	±1.2 µL	±0.2 %	±0.4 µL	4921 000.117	143.00 £
200 µL	■ blue	±0.6 %	±1.2 µL	±0.2 %	±0.4 µL	4921 000.125	143.00 £
250 µL	■ blue	±0.6 %	±1.5 µL	±0.2 %	±0.5 µL	4921 000.133	143.00 £
500 µL	■ blue	±0.6 %	±3.0 µL	±0.2 %	±1.0 µL	4921 000.141	143.00 £
1,000 µL	■ blue	±0,6 %	±6.0 µL	±0.2 %	±2.0 µL	4921 000.150	143.00 £
2 mL	■ red	±0.6 %	±0.012 mL	±0.2 %	±0.004 mL	4921 000.168	143.00 £
2.5 mL	■ red	±0.6 %	±0.015 mL	±0.2 %	±0.005 mL	4921 000.176	143.00 £

<sup>1)</sup> The error data, according to EN ISO 8655, only applies if original Eppendorf tips are used. Technical specifications are subject to change. Errors and omissions excepted.

# Eppendorf Reference® 2

## Ordering information

Volume range	Color code	Volume	Rel. systematic error <sup>1)</sup>	Abs. systematic error <sup>1)</sup>	Rel. random error <sup>1)</sup>	Abs. random error <sup>1)</sup>	Order no.	Price
<b>Eppendorf Reference® 2, single-channel, variable, incl. epT.I.P.S.® Box and holder for pipette carousel</b>								
0.1 – 2.5 µL	■ dark gray	0.1 µL	±48.0 %	±0.048 µL	±12.0 %	±0.012 µL	4920 000.016	259.00 £
		0.25 µL	±12.0 %	±0.03 µL	±6.0 %	±0.015 µL		
		1.25 µL	±2.5 %	±0.031 µL	±1.5 %	±0.019 µL		
		2.5 µL	±1.4 %	±0.035 µL	±0.7 %	±0.018 µL		
0.5 – 10 µL	■ medium gray	0.5 µL	±8.0 %	±0.04 µL	±5.0 %	±0.0025 µL	4920 000.024	259.00 £
		1.0 µL	±2.5 %	±0.025 µL	±1.8 %	±0.018 µL		
		5.0 µL	±1.5 %	±0.075 µL	±0.8 %	±0.04 µL		
		10 µL	±1.0 %	±0.10 µL	±0.4 %	±0.04 µL		
2 – 20 µL	■ light gray	2.0 µL	±5.0 %	±0.10 µL	±1.5 %	±0.03 µL	4920 000.032	259.00 £
		10 µL	±1.2 %	±0.12 µL	±0.6 %	±0.06 µL		
		20 µL	±1.0 %	±0.20 µL	±0.3 %	±0.06 µL		
2 – 20 µL	■ yellow	2.0 µL	±5.0 %	±0.10 µL	±1.5 %	±0.03 µL	4920 000.040	259.00 £
		10 µL	±1.2 %	±0.12 µL	±0.6 %	±0.06 µL		
		20 µL	±1.0 %	±0.2 µL	±0.3 %	±0.06 µL		
10 – 100 µL	■ yellow	10 µL	±3.0 %	±0.3 µL	±0.7 %	±0.07 µL	4920 000.059	259.00 £
		50 µL	±1.0 %	±0.5 µL	±0.3 %	±0.15 µL		
		100 µL	±0.8 %	±0.8 µL	±0.2 %	±0.2 µL		
20 – 200 µL	■ yellow	20 µL	±2.5 %	±0.5 µL	±0.7 %	±0.14 µL	4920 000.067	259.00 £
		100 µL	±1.0 %	±1.0 µL	±0.3 %	±0.3 µL		
		200 µL	±0.6 %	±1.2 µL	±0.2 %	±0.4 µL		
30 – 300 µL	■ orange	30 µL	±2.5 %	±0.75 µL	±0.7 %	±0.21 µL	4920 000.075	259.00 £
		150 µL	±1.0 %	±1.5 µL	±0.3 %	±0.45 µL		
		300 µL	±0.6 %	±1.8 µL	±0.2 %	±0.6 µL		
100 – 1,000 µL	■ blue	100 µL	±3.0 %	±3.0 µL	±0.6 %	±0.6 µL	4920 000.083	259.00 £
		500 µL	±1.0 %	±5.0 µL	±0.2 %	±1.0 µL		
		1,000 µL	±0.6 %	±6.0 µL	±0.2 %	±2.0 µL		
<b>Eppendorf Reference® 2, single-channel, variable, incl. epT.I.P.S.® sample bag and holder for pipette carousel</b>								
0.25 – 2.5 mL	■ red	0.25 mL	±4.8 %	±0.012 mL	±1.2 %	±0.003 mL	4920 000.091	259.00 £
		1.25 mL	±0.8 %	±0.010 mL	±0.2 %	±0.0025 mL		
		2.5 mL	±0.6 %	±0.015 mL	±0.2 %	±0.005 mL		
0.5 – 5 mL	■ violet	0.5 mL	±2.4 %	±0.012 mL	±0.6 %	±0.003 mL	4920 000.105	259.00 £
		2.5 mL	±1.2 %	±0.030 mL	±0.25 %	±0.006 mL		
		5.0 mL	±0.6 %	±0.030 mL	±0.15 %	±0.0075 mL		
1 – 10 mL	■ turquoise	1.0 mL	±3.0 %	±0.030 mL	±0.6 %	±0.006 mL	4920 000.113	259.00 £
		5.0 mL	±0.8 %	±0.040 mL	±0.2 %	±0.010 mL		
		10.0 mL	±0.6 %	±0.060 mL	±0.15 %	±0.015 mL		

<sup>1)</sup> The error data, according to EN ISO 8655, only applies if original Eppendorf tips are used. Technical specifications are subject to change. Errors and omissions excepted.

## Ordering information

Volume range	Color code	Volume	Rel. systematic error <sup>1)</sup>	Abs. systematic error <sup>1)</sup>	Rel. random error <sup>1)</sup>	Abs. random error <sup>1)</sup>	Order no.	Price
<b>Eppendorf Reference® 2, 8-channel, variable, incl. holder for pipette carousel</b>								
0.5 – 10 µL	medium gray	0.5 µL	±12.0 %	±0.06 µL	±8.0 %	±0.04 µL	4922 000.013	730.00 £
		1.0 µL	±8.0 %	±0.08 µL	±5.0 %	±0.05 µL		
		5.0 µL	±4.0 %	±0.2 µL	±2.0 %	±0.1 µL		
		10.0 µL	±2.0 %	±0.2 µL	±1.0 %	±0.1 µL		
10 – 100 µL	yellow	10.0 µL	±3.0 %	±0.3 µL	±2.0 %	±0.2 µL	4922 000.030	730.00 £
		50 µL	±1.0 %	±0.5 µL	±0.8 %	±0.4 µL		
		100 µL	±0.8 %	±0.8 µL	±0.3 %	±0.3 µL		
30 – 300 µL	orange	30 µL	±3.0 %	±0.9 µL	±1.0 %	±0.3 µL	4922 000.056	730.00 £
		150 µL	±1.0 %	±1.5 µL	±0.5 %	±0.75 µL		
		300 µL	±0.6 %	±1.8 µL	±0.3 %	±0.9 µL		
<b>Eppendorf Reference® 2, 12-channel, variable, incl. holder for pipette carousel</b>								
0.5 – 10 µL	medium gray	0.5 µL	±12.0 %	±0.06 µL	±8.0 %	±0.04 µL	4922 000.021	800.00 £
		1.0 µL	±8.0 %	±0.08 µL	±5.0 %	±0.05 µL		
		5.0 µL	±4.0 %	±0.2 µL	±2.0 %	±0.1 µL		
		10.0 µL	±2.0 %	±0.2 µL	±1.0 %	±0.1 µL		
10 – 100 µL	yellow	10.0 µL	±3.0 %	±0.3 µL	±2.0 %	±0.2 µL	4922 000.048	800.00 £
		50 µL	±1.0 %	±0.5 µL	±0.8 %	±0.4 µL		
		100 µL	±0.8 %	±0.8 µL	±0.3 %	±0.3 µL		
30 – 300 µL	orange	30 µL	±3.0 %	±0.9 µL	±1.0 %	±0.3 µL	4922 000.064	800.00 £
		150 µL	±1.0 %	±1.5 µL	±0.5 %	±0.75 µL		
		300 µL	±0.6 %	±1.8 µL	±0.3 %	±0.9 µL		

<sup>1)</sup> The error data, according to EN ISO 8655, only applies if original Eppendorf tips are used. Technical specifications are subject to change. Errors and omissions excepted.

## Eppendorf Reference® 2, 3-pack



## Description

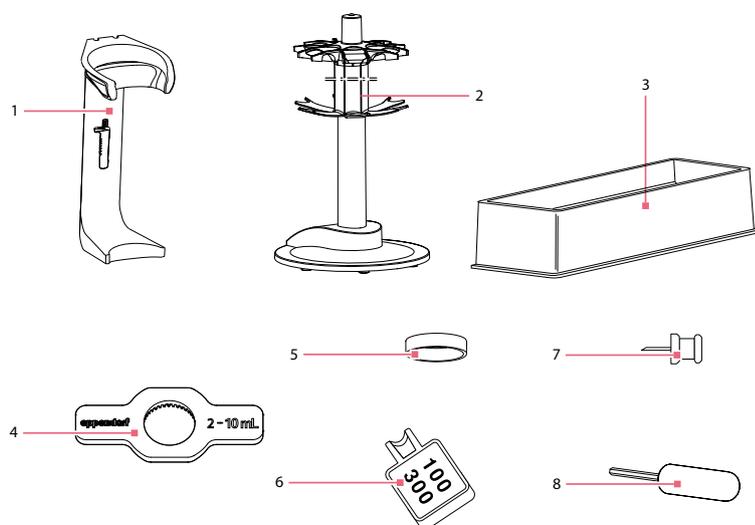
Comfortable, high precision pipetting is the result of perfect teamwork between the pipette and tip. Why not rely upon the unbeatable team of Eppendorf Reference 2 pipettes and epT.I.P.S.? Now conveniently available as Reference 2 3-pack at a special price that's too good to miss!

In addition to three Reference 2 pipettes, each pack contains one set of matching Eppendorf tips and one of the popular Eppendorf ballpoint pens.

## Ordering information

Description	Order no.	Price
<b>Eppendorf Reference® 2, 3-pack, incl. epT.I.P.S.® Box or sample bag and ballpoint pen</b>		
<b>Option 1:</b> 0.5-10 µL, 10-100 µL, 100-1,000 µL	4920 000.903	622.00 £
<b>Option 2:</b> 2-20 µL, 20-200 µL, 100-1,000 µL	4920 000.911	622.00 £
<b>Option 3:</b> 100-1,000 µL, 0.5-5 mL, 1-10 mL	4920 000.920	622.00 £

# Eppendorf Reference® 2



1. Wall mount
2. Pipette carousel
3. Reagent reservoir Tip-Tub
4. Key for detachment
5. Locking ring
6. Cutting tool
7. Pin
8. Adjustment tool

## Accessories

Description	Order no.	Price
<b>Pipette carousel</b> , with 6 holders, for Eppendorf Reference® 2	4923 000.009	93.20 £
<b>Holder</b> , for Eppendorf Reference® 2, for pipette carousel	4923 601.002	11.40 £
<b>Wall mount</b> , for Eppendorf Reference® 2, with hook and loop strip	4923 000.017	14.90 £
<b>Adjustment tool</b> , for changing factory or secondary user adjustment	3120 633.006	4.90 £
<b>O-ring for tip cones</b> , 24 pcs., red, for 100 & 300µL multi-channel pipettes, with mounting aid (1 set = 24 pieces)	3122 611.000	12.80 £
<b>Cutting tool</b> , for red o-rings of 100 & 300 µL multi-channel pipettes	3122 610.003	4.90 £
<b>Key for detachment of 2-10 mL pipettes lower parts</b>	3120 634.002	4.90 £
<b>Locking ring</b> , to prevent spring action of 10-1000µL single channel pipettes tip cones	3120 635.009	2.30 £
<b>Tip-Tub reagent reservoir</b> , autoclavable reservoir for aspirating liquids with multi-channel pipettes, 1 set = 10 reservoirs and 10 lids	0030 058.607	17.50 £
<b>Special grease for pipettes</b> , bag of 1 g	0013 063.010	3.30 £
<b>Picaso® II</b> , software for pipette calibration	3113 004.001	393.00 £
<b>Eppendorf TrackIT</b> , RFID Reader and Software	3903 000.014	373.00 £

i For more information go to [www.eppendorf.com/Reference2](http://www.eppendorf.com/Reference2)

# Eppendorf Research<sup>®</sup> plus

**Volume Setting:**

Set your desired volume in just a few turns even when moving from minimum to maximum volume

**Ejector:**

Very low operating force and positioned in such a way that thumb strain is reduced when moving to eject tips

**Secondary Adjustment:**

Easily adjust your Research plus for the most accurate pipetting of different liquids or other external conditions without the need for a full calibration

**Quick lock:**

Simply push up on the collar holding the lower part in place to remove for easy cleaning and maintenance of your pipette

**Control Button:**

Very low operating forces and color coding for easy identification of pipette volume with ergonomic height even at maximum volume to limit strain on thumbs

**Volume Display:**

4 digit display with magnifying window to allow for easier volume identification

**Eppendorf PerfectPiston<sup>®</sup>:**

Ultralight, chemically resistant piston provides for overall weight reduction of the pipette

**Spring loaded tip cone:**

Improves user to user reproducibility and improved ergonomics by lowering tip attachment force



i For more information go to [www.eppendorf.com/Researchplus](http://www.eppendorf.com/Researchplus)

➤ Pipette service and maintenance contracts can be found on page 70. Pipette tips can be found on page 40 onward. Further information about IVD products see on page 511.

# Eppendorf Research® plus



Secondary user adjustment: Set back on factory adjustment without calibration.



## Description

The Eppendorf Research plus is one of the most commonly used pipettes in the world. Besides safety and robustness the main focus of its design lay on ergonomics. The Research plus protects the health of our customers during their daily work. It has pioneered the renowned PhysioCare concept and thus reduced the strain on hand and arm during pipetting essentially. The Research plus is the pipette family with the lowest weight and lowest operation forces at Eppendorf. Lower operation forces can only be reached with our electronic pipettes. The spring loaded tip cone ensures low tip attachment and ejection forces. The Research plus has the ability to be autoclaved without disassembling. Fixed-volume pipettes and multichannel options available; the Research plus pipette will become an indispensable tool in your laboratory.

## Applications

- > Pipetting liquids
- > Volume determination
- > Mixing liquids
- > Filling of plates, gels, and reaction vessels
- > Phase extraction and removal of supernatants

## Ordering information

Volume range	Color code	Rel. systematic error <sup>1)</sup>	Abs. systematic error <sup>1)</sup>	Rel. random error <sup>1)</sup>	Abs. random error <sup>1)</sup>	Order no.	Price
<b>Eppendorf Research® plus, single-channel, fixed</b>							
10 µL	■ medium gray	±1.2 %	±0.12 µL	±0.6 %	±0.06 µL	3121 000.015	119.00 £
20 µL	■ light gray	±0.8 %	±0.16 µL	±0.3 %	±0.06 µL	3121 000.031	119.00 £
10 µL	■ yellow	±1.2 %	±0.12 µL	±0.6 %	±0.06 µL	3121 000.023	119.00 £
20 µL	■ yellow	±1.0 %	±0.2 µL	±0.3 %	±0.06 µL	3121 000.040	119.00 £
25 µL	■ yellow	±1.0 %	±0.25 µL	±0.3 %	±0.08 µL	3121 000.058	119.00 £
50 µL	■ yellow	±0.7 %	±0.35 µL	±0.3 %	±0.15 µL	3121 000.066	119.00 £
100 µL	■ yellow	±0.6 %	±0.6 µL	±0.2 %	±0.2 µL	3121 000.074	119.00 £
200 µL	■ yellow	±0.6 %	±1.2 µL	±0.2 %	±0.4 µL	3121 000.082	119.00 £
200 µL	■ blue	±0.6 %	±1.2 µL	±0.2 %	±0.4 µL	3121 000.090	119.00 £
250 µL	■ blue	±0.6 %	±1.5 µL	±0.2 %	±0.5 µL	3121 000.104	119.00 £
500 µL	■ blue	±0.6 %	±3.0 µL	±0.2 %	±1.0 µL	3121 000.112	119.00 £
1,000 µL	■ blue	±0.6 %	±6.0 µL	±0.2 %	±2.0 µL	3121 000.120	119.00 £

<sup>1)</sup> The error data, according to EN ISO 8655, only applies if original Eppendorf tips are used. Technical specifications are subject to change. Errors and omissions excepted.

i For more information go to [www.eppendorf.com/Researchplus](http://www.eppendorf.com/Researchplus)

- Pipette service and maintenance contracts can be found on page 70. Pipette tips can be found on page 40 onward. Further information about IVD products see on page 511.

## Ordering information

Volume range	Color code	Volume	Rel. systematic error <sup>1)</sup>	Abs. systematic error <sup>1)</sup>	Rel. random error <sup>1)</sup>	Abs. random error <sup>1)</sup>	Order no.	Price
<b>Eppendorf Research<sup>®</sup> plus</b> , single-channel, variable, incl. epT.I.P.S. <sup>®</sup> Box or epT.I.P.S. <sup>®</sup> sample bag								
0.1 – 2.5 µL	■ dark gray	0.1 µL	±48.0 %	0.048 µL	±12.0 %	±0.012 µL	3120 000.011	190.00 £
		0.25 µL	±12.0 %	0.03 µL	±6.0 %	±0.015 µL		
		1.25 µL	±2.5 %	0.031 µL	±1.5 %	±0.019 µL		
		2.5 µL	±1.4 %	0.035 µL	±0.7 %	±0.018 µL		
0.5 – 10 µL	■ medium gray	0.5 µL	±8.0 %	±0.04 µL	±5.0 %	±0.025 µL	3120 000.020	190.00 £
		1 µL	±2.5 %	±0.025 µL	±1.8 %	±0.018 µL		
		5 µL	±1.5 %	±0.075 µL	±0.8 %	±0.04 µL		
		10 µL	±1.0 %	±0.1 µL	±0.4 %	±0.04 µL		
2 – 20 µL	■ light gray	2 µL	±5.0 %	±0.1 µL	±1.5 %	±0.03 µL	3120 000.097	190.00 £
		10 µL	±1.2 %	±0.12 µL	±0.6 %	±0.06 µL		
		20 µL	±1.0 %	±0.2 µL	±0.3 %	±0.06 µL		
2 – 20 µL	■ yellow	2 µL	±5.0 %	±0.1 µL	±1.5 %	±0.03 µL	3120 000.038	190.00 £
		10 µL	±1.2 %	±0.12 µL	±0.6 %	±0.06 µL		
		20 µL	±1.0 %	±0.2 µL	±0.3 %	±0.06 µL		
10 – 100 µL	■ yellow	10 µL	±3.0 %	±0.3 µL	±1.0 %	±0.1 µL	3120 000.046	190.00 £
		50 µL	±1.0 %	±0.5 µL	±0.3 %	±0.15 µL		
		100 µL	±0.8 %	±0.8 µL	±0.2 %	±0.2 µL		
20 – 200 µL	■ yellow	20 µL	±2.5 %	±0.5 µL	±0.7 %	±0.14 µL	3120 000.054	190.00 £
		100 µL	±1.0 %	±1.0 µL	±0.3 %	±0.3 µL		
		200 µL	±0.6 %	±1.2 µL	±0.2 %	±0.4 µL		
30 – 300 µL	■ orange	30 µL	±2.5 %	±0.75 µL	±0.7 %	±0.21 µL	3120 000.100	190.00 £
		150 µL	±1.0 %	±1.5 µL	±0.3 %	±0.45 µL		
		300 µL	±0.6 %	±1.8 µL	±0.2 %	±0.6 µL		
100 – 1,000 µL	■ blue	100 µL	±3.0 %	±3.0 µL	±0.6 %	±0.6 µL	3120 000.062	190.00 £
		500 µL	±1.0 %	±5.0 µL	±0.2 %	±1.0 µL		
		1,000 µL	±0.6 %	±6.0 µL	±0.2 %	±2.0 µL		
0.5 – 5 mL	■ violet	0.5 mL	±2.4 %	±0.012 mL	±0.6 %	±0.003 mL	3120 000.070	190.00 £
		2.5 mL	±1.2 %	±0.03 mL	±0.25 %	±0.006 mL		
		5 mL	±0.6 %	±0.03 mL	±0.15 %	±0.008 mL		
1 – 10 mL	■ turquoise	1 mL	±3.0 %	±0.03 mL	±0.6 %	±0.006 mL	3120 000.089	190.00 £
		5 mL	±0.8 %	±0.04 mL	±0.2 %	±0.01 mL		
		10 mL	±0.6 %	±0.06 mL	±0.15 %	±0.015 mL		

<sup>1)</sup> The error data, according to EN ISO 8655, only applies if original Eppendorf tips are used. Technical specifications are subject to change. Errors and omissions excepted.

i For more information go to [www.eppendorf.com/Researchplus](http://www.eppendorf.com/Researchplus)

► Pipette service and maintenance contracts can be found on page 70. Pipette tips can be found on page 40 onward. Further information about IVD products see on page 511.

# Eppendorf Research<sup>®</sup> plus

## Ordering information

Volume range	Color code	Volume	Rel. systematic error <sup>1)</sup>	Abs. systematic error <sup>1)</sup>	Rel. random error <sup>1)</sup>	Abs. random error <sup>1)</sup>	Order no.	Price
<b>Eppendorf Research<sup>®</sup> plus, 8-channel, variable</b>								
0.5 – 10 µL	medium gray	0.5 µL	±12.0 %	±0.06 µL	±8.0 %	±0.04 µL	3122 000.019	553.00 £
		1 µL	±8.0 %	±0.08 µL	±5.0 %	±0.05 µL		
		5 µL	±4.0 %	±0.2 µL	±2.0 %	±0.1 µL		
		10 µL	±2.0 %	±0.2 µL	±1.0 %	±0.1 µL		
10 – 100 µL	yellow	10 µL	±3.0 %	±0.3 µL	±2.0 %	±0.2 µL	3122 000.035	553.00 £
		50 µL	±1.0 %	±0.5 µL	±0.8 %	±0.4 µL		
		100 µL	±0.8 %	±0.8 µL	±0.3 %	±0.3 µL		
30 – 300 µL	orange	30 µL	±3.0 %	±0.9 µL	±1.0 %	±0.3 µL	3122 000.051	553.00 £
		150 µL	±1.0 %	±1.5 µL	±0.5 %	±0.75 µL		
		300 µL	±0.8 %	±1.8 µL	±0.3 %	±0.9 µL		
<b>Eppendorf Research<sup>®</sup> plus, 12-channel, variable</b>								
0.5 – 10 µL	medium gray	0.5 µL	±12.0 %	±0.06 µL	±8.0 %	±0.04 µL	3122 000.027	605.00 £
		1 µL	±8.0 %	±0.08 µL	±5.0 %	±0.05 µL		
		5 µL	±4.0 %	±0.2 µL	±2.0 %	±0.1 µL		
		10 µL	±2.0 %	±0.2 µL	±1.0 %	±0.1 µL		
10 – 100 µL	yellow	10 µL	±3.0 %	±0.3 µL	±2.0 %	±0.2 µL	3122 000.043	605.00 £
		50 µL	±1.0 %	±0.5 µL	±0.8 %	±0.4 µL		
		100 µL	±0.8 %	±0.8 µL	±0.3 %	±0.3 µL		
30 – 300 µL	orange	30 µL	±3.0 %	±0.9 µL	±1.0 %	±0.3 µL	3122 000.060	605.00 £
		150 µL	±1.0 %	±1.5 µL	±0.5 %	±0.75 µL		
		300 µL	±0.6 %	±1.8 µL	±0.3 %	±0.9 µL		

<sup>1)</sup> The error data, according to EN ISO 8655, only applies if original Eppendorf tips are used. Technical specifications are subject to change. Errors and omissions excepted.

## Eppendorf Research<sup>®</sup> plus 3-pack



### Description

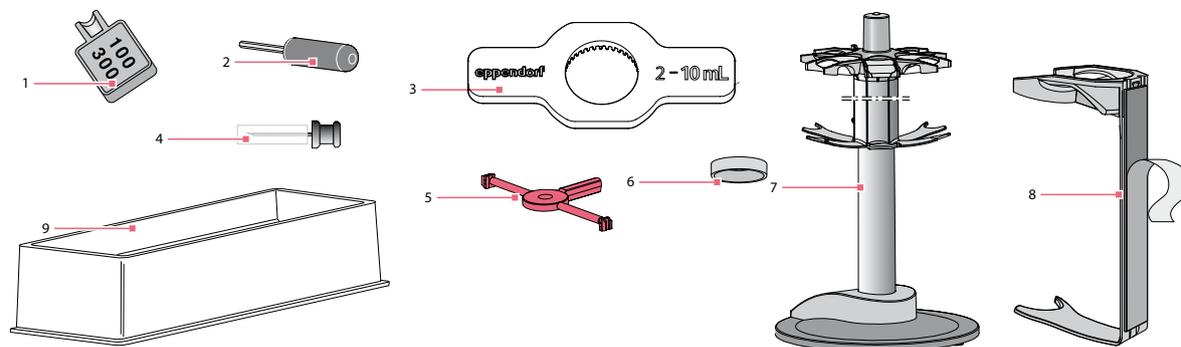
Get ready for a threefold enjoyable pipetting experience with one of the most advanced and ergonomic pipettes in the world. The economic Research plus triple-pack is available in three different versions. In addition to three Research plus pipettes, each pack contains one set of matching Eppendorf tips and one of the popular Eppendorf ballpoint pens.

## Ordering information

Description	Order no.	Price
<b>Eppendorf Research<sup>®</sup> plus 3-pack</b> , incl. epT.I.P.S. <sup>®</sup> Box or sample bag and ballpoint pen		
<b>Option 1:</b> 0,5-10 µL, 10-100 µL, 100-1,000 µL	3120 000.909	468.00 £
<b>Option 2:</b> 2-20 µL yellow, 20-200 µL, 100-1,000 µL	3120 000.917	468.00 £
<b>Option 3:</b> 100-1,000 µL, 0,5-5 mL, 1-10 mL	3120 000.925	468.00 £

► Pipette service and maintenance contracts can be found on page 70. Pipette tips can be found on page 40 onward. Further information about IVD products see on page 511.

Manufacturer's recommended retail price. All prices excl. VAT.  
Technical specifications subject to change.



- |                              |                              |
|------------------------------|------------------------------|
| 1. Multi-channel tool        | 6. Locking ring              |
| 2. Adjustment tool           | 7. Pipette carousel          |
| 3. Pipette wrench 5 mL/10 mL | 8. Pipette holder            |
| 4. Pin                       | 9. Reagent reservoir Tip-Tub |
| 5. Safety plug tool          |                              |

### Accessories

Description	Order no.	Price
<b>Pipette carousel</b> , with 6 holders, for Eppendorf Research® plus and Biomaster® 4830	3115 000.003	93.20 £
<b>Holder</b> , for Eppendorf Research® plus and Biomaster® 4830, for pipette carousel	3115 600.019	11.40 £
<b>Wall mount</b> , for Eppendorf Research® plus and Biomaster® 4830, with hook and loop strip	3115 000.020	14.90 £
<b>Eppendorf Research® plus adjustment seal</b>	3120 636.005	1.60 £
<b>Adjustment tool</b> , for changing factory or secondary user adjustment	3120 633.006	4.90 £
<b>Safety plug tools</b> , 5 pieces	3120 639.004	5.10 £
<b>Eppendorf Research® plus protection filter</b> , for tip cone, 5 mL, color code violet, 1 set = 50 pieces	3120 632.000	14.50 £
<b>Eppendorf Research® plus protection filter</b> , for tip cone, 10 mL, color code: turquoise, 1 set = 50 pieces	3111 606.004	23.70 £
<b>O-ring for tip cones</b> , 24 pcs., red, for 100 & 300 µL multi-channel pipettes, with mounting aid (1 set = 24 pieces)	3122 611.000	12.80 £
<b>Cutting tool</b> , for red o-rings of 100 & 300 µL multi-channel pipettes	3122 610.003	4.90 £
<b>Key for detachment of 2-10mL pipettes lower parts</b>	3120 634.002	4.90 £
<b>Locking ring</b> , to prevent spring action of 10-1000µL single channel pipettes tip cones	3120 635.009	2.30 £
<b>Tip-Tub reagent reservoir</b> , autoclavable reservoir for aspirating liquids with multi-channel pipettes, 1 set = 10 reservoirs and 10 lids	0030 058.607	17.50 £
<b>Special grease for pipettes</b> , bag of 1 g	0013 063.010	3.30 £
<b>Picaso® II</b> , software for pipette calibration	3113 004.001	393.00 £
<b>Eppendorf TrackIT</b> , RFID Reader and Software	3903 000.014	373.00 £

- Pipette service and maintenance contracts can be found on page 70. Pipette tips can be found on page 40 onward. Further information about IVD products see on page 511.

# Eppendorf Xplorer®

Flexible charging options:  
Ability to recharge by  
connecting the power  
cord directly to the unit  
or on the charging stand

Intuitive user interface  
for quick and easy  
programming in 9  
languages

Multifunctional rocker  
is used for parameter  
adjustment and initiation  
of aspiration and  
dispensing.

Innovative ejector is  
electronically linked to  
the piston control

Selection dial indicates  
the current mode at a  
glance

Ergonomic display  
angle makes viewing  
convenient for all users  
and the ergonomic  
handle enables facilitates  
operation

History function:  
automatic storage of last  
10 parameter sets (can  
be optionally set as an  
alternative to the Help  
function)

Spring-loaded nose  
cone ensures perfect tip  
attachment, even on the  
multichannel pipettes



For more information go to [www.eppendorf.com/Xplorer](http://www.eppendorf.com/Xplorer)



### Description

The Eppendorf Xplorer pipettes are electronic single, 8 and 12 channel pipettes designed to aspirate and dispense liquid volumes from 0.5  $\mu$ L to 10 mL while eliminating many of the potential error risks associated with manual pipetting. The intuitive operating concept and ergonomic design, supported by Eppendorf PhysioCare Concept<sup>®</sup> set new standards in simplicity, precision and reproducibility. It can be set to 9 different languages: Chinese, Dutch, English, French, German, Italian, Japanese, Portuguese and Spanish. The Xplorer pipettes are the ideal instrument if you need precisely adjustable parameters, reproducible and accurate results while experiencing fatigue-free pipetting and always maintaining full control over pipetting procedures.



### Applications

- > Pipetting liquids (manual and automatic)
- > Pipetting and mixing
- > Dispensing (timed and manual)
- > Volume determination (manual pipetting)
- > Filling of plates, gels, and reaction vessels
- > Phase extraction and removal of supernatants

Modes	Xplorer	Xplorer plus
Pipetting: Aspiration and Dispensing of liquids	■	■
Manual Pipetting: Aspiration of liquid can be manually stopped prior to reaching the max set volume; used for volume determination	■	■
Pipetting and Mixing: Samples are aspirated and dispensed in for a set number of user triggered mixing cycles	■	■
Dispensing: dispensing of liquid in equal partial volumes	■	■
Automatic Dispensing: automatic dispensing of liquid in equal partial volumes at user defined time intervals	■	■
Multi Aspiration: Consecutive aspiration of liquid volume for pooling into one pipette tip		■
Sequential Dispensing: Dispensing of liquid in up to 10 unique volumes in a preset user defined sequence		■
Reverse Pipetting: Aspiration and Dispensing of non aqueous solutions		■
Fix Volume: Storage of frequently used volumes; 10 unique volumes with speed of aspiration and dispense		■
Programming: Storage of up to 4 different modes in a sequence; 10 programs may be stored		■

i For more information go to [www.eppendorf.com/Xplorer](http://www.eppendorf.com/Xplorer)

# Eppendorf Xplorer®



Ordering information								
Volume range	Color code	Volume	Rel. systematic error <sup>1)</sup>	Abs. systematic error <sup>1)</sup>	Rel. random error <sup>1)</sup>	Abs. random error <sup>1)</sup>	Order no.	Price
<b>Eppendorf Xplorer®, single-channel, variable</b>								
0.5 – 10 µL	■ medium gray	0.5 µL	±6.0 %	±0.03 µL	±3.0 %	±0.015 µL	4861 000.015	435.00 £
		1 µL	±2.5 %	±0.025 µL	±1.8 %	±0.018 µL		
		5 µL	±1.5 %	±0.075 µL	±0.8 %	±0.04 µL		
		10 µL	±1.0 %	±0.1 µL	±0.4 %	±0.04 µL		
5 – 100 µL	■ yellow	5 µL	±4.0 %	±0.2 µL	±2.0 %	±0.1 µL	4861 000.023	435.00 £
		10 µL	±2.0 %	±0.2 µL	±1.0 %	±0.1 µL		
		50 µL	±1.0 %	±0.5 µL	±0.3 %	±0.15 µL		
		100 µL	±0.8 %	±0.8 µL	±0.2 %	±0.2 µL		
15 – 300 µL	■ orange	15 µL	±5.0 %	±0.75 µL	±1.4 %	±0.21 µL	4861 000.031	435.00 £
		30 µL	±2.5 %	±0.75 µL	±0.7 %	±0.21 µL		
		150 µL	±1.0 %	±1.5 µL	±0.3 %	±0.45 µL		
		300 µL	±0.6 %	±1.8 µL	±0.2 %	±0.6 µL		
50 – 1,000 µL	■ blue	50 µL	±6.0 %	±3 µL	±1.0 %	±0.5 µL	4861 000.040	435.00 £
		100 µL	±3.0 %	±3 µL	±0.6 %	±0.6 µL		
		500 µL	±1.0 %	±5 µL	±0.2 %	±1 µL		
		1,000 µL	±0.6 %	±6 µL	±0.2 %	±2 µL		
0.2 – 5 mL	■ violet	250 µL	±4.8 %	±12 µL	±1.2 %	±3 µL	4861 000.058	435.00 £
		500 µL	±3.0 %	±15 µL	±0.6 %	±3 µL		
		2,500 µL	±1.2 %	±30 µL	±0.3 %	±6.25 µL		
		5,000 µL	±0.6 %	±30 µL	±0.15 %	±7.5 µL		
0.5 – 10 mL	■ turquoise	500 µL	±6.0 %	±30 µL	±1.2 %	±6 µL	4861 000.066	435.00 £
		1,000 µL	±3.0 %	±30 µL	±0.6 %	±6 µL		
		5,000 µL	±0.8 %	±40 µL	±0.2 %	±10 µL		
		10,000 µL	±0.6 %	±60 µL	±0.15 %	±15 µL		

<sup>1)</sup> The error data, according to EN ISO 8655, only applies if original Eppendorf tips are used. Technical specifications are subject to change. Errors and omissions excepted.

i For more information go to [www.eppendorf.com/Xplorer](http://www.eppendorf.com/Xplorer)

**Ordering information**

Volume range	Color code	Volume	Rel. systematic error <sup>1)</sup>	Abs. systematic error <sup>1)</sup>	Rel. random error <sup>1)</sup>	Abs. random error <sup>1)</sup>	Order no.	Price
<b>Eppendorf Xplorer<sup>®</sup>, 8-channel, variable</b>								
0.5 – 10 µL	■ medium gray	0.5 µL	±10.0 %	±0.05 µL	±6.0 %	±0.03 µL	4861 000.104	631.00 £
		1 µL	±5.0 %	±0.05 µL	±3.0 %	±0.03 µL		
		5 µL	±3.0 %	±0.15 µL	±1.5 %	±0.075 µL		
		10 µL	±2.0 %	±0.2 µL	±0.8 %	±0.08 µL		
5 – 100 µL	■ yellow	5 µL	±6.0 %	±0.3 µL	±4.0 %	±0.2 µL	4861 000.120	631.00 £
		10 µL	±2.0 %	±0.2 µL	±2.0 %	±0.2 µL		
		50 µL	±1.0 %	±0.5 µL	±0.8 %	±0.4 µL		
		100 µL	±0.8 %	±0.8 µL	±0.25 %	±0.25 µL		
15 – 300 µL	■ orange	15 µL	±6.0 %	±0.9 µL	±2.0 %	±0.3 µL	4861 000.147	631.00 £
		30 µL	±2.5 %	±0.75 µL	±1.0 %	±0.3 µL		
		150 µL	±1.0 %	±1.5 µL	±0.5 %	±0.75 µL		
		300 µL	±0.6 %	±1.8 µL	±0.25 %	±0.75 µL		
50 – 1,200 µL	■ green	50 µL	±8.0 %	±4.0 µL	±1.2 %	±0.6 µL	4861 000.163	631.00 £
		120 µL	±6.0 %	±7.2 µL	±0.9 %	±1.08 µL		
		600 µL	±2.7 %	±16.2 µL	±0.4 %	±2.4 µL		
		1,200 µL	±1.2 %	±14.4 µL	±0.3 %	±3.6 µL		
<b>Eppendorf Xplorer<sup>®</sup>, 12-channel, variable</b>								
0.5 – 10 µL	■ medium gray	0.5 µL	±10.0 %	±0.05 µL	±6.0 %	±0.03 µL	4861 000.112	741.00 £
		1 µL	±5.0 %	±0.05 µL	±3.0 %	±0.03 µL		
		5 µL	±3.0 %	±0.15 µL	±1.5 %	±0.075 µL		
		10 µL	±2.0 %	±0.2 µL	±0.8 %	±0.08 µL		
5 – 100 µL	■ yellow	5 µL	±6.0 %	±0.3 µL	±4.0 %	±0.2 µL	4861 000.139	741.00 £
		10 µL	±2.0 %	±0.2 µL	±2.0 %	±0.2 µL		
		50 µL	±1.0 %	±0.5 µL	±0.8 %	±0.4 µL		
		100 µL	±0.8 %	±0.8 µL	±0.25 %	±0.25 µL		
15 – 300 µL	■ orange	15 µL	±6.0 %	±0.9 µL	±2.0 %	±0.3 µL	4861 000.155	741.00 £
		30 µL	±2.5 %	±0.75 µL	±1.0 %	±0.3 µL		
		150 µL	±1.0 %	±1.5 µL	±0.5 %	±0.75 µL		
		300 µL	±0.6 %	±1.8 µL	±0.25 %	±0.75 µL		
50 – 1,200 µL	■ green	50 µL	±8.0 %	±4.0 µL	±1.2 %	±0.6 µL	4861 000.171	741.00 £
		120 µL	±6.0 %	±7.2 µL	±0.9 %	±1.08 µL		
		600 µL	±2.7 %	±16.2 µL	±0.4 %	±2.4 µL		
		1,200 µL	±1.2 %	±14.2 µL	±0.3 %	±3.6 µL		

<sup>1)</sup> The error data, according to EN ISO 8655, only applies if original Eppendorf tips are used. Technical specifications are subject to change. Errors and omissions excepted.

## Eppendorf Xplorer® plus

The Eppendorf Xplorer plus offers all Eppendorf Xplorer functions including an intuitive operating concept

Individual speed setting allows you to set parameters at a speed you are comfortable with that are perfect for the liquid class

One-time programming of individual sequences for simple editing of complex processes

Storage of frequently used fixed volumes for quick programming



Intelligent, preset applications: aspiration, dilution, sequential dispense and pipetting, reverse pipetting

Reminder function for pipette servicing, based on time or usage interval

Programming and adjustment security via an optional password protection

**i** For more information go to [www.eppendorf.com/Xplorerplus](http://www.eppendorf.com/Xplorerplus)



### Applications

- > Pipetting liquids (manual and electronic)
- > Dispensing (timed and manual)
- > Pipetting and mixing
- > Diluting
- > Pooling supernatants from different vessels (multi aspiration)
- > Sequential dispensing and pipetting
- > Pipetting of viscous or high vapour pressure liquids (reverse pipetting)
- > Volume determination (manual pipetting)
- > Filling of plates, gels, and reaction vessels
- > Phase extraction and removal of supernatants

### Description

The Eppendorf Xplorer plus was developed to exceed the high standards of Eppendorf Xplorer. This expanded version offers exciting extras such as intelligent applications, adjustable fixed volumes, individual programming and a history function to make work much easier and faster. The Eppendorf Xplorer plus is the perfect choice for all users who need advanced speed, safety and reliability every day.

### Ordering information

Volume range	Color code	Volume	Rel. systematic error <sup>1)</sup>	Abs. systematic error <sup>1)</sup>	Rel. random error <sup>1)</sup>	Abs. random error <sup>1)</sup>	Order no.	Price
<b>Eppendorf Xplorer® plus, single-channel</b>								
0.5 – 10 µL	medium gray	0.5 µL	±6.0 %	±0.03 µL	±3.0 %	±0.015 µL	4861 000.708	535.00 £
		1 µL	±2.5 %	±0.025 µL	±1.8 %	±0.018 µL		
		5 µL	±1.5 %	±0.075 µL	±0.8 %	±0.04 µL		
		10 µL	±1.0 %	±0.1 µL	±0.4 %	±0.04 µL		
5 – 100 µL	yellow	5 µL	±4.0 %	±0.2 µL	±2.0 %	±0.1 µL	4861 000.716	535.00 £
		10 µL	±2.0 %	±0.2 µL	±1.0 %	±0.1 µL		
		50 µL	±1.0 %	±0.5 µL	±0.3 %	±0.15 µL		
		100 µL	±0.8 %	±0.8 µL	±0.2 %	±0.2 µL		
15 – 300 µL	orange	15 µL	±5.0 %	±0.75 µL	±1.4 %	±0.21 µL	4861 000.724	535.00 £
		30 µL	±2.5 %	±0.75 µL	±0.7 %	±0.21 µL		
		150 µL	±1.0 %	±1.5 µL	±0.3 %	±0.45 µL		
		300 µL	±0.6 %	±1.8 µL	±0.2 %	±0.6 µL		
50 – 1,000 µL	blue	50 µL	±6.0 %	±3 µL	±1.0 %	±0.5 µL	4861 000.732	535.00 £
		100 µL	±3.0 %	±3 µL	±0.6 %	±0.6 µL		
		500 µL	±1.0 %	±5 µL	±0.2 %	±1 µL		
		1,000 µL	±0.6 %	±6 µL	±0.2 %	±2 µL		
0.2 – 5 mL	violet	250 µL	±4.8 %	±12 µL	±1.2 %	±3 µL	4861 000.740	535.00 £
		500 µL	±3.0 %	±15 µL	±0.6 %	±3 µL		
		2,500 µL	±1.2 %	±30 µL	±0.3 %	±6.25 µL		
		5,000 µL	±0.6 %	±30 µL	±0.15 %	±7.5 µL		
0.5 – 10 mL	turquoise	500 µL	±6.0 %	±30 µL	±1.2 %	±6 µL	4861 000.759	535.00 £
		1,000 µL	±3.0 %	±30 µL	±0.6 %	±6 µL		
		5,000 µL	±0.8 %	±40 µL	±0.2 %	±10 µL		
		10,000 µL	±0.6 %	±60 µL	±0.15 %	±15 µL		

<sup>1)</sup> The error data, according to EN ISO 8655, only applies if original Eppendorf tips are used. Technical specifications are subject to change. Errors and omissions excepted.

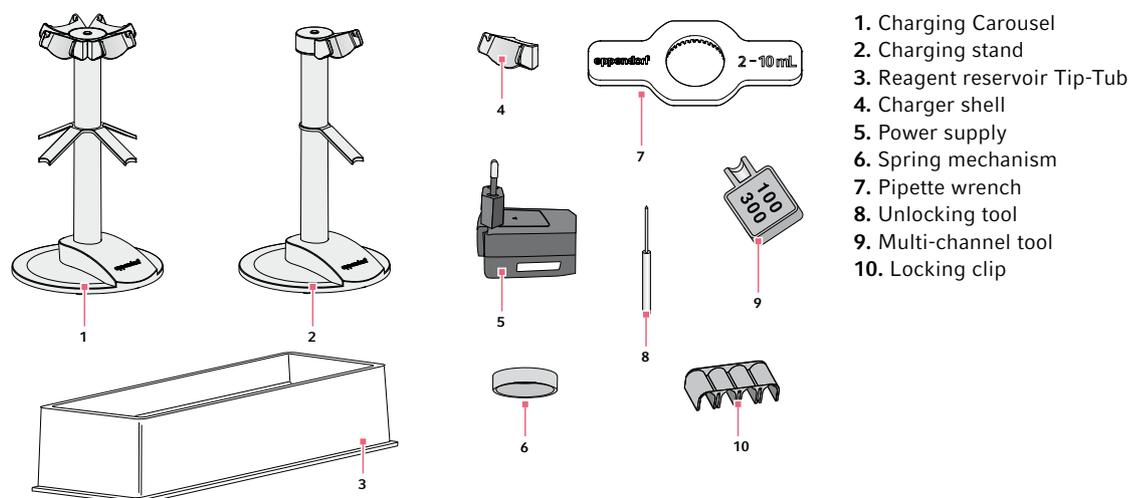
# Eppendorf Xplorer® plus



## Ordering information

Volume range	Color code	Volume	Rel. systematic error <sup>1)</sup>	Abs. systematic error <sup>1)</sup>	Rel. random error <sup>1)</sup>	Abs. random error <sup>1)</sup>	Order no.	Price
<b>Eppendorf Xplorer® plus, 8-channel</b>								
0.5 – 10 µL	medium gray	0.5 µL	±10.0 %	±0.05 µL	±6.0 %	±0.03 µL	4861 000.767	777.00 £
		1 µL	±5.0 %	±0.05 µL	±3.0 %	±0.03 µL		
		5 µL	±3.0 %	±0.15 µL	±1.5 %	±0.075 µL		
		10 µL	±2.0 %	±0.2 µL	±0.8 %	±0.08 µL		
5 – 100 µL	yellow	5 µL	±6.0 %	±0.3 µL	±4.0 %	±0.2 µL	4861 000.783	777.00 £
		10 µL	±2.0 %	±0.2 µL	±2.0 %	±0.2 µL		
		50 µL	±1.0 %	±0.5 µL	±0.8 %	±0.4 µL		
		100 µL	±0.8 %	±0.8 µL	±0.25 %	±0.25 µL		
15 – 300 µL	orange	15 µL	±6.0 %	±0.9 µL	±2.0 %	±0.3 µL	4861 000.805	777.00 £
		30 µL	±2.5 %	±0.75 µL	±1.0 %	±0.3 µL		
		150 µL	±1.0 %	±1.5 µL	±0.5 %	±0.75 µL		
		300 µL	±0.6 %	±1.8 µL	±0.25 %	±0.75 µL		
50 – 1,200 µL	green	50 µL	±8.0 %	±4.0 µL	±1.2 %	±0.6 µL	4861 000.821	777.00 £
		120 µL	±6.0 %	±7.2 µL	±0.9 %	±1.08 µL		
		600 µL	±2.7 %	±16.2 µL	±0.4 %	±2.4 µL		
		1,200 µL	±1.2 %	±14.4 µL	±0.3 %	±3.6 µL		
<b>Eppendorf Xplorer® plus, 12-channel</b>								
0.5 – 10 µL	medium gray	0.5 µL	±10.0 %	±0.05 µL	±6.0 %	±0.03 µL	4861 000.775	911.00 £
		1 µL	±5.0 %	±0.05 µL	±3.0 %	±0.03 µL		
		5 µL	±3.0 %	±0.15 µL	±1.5 %	±0.075 µL		
		10 µL	±2.0 %	±0.2 µL	±0.8 %	±0.08 µL		
5 – 100 µL	yellow	5 µL	±6.0 %	±0.3 µL	±4.0 %	±0.2 µL	4861 000.791	911.00 £
		10 µL	±2.0 %	±0.2 µL	±2.0 %	±0.2 µL		
		50 µL	±1.0 %	±0.5 µL	±0.8 %	±0.4 µL		
		100 µL	±0.8 %	±0.8 µL	±0.25 %	±0.25 µL		
15 – 300 µL	orange	15 µL	±6.0 %	±0.9 µL	±2.0 %	±0.3 µL	4861 000.813	911.00 £
		30 µL	±2.5 %	±0.75 µL	±1.0 %	±0.3 µL		
		150 µL	±1.0 %	±1.5 µL	±0.5 %	±0.75 µL		
		300 µL	±0.6 %	±1.8 µL	±0.25 %	±0.75 µL		
50 – 1,200 µL	green	50 µL	±8.0 %	±4.0 µL	±1.2 %	±0.6 µL	4861 000.830	911.00 £
		120 µL	±6.0 %	±7.2 µL	±0.9 %	±1.08 µL		
		600 µL	±2.7 %	±16.2 µL	±0.4 %	±2.4 µL		
		1,200 µL	±1.2 %	±14.2 µL	±0.3 %	±3.6 µL		

<sup>1)</sup> The error data, according to EN ISO 8655, only applies if original Eppendorf tips are used. Technical specifications are subject to change. Errors and omissions excepted.



1. Charging Carousel
2. Charging stand
3. Reagent reservoir Tip-Tub
4. Charger shell
5. Power supply
6. Spring mechanism
7. Pipette wrench
8. Unlocking tool
9. Multi-channel tool
10. Locking clip

### Accessories

Description	Order no.	Price
<b>Charger carousel</b> , for 4 Eppendorf Xplorer® and Eppendorf Xplorer® plus	4880 000.026	286.00 £
<b>Charger stand</b> , for 1 Eppendorf Xplorer® and Eppendorf Xplorer® plus	4880 000.000	157.00 £
<b>Charger shell</b> , for Eppendorf Xplorer®, for charging carousel and stand	4880 602.000	35.20 £
<b>Wall mount for Eppendorf Xplorer®</b>	4861 615.001	21.10 £
<b>Power supply 100-240VAC / 5VDC (c)</b> , with power plug adapters for Eppendorf Xplorer® and electronic Multipipette®/Repeater®	4986 603.005	14.50 £
<b>Power supply</b> , incl. power plug adapters for charger carousel for Eppendorf Xplorer® and electronic Multipipette®/Repeater®	4880 603.006	15.50 £
<b>Eppendorf Research® plus protection filter</b> , for tip cone, 5 mL, color code violet, 1 set = 50 pieces	3120 632.000	14.50 £
<b>Eppendorf Research® plus protection filter</b> , for tip cone, 10 mL, color code: turquoise, 1 set = 50 pieces	3111 606.004	23.70 £
<b>O-ring for tip cones, 24 pcs.</b> , red, for 100 & 300µL multi-channel pipettes, with mounting aid (1 set = 24 pieces)	3122 611.000	12.80 £
<b>Cutting tool</b> , for red o-rings of 100 & 300 µL multi-channel pipettes	3122 610.003	4.90 £
<b>O-Ring</b> , red, for 1200µL multi-channel pipettes (1 set = 24 pieces)	4860 716.009	14.50 £
<b>Key for detachment of 2-10 mL pipettes lower parts</b>	3120 634.002	4.90 £
<b>Key for detachment of 1200 µL pipettes lower parts</b>	4861 605.006	6.50 £
<b>Locking ring</b> , to prevent spring action of 10-1000µL single channel pipettes tip cones	3120 635.009	2.30 £
<b>Locking clip for 8-channel pipette</b> , to prevent spring action of tip cones	3122 612.006	4.20 £
<b>Locking clip for 12-channel pipette</b> , to prevent spring action of tip cones	3122 613.002	5.20 £
<b>Tip-Tub reagent reservoir</b> , autoclavable reservoir for aspirating liquids with multi-channel pipettes, 1 set = 10 reservoirs and 10 lids	0030 058.607	17.50 £
<b>Special grease for pipettes</b> , bag of 1 g	0013 063.010	3.30 £
<b>Picaso® II</b> , software for pipette calibration	3113 004.001	393.00 £
<b>Eppendorf TrackIT</b> , RFID Reader and Software	3903 000.014	373.00 £

i For more information go to [www.eppendorf.com/Xplorerplus](http://www.eppendorf.com/Xplorerplus)

## epT.I.P.S.<sup>®</sup>



### Description

For epT.I.P.S. – the original Eppendorf “Totally Integrated Pipetting System” – the tips are optimally coordinated to Eppendorf pipettes and, of course, meet EN ISO 8655 requirements. This has resulted in minimal attachment and ejection forces with the highest level of tightness. epT.I.P.S. pipette tips can be used with pipettes from other manufacturers. Optimal wetting properties, high transparency and special, certified purity grades are the visible expression of our product and production philosophy.

### Applications

- > Pipetting liquids
- > Dispensing liquids
- > Mixing liquids
- > Filling plates and reaction vessels
- > Filling gels for electrophoresis
- > Phase extraction and removal of supernatants

### Product features

- > The ergonomically optimized cone geometry provides the optimal pipette fit on the Eppendorf Pipette
- > epT.I.P.S. pipette tips can be used universally, including pipette models from other manufacturers
- > Fine graduations make visual checks of the pipetting volume even easier
- > Long, narrow tips reach the base of narrow and high vessels without touching the top of the vessel edge
- > Fine retracted or extended tips simplify work with small volumes
- > Available in five purity grades: Eppendorf Quality, PCR clean, Eppendorf Biopur<sup>®</sup>, PCR clean/Sterile (sterile and pyrogen-free)
- > Color-coded trays make volume identification and allocation of Eppendorf pipettes easier than ever

**i** For more information go to [www.eppendorf.com/epTips](http://www.eppendorf.com/epTips)

**>** Ordering information see page 48



### epT.I.P.S.® Standard

- > Original, high-quality Eppendorf pipette tips packaged in resealable bags
- > Available in sizes from 10 µL to 10 mL in Eppendorf Quality purity grade
- > epT.I.P.S. Standard 200 µL, 300 µL and 1,000 µL tips are also available color-coded yellow and blue
- > epT.I.P.S. Standard pipette tips can be autoclaved at 121 °C



### epT.I.P.S.® Box/epT.I.P.S.® Set

- > Contamination-free transfer of trays to stable working box
- > System optimized for use with multichannel pipettes
- > Color-coded trays for simple identification of tips and pipette
- > Tips can be attached to pipette from refill trays
- > Boxes and trays are autoclavable at 121 °C for subsequent use
- > epT.I.P.S. Box and epT.I.P.S. Set available in Eppendorf Quality



### epT.I.P.S.® Racks

- > Eppendorf Biopur pipette tips offer the highest biological purity
- > Guaranteed PCR clean, sterile, pyrogen-, ATP- and bacterial DNA-free
- > For use in medical, pharmaceutical and food industry, molecular biology and cell technology
- > Each production lot inspected continuously by independent laboratory
- > Batch-specific certificates available at [www.eppendorf.com/certificates](http://www.eppendorf.com/certificates)
- > Packed in racks with 96, 48 or 24 tips



### epT.I.P.S.® Singles

- > Eppendorf Biopur pipette tip, individually wrapped
- > Guaranteed PCR clean, sterile, pyrogen-, ATP- and bacterial DNA-free
- > For use in medical, pharmaceutical and food industry, molecular biology and cell technology
- > Batch number and expiration date on each blister package
- > Each production lot inspected continuously by independent laboratory
- > Batch-specific certificates available at [www.eppendorf.com/certificates](http://www.eppendorf.com/certificates)

## epT.I.P.S.<sup>®</sup>



### epT.I.P.S.<sup>®</sup> Reloads

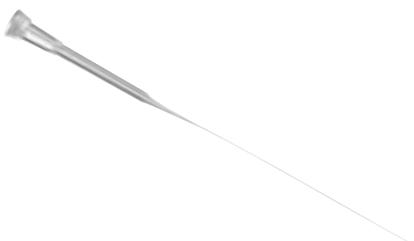
- > All components are 100% recyclable
- > Reduced waste as compared with disposable racks
- > The refill trays can be autoclaved up to 121°C, in packaging and without foil, for subsequent use.
- > The refill system, depending on tips size, is packaged as either dual-sided or in stack form
- > Available in purity grades of Eppendorf Quality and PCR clean
- > Color-coded trays for simple volume and pipette identification

## Special Tips



### Eppendorf GELoader<sup>®</sup>

- > Special tip for gel electrophoresis, loading of polyacrylamide gels
- > Flexible long and narrow tips for handling of smallest volumes
- > GELoader tips and rack autoclavable (121 °C, 20 min.)
- > Highest precision and accuracy when used with Eppendorf pipettes for 0.5 to 10 µL (gray control button)



### Eppendorf Microloader<sup>®</sup>

- > Extremely long, fine and flexible tip for filling of microcapillaries for microinjection and where additional reach is needed
- > Ideal for recovering surplus solution from the capillary
- > Microloader tips and rack autoclavable (121 °C, 20 min.)
- > Highest precision and accuracy when used with Eppendorf pipettes for 0.5 to 10 µL (gray control button)

**i** For more information go to [www.eppendorf.com/epTips](http://www.eppendorf.com/epTips)

**>** Ordering information see page 48 and 53

Manufacturer's recommended retail price. All prices excl. VAT.  
 Technical specifications subject to change.

# epT.I.P.S.<sup>®</sup> Long



## Description

With the slim design of the extra long epT.I.P.S. and ep Dualfilter T.I.P.S. pipette tips, you always achieve the best results when pipetting into tubes, high tubes and deep wells. Furthermore, the risk of touching the walls of these deep vessels is minimized and cross-contamination is virtually eliminated. Extra long epT.I.P.S. are available in the following volumes:

- > 0.5 – 20  $\mu\text{L}$ , L, 46 mm
- > 50 – 1,250  $\mu\text{L}$ , L, 103 mm
- > 1 – 10 mL, L, 243 mm
- > in the Eppendorf Quality; PCR clean; PCR clean, sterile and pyrogen-free; and Eppendorf Biopur<sup>®</sup> purity grades.

## Product features

- > Slim design of the extra long epT.I.P.S. and ep Dualfilter T.I.P.S. pipette tips
- > Always obtain the best results when pipetting from and into tubes, high tubes and deep wells
- > The risk of touching the walls of deep vessels is minimized and cross-contamination is virtually eliminated.
- > Available in volumes of: 0.5 – 20  $\mu\text{L}$ , L, 46 mm / 50 – 1,250  $\mu\text{L}$ , L, 103 mm / 1 – 10 mL, L, 243 mm and 5 mL, L, 120 mm
- > Available in Eppendorf Quality, PCR clean, PCR clean/Sterile (sterile and pyrogen-free), and Eppendorf Biopur purity grades
- > Also available as ep Dualfilter T.I.P.S. filter tips

## Applications

- > Pipetting liquids
- > Dispensing liquids
- > Mixing liquids
- > Filling plates and reaction vessels
- > Filling gels for electrophoresis
- > Phase extraction and removal of supernatants

**i** For more information go to [www.eppendorf.com/epTips](http://www.eppendorf.com/epTips)

**>** Ordering information see page 48

## ep Dualfilter T.I.P.S.<sup>®</sup>



### Description

ep Dualfilter T.I.P.S. filter tips are the first filter tips with a two-phase filter for contamination protection. The two filter layers made of flexible, hydrophobic material, fit perfectly in the tip cone and retain practically 100 % of all aerosols\*<sup>1</sup> and biomolecules. This unique filtering effect is achieved using various, well-defined pore sizes. The layer facing the sample provides protection from drops, splashes and aerosols. The layer facing the pipette cone functions as a second barrier from contamination, and dependably binds biomolecules. A defined air passage rate guarantees full sample recovery and the customary quick pipetting.

\*<sup>1</sup> An aerosol is a colloid of fine solid particles or liquid droplets, in air or another gas.

### Applications

- > DNA applications (e.g. PCR)
- > RNA applications (e.g. Gene expression analysis)
- > Protein applications (e.g. Antibody Research)
- > Cell Culture applications (e.g. Media)
- > Applications with radio actives
- > All applications which use aerosol\*<sup>1</sup> binding liquids

\*<sup>1</sup> An aerosol is a colloid of fine solid particles or liquid droplets, in air or another gas.

### Product features

- > Two filter layers provide dual protection
- > Dual protection against aerosols\*<sup>1</sup> and biomolecules
- > Dual protection for pipette and sample
- > Free of PCR inhibitor additives
- > Available in Eppendorf PCR clean/Sterile (sterile and pyrogen-free)
- > Tested at the Fraunhofer Institute for Toxicology and Experimental Medicine (ITEM) in Hannover, Germany
- > Continuous inspection of each production lot by an independent laboratory
- > Lot-specific certificates are available at: [www.eppendorf.com/certificates](http://www.eppendorf.com/certificates).
- > Certificate of filter efficiency acc. to EN 1822 available at: [www.eppendorf.com/certificates](http://www.eppendorf.com/certificates)

\*<sup>1</sup> An aerosol is a colloid of fine solid particles or liquid droplets, in air or another gas.

**i** For more information go to [www.eppendorf.com/epTips](http://www.eppendorf.com/epTips)

**>** Ordering information see page 52

Manufacturer's recommended retail price. All prices excl. VAT.  
 Technical specifications subject to change.

# ep Dualfilter T.I.P.S.® SealMax



## Description

The new violet and white filter for the ep Dualfilter T.I.P.S.® SealMax filter tips combine a reliable contamination protection for your pipette from your sample liquid with virtually 100 % protection from aerosols\*<sup>1</sup> and biomolecules. This new Dualfilter closes immediately when it comes into contact with the overpipetted sample without inhibiting valuable material. Additionally drops and splashes are retained by the white layer, the violet layer forms the highly-effective barrier against sample liquid. Further information and certification on specific sample recovery features, PCR inhibition and aerosol protection are available on your local Eppendorf website.

\*<sup>1</sup> An aerosol is a colloid of fine solid particles or liquid droplets in air or another gas.

## Product features

- > Reliable protection from liquids
- > Reliable protection from aerosols\*<sup>1</sup> and biomolecules
- > No PCR inhibiting additives
- > Protection of your pipette from aggressive liquids when over-aspiration occurs
- > Available in PCR clean / Sterile (sterile and pyrogen-free)
- > Continuous inspection of each production lot by an independent laboratory guarantees high purity and quality
- > Lot specific purity certificates available at: [www.eppendorf.com/certificates](http://www.eppendorf.com/certificates)
- > Certificate of filter efficiency acc. to EN 1822 available at: [www.eppendorf.com/certificates](http://www.eppendorf.com/certificates)

\*<sup>1</sup> An aerosol is a colloid of fine solid particles or liquid droplets in air or another gas.

## Applications

- > DNA applications (e.g. PCR)
- > RNA applications (e.g. Gene expression analysis)
- > Protein applications (e.g. Antibody Research)
- > Cell Culture applications (e.g. Media)
- > Applications with radio actives
- > All applications which use aerosol\*<sup>1</sup> binding liquids

\*<sup>1</sup> An aerosol is a colloid of fine solid particles or liquid droplets in air or another gas.

**i** For more information go to [www.eppendorf.com/epTips](http://www.eppendorf.com/epTips)

**>** Ordering information see page 52

## epT.I.P.S.<sup>®</sup> LoRetention



The “Pearl Effect” – a comparison of the amount of residual liquid when pipetting solutions that contain detergents:

1. Significant loss of sample using standard tips
2. Maximum recovery with epT.I.P.S. LoRetention

### Description

The ultrahydrophobic, extremely homogeneous surface of the epT.I.P.S. LoRetention and ep Dualfilter T.I.P.S. LoRetention pipette tips is achieved through an innovative treatment at the molecular level – the Pearl Effect Technology. They are uncoated, free of additives and do not leach into the sample. Liquids containing detergents fully roll off, so that almost no liquid remains in the tip. In comparison, the adhering liquid film in standard tips leaves behind a significantly higher amount of sample material. These unique material properties guarantee maximum sample recovery, improved reproducibility and increased sensitivity.

### Applications

- > Cell culture (media)
- > Genomics: PCR, RT-PCR, qPCR and all other types of PCR
- > Enzymatic reactions (restriction decomposition, ligation limitation)
- > Isolation and purification of nucleic acid
- > Gel electrophoresis (e.g., prefabricated DNA ladders)
- > Proteomics (all types of protein examinations)
- > Protein isolation and purification
- > Gel electrophoresis if the sample contains detergents
- > For typical detergents: SDS, Triton<sup>®</sup>, X-100, Brij<sup>®</sup> 35, Tween<sup>®</sup> 20, CHAPS<sup>®</sup>

### Product features

- > Ultrahomogenous surface for maximum reproducibility
- > Ultrahydrophobic surface for minimal sample loss
- > Significantly reduced foam formation during pipetting
- > Increase in reproducibility, e.g. for sensitive PCR and real-time PCR applications
- > Extreme resistance to chemicals
- > Available in PCR clean and Eppendorf Quality, autoclavable up to 121 °C
- > Also available as ep Dualfilter T.I.P.S. in PCR clean/Sterile (sterile and pyrogen-free)
- > Lot-specific certificates are available at: [www.eppendorf.com/certificates](http://www.eppendorf.com/certificates).

**i** For more information go to [www.eppendorf.com/epTips](http://www.eppendorf.com/epTips)

**>** Ordering information see page 48

### Maximum reproducibility with epT.I.P.S. LoRetention and ep Dualfilter T.I.P.S. LoRetention - Reduce costs, increase reproducibility.

In particular with sensitive PCR and real-time PCR applications low-retention surfaces can increase reproducibility and notably reduce the loss of expensive reagents - depending on the reagent solution, this can be by up to 5 %!

### Versatile application

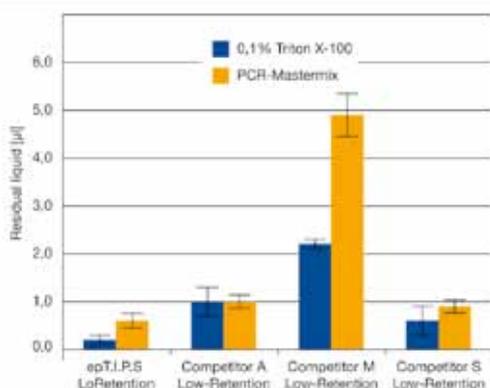
- epT.I.P.S. LoRetention pipette tips are ideally suited for all applications with samples that contain detergents:
- > PCR and real-time PCR preparation of enzyme solutions and master mixes
  - > Isolation, purification and denaturation of proteins
  - > Restriction digestions and ligations
  - > Pipetting DNA ladders during gel electrophoresis

epT.I.P.S. LoRetention and ep Dualfilter T.I.P.S. LoRetention perform considerably better in terms of precision and sample recovery than low retention tips from other manufacturers. In

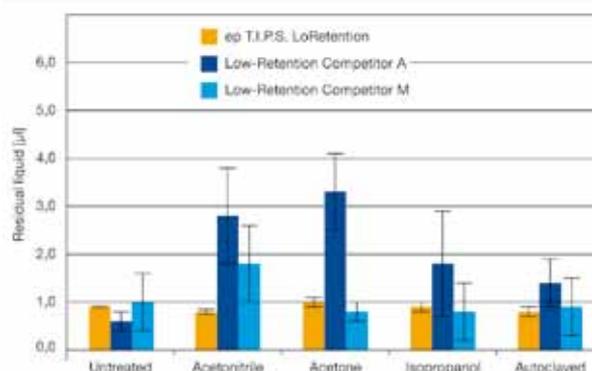
our Application Notes 218 and 192 you find detailed results on the comparison of residual liquid from epT.I.P.S. LoRetention with standard epT.I.P.S. pipette tips and low retention tips of other manufacturers and the comparison of resistance of the low retention property when subjected to solvents or autoclaving. Both results showed best performance of epT.I.P.S. LoRetention with lowest residual liquid and smallest standard deviation.

### Quality and purity is an Eppendorf standard.

It goes without saying that the new epT.I.P.S. LoRetention and ep Dualfilter T.I.P.S. LoRetention pipette tips have all the valued properties of the proven Eppendorf epT.I.P.S.. They are produced in high-precision manufacturing processes, can be autoclaved and are extremely resistant to chemicals. This Eppendorf quality is also available in the PCR clean (free of human DNA, DNase, RNase, and PCR inhibitors) purity grade. For maximum contamination protection, epT.I.P.S. LoRetention pipette tips are also available as ep Dualfilter T.I.P.S..



**Fig. 1. Comparison of residual liquid from epT.I.P.S. LoRetention and low retention tips of other manufacturers.** 200 µL tips were used to pipette a commercial PCR master mix and the detergent 0.1 % Triton X-100. Once the liquid had been dispensed, the residual liquid in the tips was determined. The measurements were repeated several times and the standard deviation determined. epT.I.P.S. LoRetention resulted in the lowest residual liquid, as well as the smallest standard deviation.



**Fig. 2. Comparison of resistance of the low retention property when subjected to solvents or autoclaving.** 200 µL epT.I.P.S. LoRetention and low retention tips of other manufacturers were autoclaved or treated with the solvent specified. An enzymatic buffer containing detergents was then pipetted and the residual moisture was determined. epT.I.P.S. LoRetention resulted in reproducible low levels of residual liquid with minimum standard deviation. Low retention tips from other manufacturers are less resistant to chemicals or autoclaving: this resulted in an increase in residual liquid and standard deviation.

i For more information go to [www.eppendorf.com/epTips](http://www.eppendorf.com/epTips)

> Ordering information see page 48

Volume range/epT.I.P.S. <sup>®</sup> epT.I.P.S. <sup>®</sup> LoRetention (all tips shown are actual size)	Standard		Reloads		Reloads	
	Eppendorf Quality™		Eppendorf Quality™		PCR clean	
<b>0.1 – 10 µL S, 34 mm</b> 	1,000 tips (2 bags x 500 tips)		960 tips (10 trays x 96 tips)		960 tips (10 trays x 96 tips)	
	0030 000.811	44.10 £	0030 073.363	52.70 £	0030 073.746	55.70 £
			0030 072.049	58.00 £	0030 072.006	61.20 £
			LoRetention		LoRetention	
<b>0.1 – 20 µL, 40 mm</b> 	1,000 tips (2 bags x 500 tips)		960 tips (10 trays x 96 tips)		960 tips (10 trays x 96 tips)	
	0030 000.838	44.10 £	0030 073.380	52.70 £	0030 073.762	57.10 £
<b>0.5 – 20 µL L, 46 mm</b> 	1,000 tips (2 bags x 500 tips)		960 tips (10 trays x 96 tips)		960 tips (10 trays x 96 tips)	
	0030 000.854	41.90 £	0030 073.401	47.60 £	0030 073.789	52.90 £
			0030 072.057	52.50 £	0030 072.014	58.40 £
			LoRetention		LoRetention	
<b>2 – 200 µL, 53 mm</b> 	1,000 tips (2 bags x 500 tips)		960 tips (10 trays x 96 tips)		960 tips (10 trays x 96 tips)	
	0030 000.889	27.20 £	0030 073.428	45.10 £	0030 073.800	50.00 £
	0030 000.870	27.20 £	0030 072.065	49.50 £	0030 072.022	55.20 £
	yellow tips		LoRetention		LoRetention	
<b>20 – 300 µL, 55 mm</b> 	1,000 tips (2 bags x 500 tips)		960 tips (10 trays x 96 tips)		960 tips (10 trays x 96 tips)	
	0030 000.900	27.20 £	0030 073.444	45.10 £	0030 073.827	50.00 £
	0030 000.897	27.20 £				
	yellow tips					
<b>50 – 1,000 µL, 71 mm</b> 	1,000 tips (2 bags x 500 tips)		960 tips (10 trays x 96 tips)		960 tips (10 trays x 96 tips)	
	0030 000.927	27.20 £	0030 073.460	45.10 £	0030 073.843	50.00 £
	0030 000.919	27.20 £	0030 072.073	49.50 £	0030 072.030	55.20 £
	blue tips		LoRetention		LoRetention	

i For more information go to [www.eppendorf.com/epTips](http://www.eppendorf.com/epTips)

Box		Set		Singles		Racks	
<b>Eppendorf Quality™</b>		<b>Eppendorf Quality™</b>		<b>Eppendorf Biopur®</b>		<b>Eppendorf Biopur®</b>	
1 reusable box x 96 tips		480 tips (5 trays x 96 tips), 1 reusable box					
0030 073.002	26.30 £	0030 073.207	43.10 £				
		0030 072.251	53.10 £				
		LoRetention					
1 reusable box x 96 tips		480 tips (5 trays x 96 tips), 1 reusable box		100 tips, individually packed		480 tips (5 racks x 96 tips)	
0030 073.029	26.30 £	0030 073.223	43.10 £	0030 010.019	21.20 £	0030 075.005	41.10 £
1 reusable box x 96 tips		480 tips (5 trays x 96 tips), 1 reusable box					
0030 073.045	23.40 £	0030 073.240	39.40 £				
		0030 072.260	47.90 £				
		LoRetention					
1 reusable box x 96 tips		480 tips (5 trays x 96 tips), 1 reusable box		100 tips, individually packed		480 tips (5 racks x 96 tips)	
0030 073.061	23.40 £	0030 073.266	38.20 £	0030 010.035	21.20 £	0030 075.021	38.30 £
		0030 072.278	46.50 £				
		LoRetention					
1 reusable box x 96 tips		480 tips (5 trays x 96 tips), 1 reusable box				480 tips (5 racks x 96 tips)	
0030 073.088	23.40 £	0030 073.282	38.20 £			0030 075.048	38.30 £
1 reusable box x 96 tips		480 tips (5 trays x 96 tips), 1 reusable box		100 tips, individually packed		480 tips (5 racks x 96 tips)	
0030 073.100	23.40 £	0030 073.304	40.40 £	0030 010.051	21.20 £	0030 075.064	38.30 £
		0030 072.286	48.70 £				
		LoRetention					

Volume range/epT.I.P.S.<sup>®</sup>  
 epT.I.P.S.<sup>®</sup> LoRetention  
 (all tips shown are actual size)

Standard

Eppendorf Quality™

1,000 tips  
 (2 bags x 500 tips)

0030 000.935 46.30 £



Reloads

Eppendorf Quality™

960 tips (10 trays x 96 tips)

0030 073.487 54.80 £



Reloads

PCR clean

960 tips (10 trays x 96 tips)

0030 073.860 61.10 £



50 – 1,250 µL, 76 mm

■ green



50 – 1,250 µL L, 103 mm

■ dark green



0.5 – 2.5 mL, 115 mm

■ red



0.1 – 5 mL L, 120 mm

■ violet



1 – 10 mL, 165 mm

■ turquoise



1 – 10 mL L, 243 mm

■ turquoise



(Image reduced size)

Box		Set		Singles		Racks	
<b>Eppendorf Quality™</b>		<b>Eppendorf Quality™</b>		<b>Eppendorf Biopur®</b>		<b>Eppendorf Biopur®</b>	
1 reusable box x 96 tips		480 tips (5 trays x 96 tips), 1 reusable box				480 tips (5 racks x 96 tips)	
0030 073.126      26.30 £		0030 073.320      52.90 £				0030 075.080      38.30 £	
<hr/>							
1 reusable box x 96 tips						480 tips (5 racks x 96 tips)	
0030 073.622      26.80 £						0030 075.129      39.00 £	
<hr/>							
1 reusable box x 48 tips		240 tips (5 trays x 48 tips), 1 reusable box				240 tips (5 racks x 48 tips)	
0030 073.142      31.00 £		0030 073.347      37.10 £				0030 075.102      34.10 £	
<hr/>							
1 reusable box x 24 tips						120 tips (5 racks x 24 tips)	
0030 073.169      27.70 £						0030 075.137      38.20 £	
<hr/>							
						120 tips (5 racks x 24 tips)	
						0030 075.145      45.50 £	
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Volume range/ ep Dualfilter T.I.P.S. <sup>®</sup> / ep Dualfilter T.I.P.S. <sup>®</sup> LoRetention/ ep Dualfilter T.I.P.S. <sup>®</sup> SealMax	Racks	PCR clean/Sterile (sterile and pyrogen-free)			
<b>0.1 – 10 µL S, 34 mm</b>	960 tips (10 racks x 96 tips)				
 dark gray	0030 077.504 125.00 £	0030 077.610 LoRetention 142.00 £	0030 077.806 SealMax 126.00 £		
					
<b>0.1 – 10 µL M, 40 mm</b>	960 tips (10 racks x 96 tips)				
 medium gray	0030 077.512 125.00 £				
					
<b>0.5 – 20 µL L, 46 mm</b>	960 tips (10 racks x 96 tips)				
 light gray	0030 077.520 119.00 £	0030 077.628 LoRetention 133.00 £	0030 077.814 SealMax 123.00 £		
					
<b>2 – 20 µL, 53 mm</b>	960 tips (10 racks x 96 tips)				
 yellow	0030 077.539 119.00 £				
					
<b>2 – 100 µL, 53 mm</b>	960 tips (10 racks x 96 tips)				
 yellow	0030 077.547 119.00 £	0030 077.644 LoRetention 133.00 £	0030 077.822 SealMax 123.00 £		
					
<b>2 – 200 µL, 55 mm</b>	960 tips (10 racks x 96 tips)				
 yellow	0030 077.555 124.00 £		0030 077.830 SealMax 128.00 £		
					
<b>20 – 300 µL, 55 mm</b>	960 tips (10 racks x 96 tips)				
 orange	0030 077.563 119.00 £	0030 077.636 LoRetention 133.00 £	0030 077.849 SealMax 123.00 £		
					
<b>50 – 1,000 µL, 76 mm</b>	960 tips (10 racks x 96 tips)				
 blue	0030 077.571 129.00 £	0030 077.652 LoRetention 144.00 £	0030 077.857 SealMax 133.00 £		
					
<b>50 – 1,250 µL L, 103 mm</b>	480 tips (5 racks x 96 tips)				
 dark green	0030 077.750 65.90 £				
					

i For more information go to [www.eppendorf.com/epTips](http://www.eppendorf.com/epTips)



Volume range/  
ep Dualfilter T.I.P.S.<sup>®</sup>/  
ep Dualfilter T.I.P.S.<sup>®</sup> LoRetention/  
ep Dualfilter T.I.P.S.<sup>®</sup> SealMax

Racks  
PCR clean/Sterile (sterile and pyrogen-free)

0.1 – 5 mL, 120 mm

120 tips (5 racks x 24 tips)

■ violet

0030 077.580 64.90 £



1 – 10 mL L, 243 mm

100 tips, individually packed

■ turquoise

0030 077.598 53.50 £



(Image reduced size)

## Special Tips



Volume range/ pipette tip

0.5 – 20 µL, 62 mm

Eppendorf GELoader<sup>®</sup>

■ light gray

192 tips (2 racks x 96 tips)

0030 001.222 49.30 £



0.5 – 20 µL, 100 mm

Microloader<sup>™</sup>

■ light gray

192 pcs. (2 racks x 96 pcs.)

5242 956.003 67.00 £



20 µL, 52 mm

Mastertip<sup>®</sup>

■ light gray

480 tips (5 racks x 96 tips)

0030 001.320 175.00 £



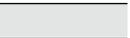
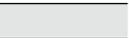
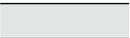
Eppendorf Research® plus	0.1 – 10 µL S, dark gray	0.1 – 10 µL M, medium gray	0.1 – 20 µL medium gray	0.5 – 20 µL L, light gray	2 – 20 µL yellow	2 – 100 µL yellow	2 – 200 µL yellow	20 – 300 µL orange
epT.I.P.S.® Standard	■		■	■	■	■	■	■
epT.I.P.S.® LoRetention	■			■			■	
ep Dualfilter T.I.P.S.®	■	■		■	■	■	■	■
epT.I.P.S.® LoRetention	■			■		■		■
ep Dualfilter T.I.P.S.® SealMax	■		■			■	■	■
<b>Fixed volume</b>								
10 µL	■	■	■	■				
20 µL	■			■				
10 µL	■				■	■	■	
20 µL	■				■	■	■	■
25 µL/50 µL/100 µL	■					■	■	■
200 µL	■						■	■
200 µL/250 µL/500 µL/ 1,000 µL	■							■
<b>Adjustable volume</b>								
0.1 – 2.5 µL	■	■	■				■	■
0.5 – 10 µL	■	■	■	■				
2 – 20 µL	■	■	■	■				
2 – 20 µL	■				■	■	■	■
10 – 100 µL	■				■	■	■	■
20 – 200 µL	■				■	■	■	■
30 – 300 µL	■				■	■	■	■
100 – 1,000 µL	■							
0.5 – 5 mL	■							
1 – 10 mL	■							
<b>Eppendorf Xplorer®/ Eppendorf Xplorer® plus</b>	0.1 – 10 µL S, dark gray	0.1 – 10 µL M, medium gray	0.1 – 20 µL medium gray	0.5 – 20 µL L, light gray	2 – 20 µL yellow	2 – 100 µL yellow	2 – 200 µL yellow	20 – 300 µL orange
epT.I.P.S.® Standard	■	■	■	■	■	■	■	■
epT.I.P.S.® LoRetention	■			■			■	
ep Dualfilter T.I.P.S.®	■	■		■	■	■	■	■
epT.I.P.S.® LoRetention	■			■		■		■
ep Dualfilter T.I.P.S.® SealMax	■		■			■	■	■
0.5 – 10 µL	■	■	■	■				
5 – 100 µL	■				■	■	■	■
15 – 300 µL	■				■	■	■	■
50 – 1,000 µL	■							
50 – 1,200 µL	■							
0.25 – 5 mL	■							
0.5 – 10 mL	■							

50 – 1,000 µL blue	50 – 1,250 µL green	50 – 1,250 µL L dark green	0.5 – 2.5 mL red	0.1 – 5 mL violet	1 – 10 mL turquoise	1 – 10 mL L turquoise	GEloader/ Microloader
							
							
							
							
							
							
							
							
							
							
							
							
							
							
							
							
							
							
							
							
							
							
							
							
							
							
							
							
							
							
							
							
							
							
							
							
							

Eppendorf Reference® 2	0.1 – 10 µL S, dark gray	0.1 – 10 µL M, medium gray	0.1 – 20 µL medium gray	0.5 – 20 µL L, light gray	2 – 20 µL yellow	2 – 100 µL yellow	2 – 200 µL yellow	20 – 300 µL orange
epT.I.P.S.® Standard	■	■	■	■	■	■	■	■
epT.I.P.S.® LoRetention	■			■			■	
ep Dualfilter T.I.P.S.®	■	■		■	■	■	■	■
epT.I.P.S.® LoRetention	■			■		■		■
ep Dualfilter T.I.P.S.® SealMax	■		■			■	■	■
<b>Fixed volume</b>								
1 µL/2 µL	■	■	■					
5 µL/10 µL	■	■	■	■				
20 µL	■		■	■				
10 µL	■				■	■	■	
20 µL	■				■	■	■	■
25 µL/50 µL/100 µL	■					■	■	■
200 µL	■						■	■
200 µL/250 µL/500 µL/ 1,000 µL	■							
2 mL/2.5 mL	■							
<b>Adjustable volume</b>								
0.1 – 2.5 µL	■	■	■					
0.5 – 10 µL	■	■	■	■				
2 – 20 µL	■	■	■	■				
2 – 20 µL	■				■	■	■	■
10 – 100 µL	■				■	■	■	■
20 – 200 µL	■				■	■	■	■
30 – 300 µL	■				■	■	■	■
100 – 1,000 µL	■							
0.25 – 2.5 mL	■							
0.5 – 5 mL	■							
1 – 10 mL	■							

i For more information go to [www.eppendorf.com/epTips](http://www.eppendorf.com/epTips)

► Ordering information see page 48

50 – 1,000 µL blue	50 – 1,250 µL green	50 – 1,250 µL L dark green	0.5 – 2.5 mL red	0.1 – 5 mL violet	1 – 10 mL turquoise	1 – 10 mL L turquoise	GELoader/ Microloader
							
							
							
							
							
							
							
							
							
							
							
							
							
							
							
							
							
							

i For more information go to [www.eppendorf.com/epTips](http://www.eppendorf.com/epTips)

➤ Ordering information see page 48

# Multipette® M4

**Volume selection dial:**

20 different volume settings for every Combitip size; Easy to reach and adjust using your thumb

**Hand rest:** Supports a relaxed hand position and ease of use

**Motion Sensor:**

Multipette switches off when not in use, and back on with minimal movements to save power and time

**Combitip sensor:**

Automatic Combitip recognition and volume display

**Step counter:** Displays the number of executed dispensing steps

**Ergonomically shaped operating lever:**

Dispenses the liquid and ejects the Combitip advanced®

**Embedded RFID chip:**

Contains relevant data on the Multipette to be read by Eppendorf TrackIT

**Ergonomically shaped filling lever:**

For filling and emptying the Combitip advanced



reddot design award  
winner 2013

i For more information go to [www.eppendorf.com](http://www.eppendorf.com)



Clearly arranged and easy-to-read display to ensure stress-free and intuitive operation. In addition to the displayed dispensing volume, the step counter supports error-free filling, for example plates.

### Description

On the Multipette M4/Combitip System, volumes are dispensed using the positive displacement principle. The liquid is directly dispensed without an air cushion, ensuring the correct volume is always dispensed regardless of the density, viscosity and volatility of the liquid. The Multipette M4 offer a unique volume range of 1  $\mu\text{L}$  – 10 mL, and its the only mechanical dispenser that dispenses the aspirated liquid up to 100 times without refilling the tip. The innovative step counter supports error-free working even after an interruption or distraction during the dispensing procedure. A fully emptied Combitip can be easily ejected with one hand using the operation lever without directly touching the tip.

### Applications

- > Repetitive Dispensing of volumes in long series such as tube or plate filling, aliquoting reagents and kit usage
- > Contamination-free dispensing of toxic, radioactive and or other hazardous liquids
- > Precise and accurate dispensing of viscous solutions (e.g. glycerol) or liquids with high vapor pressure (e.g. ethanol)



Multipette M4 along with 9 different volume sizes ( 0.1 mL - 50 mL) for Combitips advanced, offer a unique volume range of 1  $\mu\text{L}$  - 10 mL. The new Combitip Rack features trouble-free and single-hand operation during dispensing work.

### Product features

- > Repetitive dispensing modes decrease the number of movements by allowing the user to fill the tip once and dispense up to 100 times without a refill
- > Automatic Combitip recognition eliminates time consuming volume calculations
- > Wide dispensing range: 1  $\mu\text{L}$  to 10  $\mu\text{L}$
- > Stress-free work via integrated step counter: dispensing procedures can be continued error-free after an interruption or distraction
- > Central Combitip ejector: fully emptied Combitip can be easily ejected with one hand
- > Perfect for viscous or foaming solutions and liquids with high vapour pressure through direct displacement principle
- > Safe handling of toxic, radioactive or infectious material

i For more information go to [www.eppendorf.com](http://www.eppendorf.com)

# Multipette® M4



Combitips advanced®

The Eppendorf Combitips advanced feature the characteristic Eppendorf 3D design on the upper rim of the Combitip, allowing you to easily and confidently recognize the Eppendorf Original!

Combitips advanced®	Min. volume	Max. volume	Increment	Volume	Systematic error <sup>1)</sup>	Random error <sup>1)</sup>
0.1 mL	1 µL	20 µL	1 µL	2 µL	± 1.6 %	±3.0 %
				10 µL	± 1.2 %	±2.4 %
				20 µL	± 1.0 %	±2.0 %
0.2 mL	2 µL	40 µL	2 µL	4 µL	± 1.3 %	±2.0 %
				20 µL	± 0.8 %	±1.5 %
				40 µL	± 0.8 %	±1.5 %
0.5 mL	5 µL	100 µL	5 µL	10 µL	± 0.9 %	±1.5 %
				50 µL	± 0.8 %	±0.8 %
				100 µL	± 0.8 %	±0.6 %
1 mL	10 µL	200 µL	10 µL	20 µL	± 0.9 %	±0.9 %
				100 µL	± 0.6 %	±0.6 %
				200 µL	± 0.6 %	±0.4 %
2.5 mL	25 µL	500 µL	25 µL	50 µL	± 0.8 %	±0.8 %
				250 µL	± 0.6 %	±0.6 %
				500 µL	± 0.5 %	±0.3 %
5 mL	50 µL	1,000 µL	50 µL	100 µL	± 0.6 %	±0.6 %
				500 µL	± 0.5 %	±0.5 %
				1,000 µL	± 0.5 %	±0.25 %
10 mL	100 µL	2,000 µL	100 µL	200 µL	± 0.5 %	±0.6 %
				1,000 µL	± 0.5 %	±0.4 %
				2,000 µL	± 0.5 %	±0.25 %
25 mL	250 µL	5,000 µL	250 µL	500 µL	± 0.4 %	±0.6 %
				2,500 µL	± 0.3 %	±0.5 %
				5,000 µL	± 0.3 %	±0.25 %
50 mL	500 µL	10,000 µL	500 µL	1,000 µL	± 0.3 %	±0.5 %
				5,000 µL	± 0.3 %	±0.5 %
				10,000 µL	± 0.3 %	±0.3 %

<sup>1)</sup> The data for systematic and random errors, according to EN ISO 8655, only apply if original Eppendorf Combitips advanced are used.

i For more information go to [www.eppendorf.com](http://www.eppendorf.com)

**Volume table for using the Combitips advanced with the Multipipette M4**

Position of the volume selection dial:										
	0.5	1	1.5	2	2.5	3	3.5	4	4.5	5
Maximum number of dispensing steps:										
	100	50	33	25	20	16	14	12	11	10
Combitips advanced with the following dispensing volumes:										
0.1 mL	1 µL	2 µL	3 µL	4 µL	5 µL	6 µL	7 µL	8 µL	9 µL	10 µL
0.2 mL	2 µL	4 µL	6 µL	8 µL	10 µL	12 µL	14 µL	16 µL	18 µL	20 µL
0.5 mL	5 µL	10 µL	15 µL	20 µL	25 µL	30 µL	35 µL	40 µL	45 µL	50 µL
1.0 mL	10 µL	20 µL	30 µL	40 µL	50 µL	60 µL	70 µL	80 µL	90 µL	100 µL
2.5 mL	25 µL	50 µL	75 µL	100 µL	125 µL	150 µL	175 µL	200 µL	225 µL	250 µL
5.0 mL	50 µL	100 µL	150 µL	200 µL	250 µL	300 µL	350 µL	400 µL	450 µL	500 µL
10 mL	100 µL	200 µL	300 µL	400 µL	500 µL	600 µL	700 µL	800 µL	900 µL	1.0 mL
25 mL <sup>1)</sup>	250 µL	500 µL	750 µL	1.0 mL	1.25 mL	1.5 mL	1.75 mL	2.0 mL	2.25 mL	2.5 mL
50 mL <sup>1)</sup>	500 µL	1.0 mL	1.5 mL	2.0 mL	2.5 mL	3.0 mL	3.5 mL	4.0 mL	4.5 mL	5.0 mL

<sup>1)</sup> 25 and 50 mL Combitips can only be used with the corresponding adapter. Further information about Combitips advanced see page 66.

**Volume table for using the Combitips advanced with the Multipipette M4**

Position of the volume selection dial:										
	5.5	6	6.5	7	7.5	8	8.5	9	9.5	10
Maximum number of dispensing steps:										
	9	8	7	7	6	6	5	5	5	5
Combitips advanced with the following dispensing volumes:										
0.1 mL	11 µL	12 µL	13 µL	14 µL	15 µL	16 µL	17 µL	18 µL	19 µL	20 µL
0.2 mL	22 µL	24 µL	26 µL	28 µL	30 µL	32 µL	34 µL	36 µL	38 µL	40 µL
0.5 mL	55 µL	60 µL	65 µL	70 µL	75 µL	80 µL	85 µL	90 µL	95 µL	100 µL
1.0 mL	110 µL	120 µL	130 µL	140 µL	150 µL	160 µL	170 µL	180 µL	190 µL	200 µL
2.5 mL	275 µL	300 µL	325 µL	350 µL	375 µL	400 µL	425 µL	450 µL	475 µL	500 µL
5.0 mL	550 µL	600 µL	650 µL	700 µL	750 µL	800 µL	850 µL	900 µL	950 µL	1.0 mL
10 mL	1.1 mL	1.2 mL	1.3 mL	1.4 mL	1.5 mL	1.6 mL	1.7 mL	1.8 mL	1.9 mL	2.0 mL
25 mL <sup>1)</sup>	2.75 mL	3.0 mL	3.25 mL	3.5 mL	3.75 mL	4.0 mL	4.25 mL	4.50 mL	4.75 mL	5.0 mL
50 mL <sup>1)</sup>	5.5 mL	6.0 mL	6.5 mL	7.0 mL	7.5 mL	8.0 mL	8.5 mL	9.0 mL	9.5 mL	10 mL

<sup>1)</sup> 25 and 50 mL Combitips can only be used with the corresponding adapter. Further information about Combitips advanced see page 66.

**Ordering information**

Description	Order no.	Price
<b>Multipipette® M4</b> , 1 µL – 10 mL	4982 000.012	269.00 £
<b>Multipipette® M4 Starter Kit</b> , Multipipette® M4, Combitip Rack, Combitip assortment pack, 1 µL – 10 mL	4982 000.314	277.00 £
<b>Pipette carousel</b> , with 6 holders, for Eppendorf Research® plus and Biomaster® 4830	3115 000.003	93.20 £
<b>Holder</b> , for Multipipette® M4, for wall mount and/or pipette carousel	4982 602.004	13.30 £
<b>Battery</b> , 3 V	4980 215.003	5.20 £

i For more information go to [www.eppendorf.com](http://www.eppendorf.com)

# Multipette stream®/ Multipette Xstream®

**Selection dial:** for simple, easy and clear selection of the operation mode

**Illuminated display:** indicates the volume settings, number of dispensing steps, speed of aspiration/dispense while also providing feedback and instruction for the user

**Selection rocker:** Easily scroll through mode specific parameters for quick execution of editing programs

**Flexible charging options:** Ability to recharge by connecting the power cord directly to the unit or on the charging stand

**Hand rest:** for secure and comfortable support allowing the user to pipette long series with ease.

**+/- rocker:** Speedy and precise altering of parameters

**Ejector Button:** Ergonomic release of the Combitip

**Actuator key:** multipurpose button is used for initiating aspiration and dispensing steps as well as saving parameter settings



i For more information go to [www.eppendorf.com](http://www.eppendorf.com)

➤ Further information about Combitips advanced see on page 66



Combitips advanced® (see also page 66)

### Description

The Multipipette stream/Xstream in combination with the Combitips advanced creates a versatile dispensing system that functions according to the positive displacement principle and is therefore capable of pipetting any liquid while maintaining the highest standards for accurate results. The motor driven dispenser gives you full volume control, improved accuracy and reproducibility while reducing physical strain during use. The repetitive dispensing modes contribute to reducing fatigue by decreasing the number of movements for the user; filling the tip once allows dispensing up to 100 times. The system is an essential lab tool ideal for all liquid handling applications, accommodating more than 2,500 different dispensing volumes between 1 µL to 50 mL.



### Applications

- > Repetitive Dispensing of volumes in long series such as tube or plate filling, aliquoting reagents and kit usage (Dispensing/Automatic Dispensing Modes)
- > Contamination-free dispensing for toxic, radioactive and other hazardous liquids (All available Modes)
- > Precise and accurate dispensing of viscous solutions (e.g. glycerol) or liquids with high vapor pressure (e.g. ethanol) (All available Modes)
- > Pooling of supernatants (Aspiration Mode)
- > Creation of dilution Series (Sequential Dispensing Mode)
- > Concentration Determination (Titration Mode)

Multipipette stream and Multipipette Xstream at a glance	Multipipette stream	Multipipette Xstream
Modes of operation		
Dispensing	■	■
Automatic dispensing	■	■
Pipetting	■	■
Aspirating (e.g., removal of supernatants)		■
Titration (e.g., determination of buffer capacities)		■
Sequential dispensing (ideal for conducting dilution series)		■

# Multipette stream®/ Multipette Xstream®

Combitips advanced®	Min. volume	Max. volume	Increment	Volume	Systematic error <sup>1)</sup>	Random error <sup>1)</sup>
0.1 mL	1 µL	100 µL	0.1 µL	10 µL	± 1.6 %	± 2.5 %
				50 µL	± 1.0 %	± 1.5 %
				100 µL	± 1.0 %	± 0.5 %
0.2 mL	2 µL	200 µL	0.2 µL	20 µL	± 1.3 %	± 1.0 %
				100 µL	± 1.0 %	± 1.0 %
				200 µL	± 1.0 %	± 0.5 %
0.5 mL	5 µL	500 µL	0.5 µL	50 µL	± 0.9 %	± 0.8 %
				250 µL	± 0.9 %	± 0.5 %
				500 µL	± 0.9 %	± 0.3 %
1 mL	10 µL	1 mL	1 µL	100 µL	± 0.9 %	± 0.55 %
				500 µL	± 0.6 %	± 0.2 %
				1,000 µL	± 0.6 %	± 0.3 %
2.5 mL	25 µL	2.5 mL	2.5 µL	250 µL	± 0.8 %	± 0.45 %
				500 µL	± 0.5 %	± 0.30 %
				1,000 µL	± 0.5 %	± 0.15 %
5 mL	50 µL	5 mL	5 µL	500 µL	± 0.8 %	± 0.35 %
				1,000 µL	± 0.50 %	± 0.25 %
				5,000 µL	± 0.50 %	± 0.15 %
10 mL	100 µL	10 mL	10 µL	1,000 µL	± 0.5 %	± 0.25 %
				5,000 µL	± 0.4 %	± 0.25 %
				10,000 µL	± 0.4 %	± 0.15 %
25 mL	250 µL	25 mL	25 µL	2,500 µL	± 0.3 %	± 0.35 %
				5,000 µL	± 0.3 %	± 0.25 %
				25,000 µL	± 0.3 %	± 0.15 %
50 mL	500 µL	50 mL	50 µL	5,000 µL	± 0.3 %	± 0.50 %
				10,000 µL	± 0.3 %	± 0.20 %
				50,000 µL	± 0.3 %	± 0.15 %

<sup>1)</sup> The data for systematic and random errors, according to EN ISO 8655, only apply if original Eppendorf Combitips advanced are used.

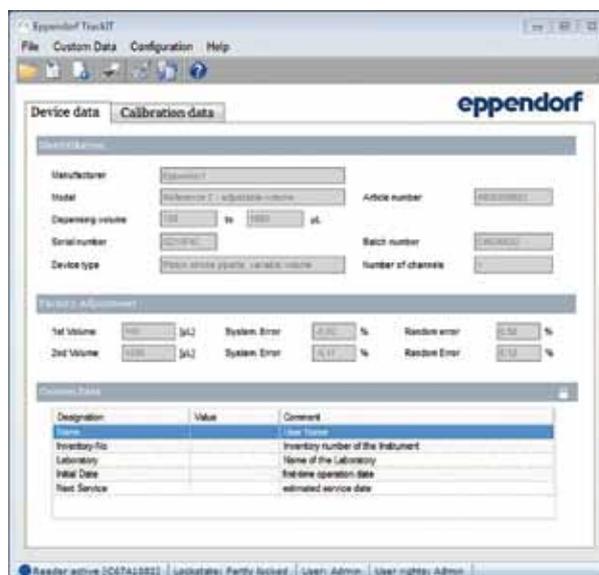
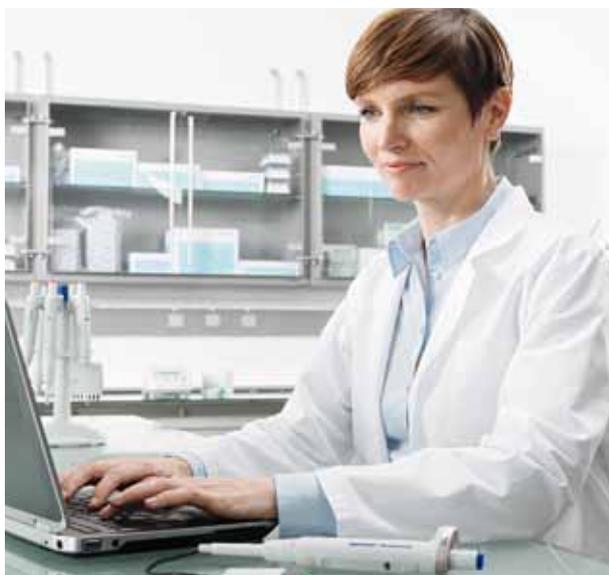
## Ordering information

Description	Order no.	Price
<b>Multipette stream®</b> , with charging adapter, 100-240V/50-60Hz	4986 000.017	467.00 £
<b>Multipette stream®</b> , with charging adapter and bundle with charger stand, 100-240V/50-60Hz	4986 000.807	529.00 £
<b>Multipette Xstream®</b> , with charging adapter, 100-240V/50-60Hz	4986 000.025	598.00 £
<b>Multipette Xstream®</b> , with charging adapter and bundle with charger stand, 100-240V/50-60Hz	4986 000.815	644.00 £
<b>Charger carousel</b> , for 4 Eppendorf Xplorer® and Eppendorf Xplorer® plus	4880 000.026	286.00 £
<b>Charger stand</b> , for Multipette stream®/Multipette Xstream®, for one device	4880 000.018	120.00 £
<b>Multipette® charger shell</b> , for charger carousel Eppendorf Xplorer®/Eppendorf Xplorer® plus (4880 000.026)	4880 601.003	35.20 £
<b>Wall mount for Multipette stream®/Multipette Xstream®</b>	4986 604.001	21.10 £

i For more information go to [www.eppendorf.com](http://www.eppendorf.com)

► Further information about Combitips advanced see on page 66

# Eppendorf TrackIT



## Description

To increase the traceability of your pipette portfolio Eppendorf offers Eppendorf TrackIT. This product contains a RFID reader and software to scan the device data of an embedded RFID chip within liquid handling instruments and save it in a database which can be opened at any time. The device data can be exported individually or automatically in various formats.

In combination with premium products like Eppendorf Reference 2 Eppendorf TrackIT offers also the ability to add your own data on the chip like calibration time, location, special application or other important data.

Simple identification and documentation with Eppendorf TrackIT!

## Product features

- > Unambiguous instrument identification: Nearly every liquid handling device is equipped with a RFID chip containing all relevant pipette data like serial number, dispensing volume, factory adjustment data etc. These data clearly identify the pipette and cannot be changed or deleted
- > Easy documentation including specific user information
- > The Eppendorf TrackIT software exports information to several formats (HTML, XML & CVS) to implement the system into existing software like electronic lab book or LIMS
- > All information concerning the pipette including the service history are stored on the RFID chip and in the data base

## Applications

- > Instrument identification
- > Traceability of instruments used in an experiment
- > Individualization of the instrument
- > Printed documentation of all relevant instrument data
- > Make all relevant instrument information available for digital documentation
- > Documentation of service history

## Ordering information

Description	Order no.	Price
Eppendorf TrackIT, RFID Reader and Software	3903 000.014	373.00 £

i For more information go to [www.eppendorf.com](http://www.eppendorf.com)

# Combitips advanced®

## Ergonomic design:

Unique funnel geometry prevents damage to gloves and ensures comfortable handling when inserting into Multipette dispensers

## Multipette connection:

Automatic Combitip recognition eliminates time consuming volume calculations

## Individually color coded:

Quick identification of the desired Combitips facilitates a speedy workflow (color coding is also visible on packaging!)

## Made of virgin polypropylene:

Manufactured without the use of slip agents, biocides and plasticizers

## Elongated tips (for 2.5 mL, 5 mL and 10 mL):

Complete emptying of the most common laboratory vessels prevents sample loss

## Optimized graduations:

Visibility of liquid volume using optimized graduations



For more information go to [www.eppendorf.com](http://www.eppendorf.com)



### Description

In 1978 Eppendorf revolutionized the industry and laboratory workflow with the introduction of the Combitip / Multipette system and has been the leader in market innovations for the past 35 years. The Eppendorf Combitips advanced have been completely redesigned and optimized to meet all the needs of any modern laboratory. The Combitips advanced also function according to the positive displacement principle, thus they always dispense the correct volume independently of the density of the liquid and its flow characteristics (e.g. increased vapor pressure or increased viscosity). Working with radioactive or toxic materials also becomes safer due to the hermetically sealed piston preventing aerosol contamination.

### Applications

- > Positive displacement principle (comparable to a syringe)
- > High-precision dispensing regardless of the density and viscosity of the liquid
- > Prevents aerosol contamination with hermetically sealed piston for secure dispensing
- > Provides protection from radioactive and toxic substances
- > Quick dispensing of long series with precise, repeated dispensing of identical volumes (with Multipette® hand dispensers)

Technical Specifications Combitips advanced®	Eppendorf Safe-Lock Tubes			Conical Tubes		Eppendorf Deepwell Plates		
	0.5 mL	1.5 mL	2.0 mL	15 mL	50 mL	96/500 µL	96/1000 µL	96/2000 µL
0.1 mL	+	+	+	-	-	+	+	+
0.2 mL	+	+	+	-	-	+	+	+
0.5 mL	+	+	+	-	-	+	+	+
1.0 mL	+	+	+	-	-	+	+	+
2.5 mL	++	++	++	++	++	+	++	++
5.0 mL	+	+	+	++	++	+	+	+
10 mL	+	+	+	-	++	+	+	+
25 mL	-	+	+	-	-	+	+	+
50 mL	-	+	+	-	-	+	+	+

++ = improved compatibility compared to Combitip plus generation

i For more information go to [www.eppendorf.com](http://www.eppendorf.com)

## Combitips advanced®



### Intelligent packaging

with the redesigned dispenser box (for "Eppendorf Quality") with extricable chute, Combitips advanced are always within reach. Portioning in 4 bags (25 pcs. each) ensures dust-free storage.



### Always easy to reach

The new Combitip Rack features trouble-free and single-hand operation during dispensing work. The rack holds up to 8 Combitips advanced in sizes ranging from 0.1 mL to 10 mL. The transparent tray allows for the sizes of the Combitips to be easily identified using the color coding.



### Unmistakably Eppendorf

The Eppendorf Combitips advanced feature the characteristic Eppendorf 3D design on the upper rim of the Combitip, allowing you to easily and confidently recognize the Eppendorf Original!

### Variety and selection

With 9 volume sizes (0.1 mL to 50 mL) and 3 purity grades (Eppendorf Quality, PCR clean and Eppendorf Biopur®) you will always find the perfect Combitip for your application! The "Eppendorf Biopur" tips are individually blister-wrapped and feature an access tab which makes them easier to open, even with gloves!

**i** For more information go to [www.eppendorf.com](http://www.eppendorf.com)

## Ordering information

Combitips advanced®	Color code	Eppendorf Quality™ 100 pcs. (4 bags x 25 pcs.)	PCR clean 100 pcs. (4 reclosable bags x 25 pcs.)	Eppendorf Biopur® 100 pcs., individually wrapped
0.1 mL	 white	0030 089.405 66.00 £	0030 089.766 82.70 £	0030 089.618 122.00 £
0.2 mL	 light blue	0030 089.413 66.00 £	0030 089.774 82.70 £	0030 089.626 122.00 £
0.5 mL	 violet	0030 089.421 66.00 £	0030 089.782 82.70 £	0030 089.634 122.00 £
1.0 mL	 yellow	0030 089.430 66.00 £	0030 089.790 82.70 £	0030 089.642 122.00 £
2.5 mL	 green	0030 089.448 66.00 £	0030 089.804 82.70 £	0030 089.650 122.00 £
5.0 mL	 blue	0030 089.456 66.00 £	0030 089.812 82.70 £	0030 089.669 122.00 £
10 mL	 orange	0030 089.464 66.00 £	0030 089.820 82.70 £	0030 089.677 122.00 £
25 mL <sup>1)</sup>	 red	0030 089.472 78.10 £	0030 089.839 97.20 £	0030 089.685 141.00 £
50 mL <sup>1)</sup>	 light gray	0030 089.480 86.00 £	0030 089.847 106.00 £	0030 089.693 153.00 £
<b>Accessories</b>				
<b>Adapter advanced</b>				
25 mL, autoclavable, 1 piece	 red	0030 089.715 7.30 £		
25 mL, autoclavable, 7 pcs., individually wrapped	 red			0030 089.731 53.10 £
50 mL, autoclavable, 1 piece	 light gray	0030 089.723 7.30 £		
50 mL, autoclavable, 7 pcs., individually wrapped	 light gray			0030 089.740 53.10 £
<b>Combitips advanced® Rack, for 8 Combitips advanced® (0.1 – 10 mL)</b>		0030 089.758 25.70 £		
<b>Combitips advanced® Assortment Pack, contains one sample of each size</b>		0030 089.936 9.60 £		
<b>Combilong, aid for aspirating liquids from large containers, 2 pieces</b>		0030 059.506 22.20 £		

<sup>1)</sup> 4 boxes of 25 pcs. each. Each box containing one adapter.

## Ordering information

Description	Order no.	Price
<b>Plus/8-Cartridge, sterile, for 100 µL pipette tips, set of 18/180 pieces, per 10 pieces</b>	0030 058.500	133.00 £
<b>Plus/8-Cartridge, sterile, for 1.25 mL pipette tips, set of 18/180 pieces, per 10 pieces</b>	0030 058.542	133.00 £
<b>Plus/8-Cartridge, non-sterile, for 100 µL pipette tips, set of 18/360 pieces, per 20 pieces</b>	0030 058.534	197.00 £
<b>Plus/8-Cartridge, non-sterile, for 1.25 mL pipette tips, set of 18/360 pieces, per 20 pieces</b>	0030 058.518	197.00 £

i For more information go to [www.eppendorf.com](http://www.eppendorf.com)

# Pipette Performance Plans

## Preventive Maintenance, Calibration & Adjustment Services

For over 65 years Eppendorf has been an innovator and leading provider of liquid handling systems, which include pipetting devices and consumables. This total approach philosophy extends beyond products to our quality pipette calibration, certification, maintenance and repair services – for all major brands of pipettes – not just our own. We offer a range of service options from basic calibration at an economical price to GLP/GMP custom-designed calibration services. Precision and accuracy of the pipettes are important for the quality of all your work results. Regular maintenance and calibration by Eppendorf assures a consistent result quality.



### Service features

- > Eppendorf service quality and integrity
- > Certified reports
- > Quick turnaround time

Performance Plans	BASIC
	Affordable calibration/adjustment according to EN ISO 8655
Initial inspection to determine pipette condition	
Replace all defective parts* <sup>2</sup>	
<b>Preventive maintenance and cleaning:</b> Cleaning and lubrication of seals, O-rings and piston, replacement of small parts like seals and O-rings, checking seals for damage/integrity	
Calibration according to EN ISO 8655 specifications with 10 measurements per test volume (min, mid, max)* <sup>4</sup>	
Quick Check according to EN ISO 8655 specifications with 4 measurements per test volume (min, mid, max)* <sup>4</sup>	■
Issue calibration report	■
Service turnaround (from time of receipt, in business days)* <sup>1</sup>	3-5
<b>Service ordering information</b>	<b>Order no.</b>
Fixed-volume pipette	0050 600.015
Adjustable-volume pipette	0050 600.071
8-channel pipette	0050 600.116
12-channel pipette	0050 600.128
Hand dispenser	0050 600.071

\*<sup>1</sup> Standard value, deviations possible, excl. shipping duration. \*<sup>2</sup> Handgrip, motor and PCB are priced separately. \*<sup>3</sup> Is included in the 10 measurements. \*<sup>4</sup> 10%, 50% and 100% of nominal volumes.

**epServices**  
for premium performance

**Additional services**

- > Trade-in program
- > Reminder of service intervals
- > Customized maintenance contracts
- > Inspection of pipettes from all manufacturers not just Eppendorf
- > Emergency service
- > On site service
- > Pipette training, with emphasis in ergonomics (PhysioCare)

**Long-term benefits**

- > Consistent, reliable pipettes
- > Highest confidence in results
- > GLP compliant audited systems



For more information go to [www.eppendorf.com/epServices](http://www.eppendorf.com/epServices).  
In selected countries only.

<b>STANDARD</b>	<b>PREMIUM</b>	<b>Calibration ISO 17025</b>	<b>CUSTOMIZED</b>
Preventive maintenance, calibration/adjustment according to EN ISO 8655	Total Care program for your pipettes (Certification services)	ISO 17025 accredited calibration service	Flexible testing program according to your specifications e.g. Testing according to special GLP and GMP specifications
■	■		
■	■		
■	■		
■ *3	■ *3		
■	■		
3-5	3-5		
<b>Order no.</b>	<b>Order no.</b>	<b>Order no.</b>	<b>Order no.</b>
0050 600.017	0050 600.025	0080 000.000	on request
0050 600.076	0050 600.084	0082 000.001	on request
0050 600.122	0050 600.092	0082 000.002	on request
0050 600.130	0050 600.033	0082 000.003	on request
0050 600.076	0050 600.084	0082 000.001	on request

# Eppendorf Purity Grades for Tips



Eppendorf epT.I.P.S.<sup>®</sup>, ep Dualfilter T.I.P.S.<sup>®</sup> and Combitips advanced<sup>®</sup> stand for highest quality and purity. The high precision and accuracy of pipette tips and Combitips<sup>®</sup> is guaranteed by precise molding. Each lot of pipette tips and Combitips is subject to gravimetric measurement during final testing. Low wetting ensures reliable volume readings and minimal adhesion.

Pipette tips and Combitip cylinders are made of PP (polypropylene). A relatively inert plastic characterized by low wettability as well as high dimensional and mechanical stability across a wide temperature range. For the Combitips advanced pistons PE (polyethylene) is used. This is due to the fact that ideal running properties between two parts can only be achieved by using two different types of plastic. Our tips are available in a variety of purity grades (see table below).

Purity grades	Eppendorf Quality™	Eppendorf sterile	Eppendorf PCR clean	Eppendorf sterile + PCR clean	Eppendorf Biopur <sup>®</sup>
<b>Eppendorf purity grades for tips</b>					
<b>Continuous quality control for the following relevant criteria:</b>					
Function, tightness, precision	■	■	■	■	■
Low wetting	■	■	■	■	■
High chemical resistance	■	■	■	■	■
High thermal resistance	■	■	■	■	■
High resistance to centrifugation forces*1	■	■	■	■	■
High transparency	■	■	■	■	■
Precisely shaped	■	■	■	■	■
<b>Lot testing*2 (certified) for the following purity criteria:</b>					
Pyrogen-free (endotoxin-free)		■		■	■
Sterile (Ph.Eur./USP)		■		■	■
Human DNA-free			■	■	■
DNA-free (Human- + bacteria DNA)					■
DNase-free			■	■	■
RNase-free			■	■	■
PCR-inhibitor-free			■	■	■
ATP-free					■
<b>Eppendorf tips</b>					
epT.I.P.S. <sup>®</sup> Standard + Box + Set	■				
epT.I.P.S. <sup>®</sup> Reloads	■		■		
epT.I.P.S. <sup>®</sup> Racks					■
epT.I.P.S. <sup>®</sup> Singles					■*3
ep Dualfilter T.I.P.S. <sup>®</sup>				■	
ep Dualfilter T.I.P.S. <sup>®</sup> SealMax				■	
ep Dualfilter T.I.P.S. <sup>®</sup> LoRetention				■	
Combitips advanced <sup>®</sup>	■	■*4	■		■*3
epT.I.P.S. <sup>®</sup> LoRetention	■		■	■	
epT.I.P.S. <sup>®</sup> Motion	■	■			
epT.I.P.S. <sup>®</sup> Motion filtertips		■	■	■	
<b>Eppendorf tubes</b>					
Eppendorf Tubes <sup>®</sup> 5.0 mL	■	■	■	■*3	
Conical Tubes 15 mL and 50 mL		■*5			

\*1 For accurate details regarding resistance to centrifugation, please refer to the respective product pages. \*2 Lot-specific certificate can be downloaded from [www.eppendorf.com/certificates](http://www.eppendorf.com/certificates). \*3 Individually packaged. \*4 Only available in North America. \*5 Eppendorf sterile, RNase free, DNase free, DNA free (humand and bacteria DNA)



**Pure quality: Tested lot by lot**

With the strictest control criteria, internally and externally monitored, we guarantee the consistently high quality of our products – from lot to lot. Our consumables are available in a variety of purity qualities.

Eppendorf Quality as well as more advanced purity grades: "Sterile, Protein-free, PCR clean and Eppendorf Biopur®". In addition to our internal process controls, the sterile, Protein-

free, PCR clean and Eppendorf Biopur® purity levels are tested by an external lab lot by lot. This allows us to ensure we consistently meet our customer's high demands when it comes to purity. As a special service, we make the inspection certificate for each delivered lot available online. (www.eppendorf.com/certificates). For further details please read page 6-7.

i For more information go to [www.eppendorf.com/certificate](http://www.eppendorf.com/certificate)

# Biomaster® 4830



## Description

Experience contamination free pipetting in the 1 µL to 20 µL volume range with the Eppendorf BioMaster. This adjustable pipette is used in combination with the positive displacement Mastertip® to eliminate the formation of aerosols – the most common cause for pipette and sample contamination. The positive displacement Mastertip is also ideal for accurate pipetting of viscous solutions of or liquids with high-vapor pressure.

## Product features

- > Mastertip with its integrated piston is a syringe-style, positive displacement tip to prevent pipette contamination and guarantee accurate pipetting of viscous solutions of or liquids with high-vapor pressure

Combination	Volume range	Volume	Rel. systematic error <sup>1)</sup>	Abs. systematic error <sup>1)</sup>	Rel. random error <sup>1)</sup>	Abs. random error <sup>1)</sup>
Biomaster® and Mastertip®	1 – 20 µL	2 µL	±6.0 %	0.12 µL	±4.0 %	0.08 µL
		10 µL	±3.0 %	0.30 µL	±1.5 %	0.15 µL
		20 µL	±2.0 %	0.40 µL	±0.8 %	0.16 µL

<sup>1)</sup> The error data, according to EN ISO 8655, only applies if original Eppendorf tips are used. Technical specifications are subject to change. Errors and omissions excepted.

## Ordering information

Description	Order no.	Price
<b>Biomaster® Kit</b> , consisting of: 1 Biomaster® with continuous volume selection in the 1 – 20 µL range 1 box with 96 Mastertips, 1 – 20 µL	4830 000.017	333.00 £
<b>Mastertip®</b> , Eppendorf tip with piston, assembled ready-to-use, Eppendorf Quality™, 20 µL, 52 mm, light gray, 480 tips (5 racks x 96 tips)	0030 001.320	175.00 £
<b>Pipette carousel</b> , with 6 holders, for Eppendorf Research® plus and Biomaster® 4830	3115 000.003	93.20 £
<b>Holder</b> , for Eppendorf Research® plus and Biomaster® 4830, for pipette carousel	3115 600.019	11.40 £
<b>Wall mount</b> , for Eppendorf Research® plus and Biomaster® 4830, with hook and loop strip	3115 000.020	14.90 £

# Varipette® 4720



## Description

The Eppendorf Varipette 4720 is a large volume pipette optimized for work with viscous or high-vapor pressure solutions. It also allows for aspirating liquids from large bottles or tall, narrow vessels when using the Varitip S system. Its super easy, one-hand operation significantly speeds up pipetting tasks: Simply press down the operating lever to aspirate liquid from the reservoir. Press the lever again and the liquid will be dispensed into your sample vessel.

## Product features

- > Volume range: 1 mL to 10 mL
- > Fast pipetting and convenient operation due to unique one-hand operation. Liquid automatically aspirates and dispenses by simply pressing the operating lever
- > 4-digit volume display and adjustable in 10 µL intervals for accurate volume setting
- > Varitip P (fig.1) is a syringe-style, positive displacement tip that allows for accurate pipetting of viscous solutions or of liquids with high-vapor pressure
- > The Varitips S (fig.2) system, consisting of the dispensing part and Maxitip (fig.3), is optimized for aspiration liquids from large bottles or tall, narrow vessels
- > The valve for use together with the Varitip S system ensures drip-free dispensing of volatile solutions

Combination	Volume range	Volume	Rel. systematic error <sup>1)</sup>	Abs. systematic error <sup>1)</sup>	Rel. random error <sup>1)</sup>	Abs. random error <sup>1)</sup>
Varipette 4720 and Varitip S	2.5 – 10 mL	2.5 mL	±1.0 %	0.025 mL	±0.2 %	0.005 mL
		5 mL	±0.4 %	0.02 mL	±0.2 %	0.01 mL
		10 mL	±0.3 %	0.03 mL	±0.2 %	0.02 mL
Varipette 4720 and Varitip P	1 – 10 mL	1 mL	±0.6 %	0.006 mL	±0.2 %	0.002 mL
		5 mL	±0.5 %	0.025 mL	±0.1 %	0.005 mL
		10 mL	±0.3 %	0.03 mL	±0.1 %	0.01 mL

<sup>1)</sup> The error data, according to EN ISO 8655, only applies if original Eppendorf tips are used. Technical specifications are subject to change. Errors and omissions excepted.

## Ordering information

Description	Order no.	Price
<b>Varipette® 4720</b> , with continuous volume selection in the 1–10 mL range	4720 000.011	357.00 £
<b>Pipette carousel</b> , with 6 holders, for Eppendorf Research® plus and Biomaster® 4830	3115 000.003	93.20 £
<b>Pipette holder</b> , for Varipette® 4720, for pipette carousel	4981 201.006	12.00 £
<b>Wall mount</b> , for Varipette® 4720, with adhesive surface	4981 203.009	14.90 £
<b>Varitip P</b> , to remove liquid from smaller vessels, 100 pieces	0030 048.130	79.60 £
<b>Varitip S Starter Kit</b> , to remove liquid from narrow-necked vessels and measuring flasks, consisting of 100 Maxitips, 10 dispensing parts, 10 valves	0030 050.525	60.30 £
<b>Varitip S dispensing part</b> , 30 pieces	0030 050.533	57.00 £
<b>Varitip S Maxitip</b> , graduated, 200 pieces	0030 050.568	57.00 £
<b>Varitip S valve</b> , 100 pieces	0030 050.541	46.50 £

# Eppendorf Easypet® 3



reddot design award  
winner 2013

## Description

Experience a new dimension of electronic pipetting with the new Eppendorf Easypet® 3. The latest technological developments give you complete speed control with the utmost precision. The lightweight, well-balanced Easypet 3 has been designed considering all ergonomic findings to sit comfortably in your hand and matches its shape to allow for fatigue-free pipetting.

## Applications

- > Pipette controller for use with pipettes from 0.1 – 100 mL
- > Serial dispensing of aliquots of different volumes
- > Resuspension of bacteria or cell pellets
- > Aspiration of cell layer from, e.g., Ficoll® gradient

## Product features

- > Intuitive and convenient speed adjustment made simple with the tips of your fingers
- > Lightweight, well-balanced and ergonomic design that allows for fatigue-free pipetting
- > Vibrant backlit LEDs provide optical feedback of the remaining battery life
- > Lithium polymer rechargeable battery offers long cordless runtime
- > Smooth setting of pump speed
- > Operation while recharging is possible
- > Autoclavable pipette adapter for sterile applications
- > Quick release of aspirating cone for easy exchange of membrane filters

i For more information go to [www.eppendorf.com/Easypet3](http://www.eppendorf.com/Easypet3)



Lightweight, well-balanced and ergonomic design ensures fatigue-free pipetting.



Battery status display now on backlit LEDs for your own peace of mind.

Technical specifications	
Model	Easypet® 3
Volume range	0.1 – 100 mL
Weight	160 g
Rechargeable battery	
Capacity	1,100 mAh/3.7 V
Charging time	~3 h
Type	Lithium polymer
Number of dispensings	~2,000 (with a 25 mL pipette)
Operation	electronic
Pipetting type	air-cushion
Mains/power supply	
Input	100 V – 240 V AC ± 10 %, 50 Hz – 60 Hz, 0.5 A
Output	5 V DC, 1.0 A

Ordering information		
Description	Order no.	Price
Eppendorf Easypet® 3, incl. mains/power supply device, wall mounting device, shelf stand, 2 membrane filters 0.45 µm, 230 V/50 Hz (EU)	4430 000.018	343.00 £
Membrane filter, for Easypet® 4421 and Easypet® 3, 0.45 µm, sterile, PTFE, 5 pcs.	4421 601.009	71.00 £
Membrane filter, for Easypet® 4421 and Easypet® 3, 0.2 µm, sterile, PTFE, 5 pcs.	4430 606.005	71.00 £
Li-polymer battery, for Easypet® 3	4430 605.009	20.30 £

i For more information go to [www.eppendorf.com/Easypet3](http://www.eppendorf.com/Easypet3)

## Eppendorf Serological Pipets



### Description

Eppendorf completes its portfolio in liquid handling with the new line of Eppendorf Serological Pipets. Experience the quality and convenience in liquid handling you have trusted in for decades with Eppendorf's newest system: Eppendorf Easypet® 3 and Eppendorf Serological Pipets.

### Product features

- > Individually wrapped
- > Easy to open paper/plastic wrap
- > Subunits with dispenser option to keep stored products safe
- > Harmonized and well-fitting operation with Easypet 3, compatibility with all existing pipet helper
- > Sharp and clear graduation for facilitated read-out
- > Color-coding for easy identification of the desired volume
- > Ultra clear virgin polystyrene meeting the requirement of USP IV
- > Sterility assurance level of  $10^{-6}$
- > Certified absence of detectable pyrogens, DNA, RNase & DNase
- > Certified non-cytotoxic

i For more information go to [www.eppendorf.com](http://www.eppendorf.com)



Sharp graduation and ultraclear material facilitate exact and easy read-out when working with Eppendorf serological pipets.

Individually wrapped pipets and an outer package with dispenser option keeps the products clean and safe. At the same time, easy opening and removal from box provide convenience while working with the product.

#### Ordering information

Description	Order no.	Price
<b>Eppendorf Serological Pipets</b> , sterile, free of detectable pyrogens, DNA, RNase & DNase. Non-cytotoxic		
1 mL, yellow, 800 pcs. (4 bags x 200 pcs.)	0030 127.692	96.40 £
2 mL, green, 600 pcs. (4 bags x 150 pcs.)	0030 127.706	80.30 £
5 mL, blue, 400 pcs. (4 bags x 100 pcs.)	0030 127.714	68.30 £
10 mL, orange, 400 pcs. (4 bags x 100 pcs.)	0030 127.722	76.30 £
25 mL, red, 200 pcs. (4 bags x 50 pcs.)	0030 127.730	72.30 £
50 mL, violet, 160 pcs. (4 bags x 40 pcs.)	0030 127.749	169.00 £

i For more information go to [www.eppendorf.com](http://www.eppendorf.com)

# Eppendorf Pipet Helper®



## Description

The Eppendorf Pipet Helper is the perfect instrument for inexperienced users as its robust and intuitive design allows everybody to adjust the meniscus precisely. In addition the valve unit is optimized so that liquids can be drawn up simply, without exerting pressure. The aspiration bulb provides rapid filling of the pipette. The aspiration and dispensing of liquids are controlled gently by the ergonomic lever. Additionally a splash free blow-out is provided. The specially designed aspirating cone ensures secure seating for all measuring and volumetric pipettes (glass and plastic).

## Applications

- > Preparation of a buffer for chromatography
- > Preparation of a fluid for fermentation
- > Sample transfer within petrochemistry
- > Generate a sample within water analytiks
- > Preparation of assays

## Product features

- > Comparable light in weight and reduced pressing power
- > Easy maintenance and cleaning due to easy dismounting, few parts and fully autoclavability
- > Comfortable working because of the good balance and pleasing material
- > The aspirating bulb enables pipetting of volumes up to 100 mL at once
- > Single lever controls low force aspirating and dispensing
- > High control over the liquid movement due to very sensitive valve unit
- > Drop wise dispensing and blow out without splashing
- > Drainage without any additional pressure delivers very reproducible results
- > Drip stop via hydrophobic membrane filter (3 µm)
- > The special silicon pipet adapter guarantees a secure pipette fit

## Ordering information

Description	Order no.	Price
Eppendorf Pipet Helper®, 0.1 – 200 mL	4423 000.010	64.30 £
Membrane filter, for Eppendorf Pipet Helper®, 3 µm, not sterile	4423 601.014	43.20 £

i For more information go to [www.eppendorf.com](http://www.eppendorf.com)

# Varispenser®/Varispenser® plus and Top Buret



## Description

The Eppendorf Varispenser and Varispenser plus are the ideal choices for dispensing aliquots of liquid from supply and reagent bottles. Available in 6 sizes for dispensing volumes from 0.5 – 100 mL, the design of these instruments make them capable of consistently dispensing selected volumes without reagent waste. All Varispenser bottle-top dispensers are fully autoclavable for maximum safety in your lab. The Varispenser plus provides additionally a recirculation valve to prevent reagent loss while ventilating and a simple calibration function.

## Product features

- > Wide range of volumes (6 sizes)
- > PFA seal of the sliding piston prevents seizing
- > Precision piston prevents liquid efflorescence
- > High chemical resistance
- > Fast volume setting via fine graduation
- > Easy to disassemble for cleaning and maintenance
- > Telescopic aspirating tube for variable adjustment to bottle height
- > Fully autoclavable without disassembly
- > Suitable for GL 32, GL 38, GL 45 GL and S 40 buttress thread with included adapters
- > Additional adapters available



## Description

The Eppendorf Top Buret sets new standards for manual titration. With each turn of the dial liquid is continuously dispensed eliminating the need for new liquid aspiration, making titration simpler and safer. The Top Buret comes in two different models: Model M features a dispensing rate of 2,500  $\mu\text{L}$  per rotation; Model H features a rate of 5,000  $\mu\text{L}$  per rotation. The digital display readings on both models range from 10  $\mu\text{L}$  to 999.9 mL with the size of your supply bottle being the only limiting factor. It's clearly labeled user-friendly digital display and simple knob control provides for easy, ergonomic and fatigue free operation.

## Product features

- > Continuous, pulse-free dispensing technology
- > Recirculate valve with valve lever
- > Voltage supply with long-life primary cells and charging display
- > Dispensing range 0.01 mL to 999.9 mL
- > Electronic control pad can be removed as unit
- > Service-friendly modular design incl. simple calibration program
- > High chemical resistance
- > Variable discharge tube, horizontal 142 – 220 mm, vertical 10 – 200 mm and rotatable by 360°
- > Telescopic aspirating tube for automatic length adjustment of 210 – 370 mm
- > Suitable for GL 32, GL 38, GL 45 GL and S 40 buttress thread with included adapters
- > Additional adapters available

i For more information go to [www.eppendorf.com](http://www.eppendorf.com)

# Varispenser®/Varispenser® plus

## Ordering information

Volume range	Volume	Dispensing step	Rel. systematic error <sup>1)</sup>	Abs. systematic error <sup>1)</sup>	Rel. random error <sup>1)</sup>	Abs. random error <sup>1)</sup>	Order no.	Price
<b>Varispenser®</b>								
0.5 – 2.5 mL	0.25 mL	0.05 mL	± 6 %	± 0.015 mL	± 1 %	± 0.0025 mL	4960 000.019	199.00 £
	1.25 mL	0.05 mL	± 1.2 %	± 0.015 mL	± 0.2 %	± 0.0025 mL		
	2.5 mL	0.05 mL	± 0.6 %	± 0.015 mL	± 0.1 %	± 0.0025 mL		
1 – 5 mL	1 mL	0.1 mL	± 2.5 %	± 0.025 mL	± 0.5 %	± 0.005 mL	4960 000.027	199.00 £
	2.5 mL	0.1 mL	± 1 %	± 0.025 mL	± 0.2 %	± 0.005 mL		
	5 mL	0.1 mL	± 0.5 %	± 0.025 mL	± 0.1 %	± 0.005 mL		
2 – 10 mL	2 mL	0.2 mL	± 2.5 %	± 0.05 mL	± 0.5 %	± 0.01 mL	4960 000.035	199.00 £
	5 mL	0.2 mL	± 1 %	± 0.05 mL	± 0.2 %	± 0.01 mL		
	10 mL	0.2 mL	± 0.5 %	± 0.05 mL	± 0.1 %	± 0.01 mL		
5 – 25 mL	5 mL	0.5 mL	± 2.5 %	± 0.125 mL	± 0.5 %	± 0.025 mL	4960 000.043	263.00 £
	12.5 mL	0.5 mL	± 1 %	± 0.125 mL	± 0.2 %	± 0.025 mL		
	25 mL	0.5 mL	± 0.5 %	± 0.125 mL	± 0.1 %	± 0.025 mL		
10 – 50 mL	10 mL	1 mL	± 2.5 %	± 0.25 mL	± 0.5 %	± 0.05 mL	4960 000.051	290.00 £
	25 mL	1 mL	± 1 %	± 0.25 mL	± 0.2 %	± 0.05 mL		
	50 mL	1 mL	± 0.5 %	± 0.25 mL	± 0.1 %	± 0.05 mL		
20 – 100 mL	20 mL	2 mL	± 2.5 %	± 0.5 mL	± 0.5 %	± 0.1 mL	4960 000.060	382.00 £
	50 mL	2 mL	± 1 %	± 0.5 mL	± 0.2 %	± 0.1 mL		
	100 mL	2 mL	± 0.5 %	± 0.5 mL	± 0.1 %	± 0.1 mL		
<b>Varispenser® plus</b>								
0.5 – 2.5 mL	0.25 mL	0.05 mL	± 6 %	± 0.015 mL	± 1 %	± 0.0025 mL	4961 000.012	235.00 £
	1.25 mL	0.05 mL	± 1.2 %	± 0.015 mL	± 0.2 %	± 0.0025 mL		
	2.5 mL	0.05 mL	± 0.6 %	± 0.015 mL	± 0.1 %	± 0.0025 mL		
1 – 5 mL	1 mL	0.1 mL	± 2.5 %	± 0.025 mL	± 0.5 %	± 0.005 mL	4961 000.020	235.00 £
	2.5 mL	0.1 mL	± 1 %	± 0.025 mL	± 0.2 %	± 0.005 mL		
	5 mL	0.1 mL	± 0.5 %	± 0.025 mL	± 0.1 %	± 0.005 mL		
2 – 10 mL	2 mL	0.2 mL	± 2.5 %	± 0.05 mL	± 0.5 %	± 0.01 mL	4961 000.039	235.00 £
	5 mL	0.2 mL	± 1 %	± 0.05 mL	± 0.2 %	± 0.01 mL		
	10 mL	0.2 mL	± 0.5 %	± 0.05 mL	± 0.1 %	± 0.01 mL		
5 – 25 mL	5 mL	0.5 mL	± 2.5 %	± 0.125 mL	± 0.5 %	± 0.025 mL	4961 000.047	313.00 £
	12.5 mL	0.5 mL	± 1 %	± 0.125 mL	± 0.2 %	± 0.025 mL		
	25 mL	0.5 mL	± 0.5 %	± 0.125 mL	± 0.1 %	± 0.025 mL		
10 – 50 mL	10 mL	1 mL	± 2.5 %	± 0.25 mL	± 0.5 %	± 0.05 mL	4961 000.055	339.00 £
	25 mL	1 mL	± 1 %	± 0.25 mL	± 0.2 %	± 0.05 mL		
	50 mL	1 mL	± 0.5 %	± 0.25 mL	± 0.1 %	± 0.05 mL		
20 – 100 mL	20 mL	2 mL	± 2.5 %	± 0.5 mL	± 0.5 %	± 0.1 mL	4961 000.063	425.00 £
	50 mL	2 mL	± 1 %	± 0.5 mL	± 0.2 %	± 0.1 mL		
	100 mL	2 mL	± 0.5 %	± 0.5 mL	± 0.1 %	± 0.1 mL		

<sup>1)</sup> The data for systematic error and random error are given according to EN ISO 8655. Technical specifications are subject to change. Errors and omissions excepted. The Varispenser (plus) and the Top Buret are not a substitution for a bottle closure. Volatile liquids can disappear.

# Eppendorf Top Buret

## Ordering information

Volume range	Volume	Rel. systematic error <sup>1)</sup>	Abs. systematic error <sup>1)</sup>	Rel. random error <sup>1)</sup>	Abs. random error <sup>1)</sup>	Order no.	Price
<b>Eppendorf Top Buret™ M</b>							
0.1 – 999.9 mL	2.5 mL	± 2.0 %	± 0.1 mL	± 1.0 %	± 0.025 mL	4965 000.017	610.00 £
	12.5 mL	± 0.4 %	± 0.1 mL	± 0.2 %	± 0.025 mL		
	25 mL	± 0.2 %	± 0.1 mL	± 0.1 %	± 0.025 mL		
<b>Eppendorf Top Buret™ H</b>							
0.1 – 999.9 mL	5 mL	± 2.0 %	± 0.1 mL	± 1.0 %	± 0.05 mL	4965 000.025	610.00 £
	25 mL	± 0.4 %	± 0.1 mL	± 0.2 %	± 0.05 mL		
	50 mL	± 0.2 %	± 0.1 mL	± 0.1 %	± 0.05 mL		

<sup>1)</sup> The data for systematic error and random error are given according to EN ISO 8655. Technical specifications are subject to change. Errors and omissions excepted. The Varispenser (plus) and the Top Buret are not a substitution for a bottle closure. Volatile liquids can disappear.

## Accessories Varispenser®/Top Buret

Description	Order no.	Price
Bottle thread adapter from GL 32 to GL 25, PP	4960 800.040	5.80 £
Bottle thread adapter from GL 32 to GL 27, PP	4960 800.139	7.00 £
Bottle thread adapter from GL 32 to GL 28, PP	4960 800.058	5.80 £
Bottle thread adapter from GL 32 to GL 38, PP	4960 800.066	8.10 £
Bottle thread adapter from GL 32 to GL 40, PP	4960 800.074	8.70 £
Bottle thread adapter from GL 32 to GL 45, PP	4960 800.112	9.10 £
Bottle thread adapter from GL 32 to NS 19/26, PP	4960 800.082	14.80 £
Bottle thread adapter from GL 32 to NS 24/29, PP	4960 800.090	16.10 £
Bottle thread adapter from GL 32 to NS 29/32, PP	4960 800.104	16.60 £
Bottle thread adapter, from GL 32 to GL 28, ETFE	4960 835.005	13.30 £
Bottle thread adapter, from GL 32 to GL 38, ETFE	4960 836.001	13.40 £
Bottle thread adapter, from GL 32 to GL 40, ETFE	4960 833.002	16.50 £
Bottle thread adapter, from GL 32 to GL 45, ETFE	4960 837.008	14.10 £
Bottle thread adapter from GL 45 to GL 32, PP	4960 800.120	9.10 £
Bottle thread adapter from GL 45 to GL 38, PP	4960 800.155	2.70 £
Bottle thread adapter from GL 45 to S 40 (Buttress thread), PP	4960 800.147	2.50 £
Bottle thread adapter, from GL 45 to GL 38, ETFE	4960 839.000	22.40 £
Bottle thread adapter, from GL 45 to GL 40, ETFE	4960 834.009	18.60 £
Discharge tube, set, for Varispenser® plus 2.5 mL, 5 mL & 10 mL	4961 826.018	12.50 £
Discharge tube, set, for Varispenser® plus 25 mL, 50 mL & 100 mL	4961 827.014	13.50 £
Discharge tube, set, for Varispenser® 2.5 mL, 5 mL & 10 mL	4960 826.022	9.40 £
Discharge tube, set, for Varispenser® 25 mL, 50 mL & 100 mL	4960 827.029	10.30 £
Spiral discharge tube, 80 cm, for Varispenser® & Varispenser® plus, 2.5 mL, 5 mL & 10 mL	4960 824.003	70.50 £
Spiral discharge tube, 80 cm, for Varispenser® & Varispenser® plus, 25 mL, 50 mL & 100 mL	4960 825.000	75.10 £
Discharge tube with knurled nut, for Top Buret	4965 612.004	20.20 £
Discharge valve with toggle, for Top Buret	4965 616.000	59.00 £
Drying tube, without drying agent, for Top Buret, Varispenser® & Varispenser® plus	4960 851.000	28.00 £
Air vent cover, for Varispenser® & Varispenser® plus	4960 810.274	3.40 £
Air vent cover/filter connection, for Top Buret	4965 620.007	3.40 £
Aspiration valve with valve ball, for Varispenser® & Varispenser® plus, 2.5 mL, 5 mL & 10 mL	4960 803.006	14.50 £
Telescopic aspirating tube, for Top Buret, Varispenser® & Varispenser® plus	4960 805.009	19.60 £
Tube holder, for Top Buret	4965 611.008	10.90 £
Thread adapter for 5L-jerrycan from 45 mm to 17/8" thread	4960 832.006	38.50 £
Universal wrench adapter, for Varispenser® & Varispenser® plus 100 mL	4960 800.171	3.50 £
Universal wrench, for Varispenser® & Varispenser® plus	4960 800.031	3.50 £



Model	epMotion® 96	epMotion® 5070	epMotion® 5070f	epMotion® M5073
Page(s)	86	90	91	92
Dimensions (W × D × H)	22.9 × 45.7 × 53.3 cm / 9 × 18 × 21 in	65 × 48 × 63 cm / 26 × 19 × 25 in	65 × 48 × 63 cm / 26 × 19 × 25 in	65 × 61 × 67 cm
Weight w/o accessories	19 kg	45 kg	33 kg	57 kg
Max. power consumption	100 W	150 W	150 W	600 W
Optical confocal infrared detector	Mechanical sensor for tip size verification	Contact-free recognition of fill level of inserted tools, labware, tip types and quantities	Contact-free recognition of fill level of inserted tools, labware, tip types and quantities	Contact-free recognition of fill level of inserted tools, labware, tip types and quantities
SBS/ANSI positions	1	4	4	6
Random measurement error		±0.1 mm	±0.1 mm	±0.1 mm
Systematic measurement error		±0.3 mm	±0.3 mm	±0.3 mm

**i** For more information go to [www.eppendorf.com](http://www.eppendorf.com)



<b>epMotion® P5073</b>	<b>epMotion® 5075l</b>	<b>epMotion® 5075v</b>	<b>epMotion® 5075t</b>	<b>epMotion® 5075m</b>
<b>94</b>	<b>96</b>	<b>98</b>	<b>100</b>	<b>102</b>
65 × 61 × 67 cm	107 × 61 × 67 cm / 43 × 24 × 27 in	107 × 61 × 67 cm / 43 × 24 × 27 in	107 × 61 × 67 cm / 43 × 24 × 27 in	107 × 61 × 67 cm / 43 × 24 × 27 in
50 kg	85 kg	86 kg	87 kg	88 kg
600 W	700 W	700 W	700 W	700 W
Contact-free recognition of fill level of inserted tools, labware, tip types and quantities	Contact-free recognition of fill level of inserted tools, labware, tip types and quantities	Contact-free recognition of fill level of inserted tools, labware, tip types and quantities	Contact-free recognition of fill level of inserted tools, labware, tip types and quantities	Contact-free recognition of fill level of inserted tools, labware, tip types and quantities
6	15	12	14	14
±0.1 mm				
±0.3 mm				

**i** For more information go to [www.eppendorf.com](http://www.eppendorf.com)

NEW

# epMotion® 96



i For more information go to [www.eppendorf.com](http://www.eppendorf.com)

✂ Ordering information for other voltage options begins on page 484

Manufacturer's recommended retail price. All prices excl. VAT.  
Technical specifications subject to change.

**Compact design**

Small footprint, fits under laminar flow hood and can be moved inbetween labs

**Tip attachment lever**

Minimal force needed to attach tips to the 96 nose-cone array for ergonomic operation

**Control unit (Apple iPod)**

High quality touch screen for convenient system control. Accessable by other iOS® 7 devices (iPhone®, iPad®) via WiFi

**Auto-detect function for tip size**

Verification between 50 and 300 µL tips allows for more accurate volume settings and better pipetting performance

**Loading frame**

For quick exchange of epT.I.P.S.® motion reload tip trays

**Height adjustment**

Possibility to pre-set labware height for repetitive tasks or auto-pipetting mode

**Lifting table**

Supports a variety of SBS-size labware such as micro plates, reservoirs, and ThermoAdapters. 384 well plates can be pipetted by indexing

**Manually lift plates up and lock in place**

Easy/fast adjustments to different labware heights and filling levels

**Accessory plate**

for handling 384 well plates by indexing with the lifting table

**Description**

The Eppendorf epMotion 96 is a semi-automated electronic pipette for fast & precise parallel 96 channel microplate processing. It is an easy to use bench top system for high precision pipetting in 96 & 384 well plates. Without changes to the system, a large volume range of 0.5 µL to 300 µL is available for convenient use over a range of applications. Its ergonomic design and intuitive handling makes the epMotion 96 a great tool for anyone in the lab who needs fast and precise liquid handling in 96 format.

**Applications**

- > Replication and reformatting of microplates
- > Cell seeding & media change
- > Reagent & compound addition
- > 384 wells by 4 times 96 well pipetting
- > Cell-based assays
- > ELISA handling (plate coating & wash)
- > Biochemical assays

**Product features**

- > 0.5 to 300 µL with one system
- > Electronic pipetting with synchronous 96 channel piston movement for better precision and reproducibility or results
- > Auto-detect function for tip size
- > Use 50 µL & 300 µL reload tips for best accuracy
- > Intuitive & industry proven software concept & convenient touch screen control
- > Intelligent, preset applications: aspiration, dilution, multi dispense, pipette & mix
- > Individual speed setting, set parameters you are comfortable with and that match the liquid class
- > Easy & rapid tip load- & reloading
- > Compact design to fit under the laminar flow hood
- > Reduced risk of repetitive stress injury (RSI)

NEW

# epMotion® 96

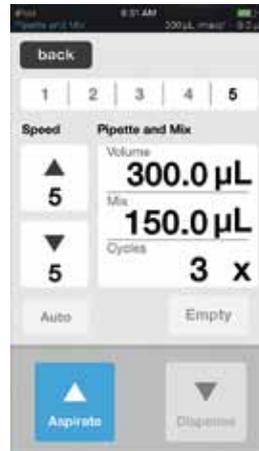
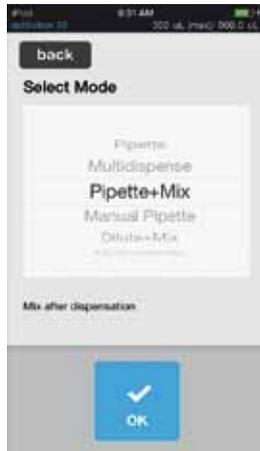


## Intuitive Operation

Insert tips for required volume range; select mode of action; move plate to tips; touch for aspirate or dispense

<b>Technical specifications</b>	
<b>Volume range</b>	0.5 – 300 µL
<b>Power supply</b>	100 – 240 V ±10 %, 50 – 60 Hz ± 5 %
<b>Max. power consumption</b>	100 W
<b>Dimensions (W × D × H)</b>	22.9 × 45.7 × 53.3 cm / 9 × 18 × 21 in
<b>Weight w/o accessories</b>	19 kg / 42 lb
<b>Dispensing tool</b>	
<b>Random measurement error (1 µL)</b>	with 50 µL tip ≤ 3 %
<b>Systematic measurement error (1 µL)</b>	with 50 µL tip ± 2 %
<b>Random measurement error (10 µL)</b>	with 300 µL tip ≤ 3 %
<b>Systematic measurement error (10 µL)</b>	with 300 µL tip ± 2 %
<b>Operation</b>	electronic
<b>Pipetting type</b>	air-cushion
<b>SBS/ANSI deck positions</b>	1
<b>Modes:</b>	<p><b>Pipette:</b> Aspiration and dispensing of liquids</p> <p><b>Multidispense:</b> Dispensing of liquid in multiple equal volumes</p> <p><b>Pipette + Mix:</b> Aspiration and dispensing followed by user defined mixing cycles</p> <p><b>Manual Pipette:</b> Aspiration of liquid can be manually stopped prior to reaching the max set volume; used for volume determination or gentle aspiration of supernatants</p> <p><b>Dilute + Mix:</b> Aspiration of a concentrate and a diluent separated by an air gap. Mix after dispensing</p> <p><b>Multiaspirate:</b> Aspiration of multiple equal liquid volumes; used for pooling from multiple plates</p> <p><b>Programming:</b> Store sequences of multiple modes as programmed workflows</p> <p><b>Pipetting technology:</b> 96 channel air displacement</p>

i For more information go to [www.eppendorf.com](http://www.eppendorf.com)



**Ordering information**

Description	Order no.	Price
<b>epMotion® 96</b> , semi-automated electronic pipette for parallel 96 channel microplate processing, 100 – 240 V ±10 %/50 – 60 Hz ± 5 %, 0.5 – 300 µL	5069 000.020	POA
<b>epT.I.P.S.® Motion as Reload System</b>		
Eppendorf Quality™, 300 µL, 2,304 tips (24 trays x 96 tips)	0030 014.464	153.00 £
<b>epT.I.P.S.® Motion as Reload System, with filter</b>		
PCR clean, 300 µL, 2,304 tips (24 trays x 96 tips)	0030 014.472	294.00 £
PCR clean and sterile, 300 µL, 2,304 tips (24 trays x 96 tips)	0030 014.537	330.00 £
<b>epT.I.P.S.® Motion as Reload System</b>		
Eppendorf Quality™, 50 µL, 2,304 tips (24 trays x 96 tips)	0030 014.421	153.00 £
<b>epT.I.P.S.® Motion as Reload System, with filter</b>		
PCR clean, 50 µL, 2,304 tips (24 trays x 96 tips)	0030 014.430	294.00 £
PCR clean and sterile, 50 µL, 2,304 tips (24 trays x 96 tips)	0030 014.529	330.00 £
<b>Thermoadapter for PCR</b> , for temperature control of PCR plates		
384 wells, skirted	5075 788.004	524.00 £
96 wells, skirted	5075 787.008	478.00 £
<b>TipHolder</b> , for epT.I.P.S.® Motion Reloads	5075 751.399	293.00 £

i For more information go to [www.eppendorf.com](http://www.eppendorf.com)

✂ Ordering information for other voltage options begins on page 484

## epMotion® 5070



### Description

The epMotion® 5070's pipetting technology is based on the classic Eppendorf piston-stroke pipettes; thus, protocols previously carried out manually are easily transferred to epMotion 5070. Its compatibility to a wide range of predefined consumables also allows established procedures to be maintained. Before every run the optical sensor checks that the required labware is correctly positioned on the deck and it also checks tip type and quantity available.

### Applications

- > Serial dilutions
- > Distributing reagents
- > Assay set-up
- > Sample transfer from individual tubes to plates
- > Reformatting plates
- > PCR set-up
- > Cell-based assay set-up
- > Immunoassay set-up
- > Setting concentrations or volumes
- > Media change

### Product features

- > 4 ANSI/SBS worktable and 3 virtual positions
- > Maximum pipetting accuracy from 1 to 1,000 µL
- > Calibrated 1-channel and 8-channel pipetting tools
- > Optical sensor\*<sup>1</sup> for detecting liquids, labware, tips
- > Compatible with tubes (0.2 mL to 50 mL) and microplates with up to 384 wells
- > Automatic exchange of two pipetting tools
- > Eppendorf EasyCon™ tablet for touch or mouse control with USB data transfer
- > User guided LH assistant for general liquid handling tasks
- > Completely contained housing including door safety mechanism (except for 5070f, laminar-flow version)
- > Option for MultiCon PC controller by touch, mouse or keyboard, upgradable for barcode tracking and GLP/GMP software versions

### Special features for epMotion 5070f

- > Eppendorf Light barrier beam — monitors the closure of the bench hood for safety
- > Pre-programmed cell culture labware
- > Sterile pipet tips available
- > Autoclavable pipetting tools

\*<sup>1</sup> US-Patent 6,819,437 B2

**i** For more information go to [www.eppendorf.com](http://www.eppendorf.com)



Technical specifications		
Model	epMotion® 5070	epMotion® 5070f
Volume range	1 µL – 1 mL	1 µL – 1 mL
Power supply	100 – 240 V ±10 %, 50 – 60 Hz ± 5 %	100 – 240 V ±10 %, 50 – 60 Hz ± 5 %
Max. power consumption	150 W	150 W
Dimensions (W x D x H)	65 x 48 x 63 cm / 26 x 19 x 25 in	65 x 48 x 63 cm / 26 x 19 x 25 in
Weight w/o accessories	45 kg / 99.2 lb	33 kg / 72.8 lb
Conductor – X, Y, Z Positioning		
Random measurement error	±0.1 mm	±0.1 mm
Systematic measurement error	±0.3 mm	±0.3 mm
Detector		
Optical confocal infrared detector	Contact-free recognition of fill level of inserted tools, labware, tip types and quantities	Contact-free recognition of fill level of inserted tools, labware, tip types and quantities
Dispensing tool <sup>1)2)</sup>		
Random measurement error (1 µL)	≤ 5 %	≤ 5 %
Systematic measurement error (1 µL)	±15 %	±15 %
Random measurement error (1,000 µL)	≤ 0.15 %	≤ 0.15 %
Systematic measurement error (1,000 µL)	±0.7 %	±0.7 %
Random measurement error (50 µL)	≤ 0.4 %	≤ 0.4 %
Systematic measurement error (50 µL)	±1.2 %	±1.2 %
Operation	electronic	electronic
Pipetting type	air-cushion	air-cushion
SBS/ANSI deck positions	4	4

<sup>1)</sup> in pipetting mode, free jet, without pre-wetting, with distilled water, at 20 °C<sup>2)</sup> See Eppendorf Application Note 168 for typical pipetting performance

✂ Ordering information for other voltage options begins on page 484

## epMotion® M5073



### Description

The epMotion® M5073: 2 systems in one. First, a customized system for automated nucleic acid purification of 1 to 24 samples with special MagSep reagents. The Eppendorf EasyCon tablet and Prep Assistant software provide simple operation with step-by-step guidance through the process. Secondly, a flexible system for automating time-consuming and complex pipetting procedures with the epBlue software, making routine liquid handling tasks easier than ever. The pipetting procedure is more precise, reproducible and fully standardized, making your workplace more ergonomic and safer. The epMotion M5073 is delivered with all accessories required for nucleic acid purification; only consumables need to be ordered separately.

### Applications

- > DNA and RNA purification
- > PCR set-up
- > Sample or reagent transfer
- > Sample mixing and tempering
- > Assay set-up
- > Media change and other cell culture applications

### Product features

- > 6 ANSI/SBS microplate positions
- > Compact control tablet with touchscreen or mouse operation, USB data transfer
- > Software assistants for simple, step-by-step application programming
- > Optical sensor\*<sup>1</sup> for detecting liquids, labware, tips
- > Automatic replacement of 2 pipetting tools
- > Volume range of 1 to 1,000 µL for maximum pipetting accuracy
- > 3D-MagSep technology, mixing, tempering, and magnetic separation all at one location
- > Calibrated 1-channel and 8-channel pipetting tools
- > Optional UV lamp and HEPA filter system for decontamination and clean air conditions
- > Compatible with tubes (0.1 to 50 mL) and microplates with up to 384 wells
- > Option for MultiCon PC controller by touch, mouse or keyboard, upgradable for barcode tracking and GLP/GMP software versions

\*<sup>1</sup> US-Patent 6,819,437 B2

**i** For more information go to [www.eppendorf.com](http://www.eppendorf.com)



### 3D MagSep technology

Unique combination of magnet finger module and TMX Thermomixer allow you to separate, mixing and temper at one position.

### New innovative functions

The new Liquid Waste Tub allows you to easily separate liquid and solid waste. And what's more, you can now save tips using the reuse tips feature.

Technical specifications		
Model	epMotion® M5073	epMotion® M5073c
Noise level	~ 56 dB(A)	~ 56 dB(A) HEPA off
Volume range	1 µL – 1 mL	1 µL – 1 mL
Power supply	100 – 240 V ±10 %, 50 – 60 Hz ± 5 %	100 – 240 V ±10 %, 50 – 60 Hz ± 5 %
Max. power consumption	600 W	600 W
Dimensions (W × D × H)	65 × 61 × 67 cm	65 × 61 × 77 cm
Weight w/o accessories	57 kg / 125.6 lb	62 kg / 136.7 lb
<b>Eppendorf EasyCon</b>		
Display	LCD color display	LCD color display
Display resolution	1,024 × 600 pixels	1,024 × 600 pixels
Interfaces	4 × USB 2.0	4 × USB 2.0
Touch panel	Capacitive touch panel	Capacitive touch panel
Gripper carrying capacity	1,200 g	1,200 g
<b>HEPA filter</b>		
Filter class according to EN 1822		E 10
Volume flow		70 – 80 m³/h
Operation	electronic	electronic
Pipetting type	air-cushion	air-cushion
<b>Thermomixer</b>		
Max. load	1,000 g (2.2 lb)	1,000 g (2.2 lb)
Mixing period	5 s – 120 min	5 s – 120 min
Speed	300 rpm – 2,000 rpm	300 rpm – 2,000 rpm
Temperature range	4 °C – 95 °C	4 °C – 95 °C
<b>UV lamp</b>		
Irradiation period per run		15 min
Radiation capacity at a distance of 1 m		39 µW/cm²
Radiation capacity after 100 h		3,9 W
Main wavelength		254 nm (UV-C)
<b>X-Y-Z axis positioning accuracy</b>		
Systematic deviation	±0.1 mm	±0.1 mm
Random deviation	±0.3 mm	±0.3 mm

Only for epMotion M5073 and M5073c: Limited Use Label License

Notice to purchaser; limited license for research use only

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## epMotion® P5073



### Description

The epMotion® P5073: 2 systems in one. First, a customized system for automatic PCR preparation in the 96 or 384 plate formats. The Eppendorf EasyCon tablet and PCR Assistant software provide simple operation with step-by-step guidance through various PCR preparations. Secondly, a flexible system for automating time-consuming and complex pipetting procedures with the epBlue software, making routine liquid handling tasks easier than ever. The pipetting procedure is more precise, reproducible and fully standardized, making your workplace more ergonomic and safer. The epMotion P5073 is delivered with all accessories required for preparing PCR samples; only consumables need to be ordered separately.

### Applications

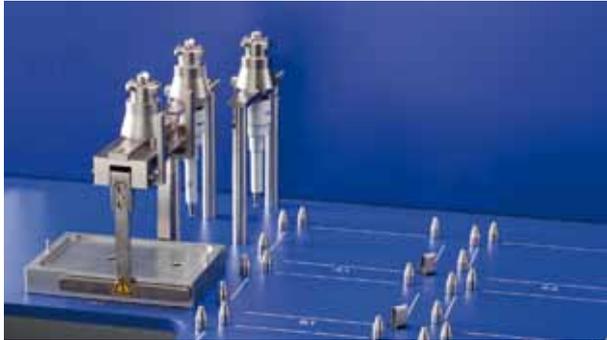
- > PCR set-up
- > Serial dilution and normalization of samples
- > Sample or reagent transfer
- > Sample mixing and tempering
- > Assay set-up
- > Media change and other cell culture applications

### Product features

- > 6 ANSI/SBS microplate positions
- > Compact control tablet with touchscreen or mouse operation, USB data transfer
- > Software assistants for simple, step-by-step application programming
- > Optical sensor\*<sup>1</sup> for detecting liquids, labware, tips
- > Automatic replacement of 2 pipetting tools
- > Volume range of 1 to 1,000 µL for maximum pipetting accuracy
- > Compatible with tubes (0.1 to 50 mL) and microplates with up to 384 wells
- > Calibrated 1-channel and 8-channel pipetting tools
- > Optional UV lamp and HEPA filter system for decontamination and clean air conditions
- > Fully enclosed, compact housing with door lock
- > Option for MultiCon PC controller by touch, mouse or keyboard, upgradable for barcode tracking and GLP/GMP software versions

\*<sup>1</sup> US patent 6,819,437 B2

i For more information go to [www.eppendorf.com](http://www.eppendorf.com)



#### More flexibility

The 6 positions of the epMotion® 5073 systems, automatic tool change, and gripper option open up a wide variety of applications.

#### Simple and fast operation via software assistants

Easily create PCR mastermixes and dilution series for quantification standards, normalization of sample concentrations and setting up PCR reactions – using touchscreen or mouse operation.

Technical specifications		
Model	epMotion® P5073	epMotion® P5073c
Noise level	~ 56 dB(A)	~ 56 dB(A) HEPA off
Volume range	1 µL – 1 mL	1 µL – 1 mL
Power supply	100 – 240 V ±10 %, 50 – 60 Hz ± 5 %	100 – 240 V ±10 %, 50 – 60 Hz ± 5 %
Max. power consumption	600 W	600 W
Dimensions (W × D × H)	65 × 61 × 67 cm	65 × 61 × 77 cm
Weight w/o accessories	50 kg / 110.2 lb	55 kg / 121.3 lb
<b>Eppendorf EasyCon</b>		
Display	LCD color display	LCD color display
Display resolution	1,024 × 600 pixels	1,024 × 600 pixels
Interfaces	4 × USB 2.0	4 × USB 2.0
Touch panel	Capacitive touch panel	Capacitive touch panel
Gripper carrying capacity	1,200 g	1,200 g
HEPA filter		
Filter class according to EN 1822		E 10
Volume flow		70 – 80 m³/h
Operation	electronic	electronic
Pipetting type	air-cushion	air-cushion
<b>Thermal module (optional)</b>		
Cooling rate	4 °C/min	4 °C/min
Heating rate	9 °C/min	9 °C/min
Temperature range	0 °C – 110 °C	0 °C – 110 °C
<b>UV lamp</b>		
Irradiation period per run		15 min
Radiation capacity at a distance of 1 m		39 µW/cm²
Radiation capacity after 100 h		3,9 W
Main wavelength		254 nm (UV-C)
<b>X-Y-Z axis positioning accuracy</b>		
Systematic deviation	±0.1 mm	±0.1 mm
Random deviation	±0.3 mm	±0.3 mm

✂ Ordering information for other voltage options begins on page 484

## epMotion® 5075I



### Description

The epMotion® 5075I is the perfect solution for more complex pipetting tasks. It offers the same precision and accuracy as the epMotion 5070, making it the ideal tool for demanding applications such as the purification of nucleic acids with magnetic beads or routine applications with several plates. The 15 positions, option of automatically changing pipetting tools, and the plate gripper make the epMotion 5075I one of the most flexible automated liquid handling systems.

### Applications

- > Serial dilutions
- > Distributing reagents
- > Sample transfer from individual tubes to plates
- > Reformatting plates
- > Media change and other cell culture applications
- > Sample pooling
- > Real-time PCR set-up
- > Cell-based assay set-up
- > Immunoassay set-up
- > Setting concentrations or volumes

### Product features

- > 15 ANSI/SBS worktable positions
- > Maximum pipetting accuracy from 1 to 1,000 µL
- > Automatic exchange of all tools (gripper, 1-channel & 8-channel)
- > Optical sensor\*<sup>1</sup> for detecting liquids, labware, tips
- > Compatible with tubes (0.2 mL to 50 mL) and microplates with up to 384 wells
- > Eppendorf MultiCon™ PC controller to run preinstalled LH assistant or epBlue software by touch or mouse
- > Optional software extensions for handling samples with barcodes or for integration to LIMS & ELN
- > Optional software extensions for integration to regulated process environments (GLP, GMP, 21 CFR)
- > CleanCap option – UV lamp & HEPA filter for decontamination and clean air conditions
- > 3 thermal module options for heating or cooling of samples or reagents

\*<sup>1</sup> US-Patent 6,819,437 B2

**i** For more information go to [www.eppendorf.com](http://www.eppendorf.com)



Technical specifications	
<b>Model</b>	epMotion® 5075I
<b>Volume range</b>	1 µL – 1 mL
<b>Power supply</b>	100 – 240 V ±10 %, 50 – 60 Hz ± 5 %
<b>Max. power consumption</b>	700 W
<b>Dimensions (W × D × H)</b>	107 × 61 × 67 cm / 43 × 24 × 27 in
<b>Weight w/o accessories</b>	85 kg / 187.4 lb
<b>Conductor – X, Y, Z Positioning</b>	
<b>Random measurement error</b>	±0.1 mm
<b>Systematic measurement error</b>	±0.3 mm
<b>Detector</b>	
<b>Optical confocal infrared detector</b>	Contact-free recognition of fill level of inserted tools, labware, tip types and quantities
<b>Dispensing tool<sup>1)2)</sup></b>	
<b>Random measurement error (1 µL)</b>	≤ 5 %
<b>Systematic measurement error (1 µL)</b>	±15 %
<b>Random measurement error (1,000 µL)</b>	≤ 0.15 %
<b>Systematic measurement error (1,000 µL)</b>	±0.7 %
<b>Random measurement error (50 µL)</b>	≤ 0.4 %
<b>Systematic measurement error (50 µL)</b>	±1.2 %
<b>Gripper carrying capacity</b>	1,200 g
<b>Operation</b>	electronic
<b>Pipetting type</b>	air-cushion
<b>SBS/ANSI deck positions</b>	15

<sup>1)</sup> in pipetting mode, free jet, without pre-wetting, with distilled water, at 20 °C<sup>2)</sup> See Eppendorf Application Note 168 for typical pipetting performance

✂ Ordering information for other voltage options begins on page 484

## epMotion® 5075v



### Description

The epMotion 5075v is all about productivity. With its integrated vacuum station the epMotion 5075v allows true walk-away automation of purification protocols that rely on vacuum filtration.

### Applications

- > Like 5075I with vacuum purification technologies
- > Solid phase extraction
- > Filtration
- > DNA from blood, tissue and cells
- > DNA from plants and bacteria
- > Sequencing and PCR clean-up
- > Total RNA isolation

### Product features

- > Same as 5075I
- > 12 SBS/ANSI deck positions
- > Integrated vacuum pump – silent operation, no tubing, wiring, and reservoirs to maintain
- > Vacuum station fully integrated that automatically adapts to filter plates controlled by software
- > Gripper for plate & labware transport
- > 3 thermal module options (2 in case of 5075vt)
- > Also available as 5075vt version with integrated Eppendorf ThermoMixer®

### Special features for epMotion 5075vt

- > Integrated Thermomixer with <sup>2D</sup>Mix-Control technology
- > Temperature control range RT –15 °C to 95 °C
- > Automatic securing of labware for mixing up to 2,000 rpm

**i** For more information go to [www.eppendorf.com](http://www.eppendorf.com)



Technical specifications		
Model	epMotion® 5075v	epMotion® 5075vt
Volume range	1 µL – 1 mL	1 µL – 1 mL
Power supply	100 – 240 V ±10 %, 50 – 60 Hz ± 5 %	100 – 240 V ±10 %, 50 – 60 Hz ± 5 %
Max. power consumption	700 W	700 W
Dimensions (W × D × H)	107 × 61 × 67 cm / 43 × 24 × 27 in	107 × 61 × 67 cm / 43 × 24 × 27 in
Weight w/o accessories	86 kg / 189.6 lb	90 kg / 198.4 lb
<b>Conductor – X, Y, Z Positioning</b>		
Random measurement error	±0.1 mm	±0.1 mm
Systematic measurement error	±0.3 mm	±0.3 mm
<b>Detector</b>		
Optical confocal infrared detector	Contact-free recognition of fill level of inserted tools, labware, tip types and quantities	Contact-free recognition of fill level of inserted tools, labware, tip types and quantities
<b>Dispensing tool<sup>1)2)</sup></b>		
Random measurement error (1 µL)	≤ 5 %	≤ 5 %
Systematic measurement error (1 µL)	±15 %	±15 %
Random measurement error (1,000 µL)	≤ 0.15 %	≤ 0.15 %
Systematic measurement error (1,000 µL)	±0.7 %	±0.7 %
Random measurement error (50 µL)	≤ 0.4 %	≤ 0.4 %
Systematic measurement error (50 µL)	±1.2 %	±1.2 %
Gripper carrying capacity	1,200 g	1,200 g
Operation	electronic	electronic
Pipetting type	air-cushion	air-cushion
SBS/ANSI deck positions	12	12
<b>Vacuum unit</b>		
Vacuum max. output	35 NL/min	35 NL/min
Suction range	0.1-85 kPa	0.1-85 kPa
Suction time	1 sec to 36 min	1 sec to 36 min

<sup>1)</sup> in pipetting mode, free jet, without pre-wetting, with distilled water, at 20 °C<sup>2)</sup> See Eppendorf Application Note 168 for typical pipetting performance

## epMotion® 5075t



### Description

The epMotion 5075t includes an integrated Thermomixer module to mix, heat or cool samples and reagents. The module can be loaded and unloaded with the gripper and pipetting to the mixer is possible before and after mixing steps. The Thermomixer module is fully software controlled enabling pipetting onto other worktable positions while the mixer is in operation.

### Applications

- > Like 5075i, plus
- > Bead applications with mixing and tempering
- > Sequencing and PCR clean-up
- > Nucleic acid purification
- > Cell disruption
- > Immunoassays

### Product features

- > Same as 5075i, plus
- > Integrated Eppendorf Thermomixer® with 2<sup>0</sup>Mix-Control technology
- > Temperature control range 15 °C below RT to 95 °C
- > Automatic fixing of labware for mixing up to 2000 rpm
- > Pipetting at standard positions during shaking
- > 14.5 deck positions, 14 SBS/ANSI plus small position for special reagent reservoir rack (3 reservoirs)
- > 2 thermal module options

**i** For more information go to [www.eppendorf.com](http://www.eppendorf.com)



The unique <sup>20</sup>Mix-Control technology mixes liquids in a very controlled, circular movement. The lack of chaotic splashing enables mixing without lid wetting or cross contamination.

Technical specifications	
<b>Model</b>	epMotion® 5075t
<b>Volume range</b>	1 µL – 1 mL
<b>Power supply</b>	100 – 240 V ±10 %, 50 – 60 Hz ± 5 %
<b>Max. power consumption</b>	700 W
<b>Dimensions (W × D × H)</b>	107 × 61 × 67 cm / 43 × 24 × 27 in
<b>Weight w/o accessories</b>	87 kg / 191.8 lb
<b>Conductor – X, Y, Z Positioning</b>	
<b>Random measurement error</b>	±0.1 mm
<b>Systematic measurement error</b>	±0.3 mm
<b>Detector</b>	
<b>Optical confocal infrared detector</b>	Contact-free recognition of fill level of inserted tools, labware, tip types and quantities
<b>Dispensing tool<sup>1)2)</sup></b>	
<b>Random measurement error (1 µL)</b>	≤ 5 %
<b>Systematic measurement error (1 µL)</b>	±15 %
<b>Random measurement error (1,000 µL)</b>	≤ 0.15 %
<b>Systematic measurement error (1,000 µL)</b>	±0.7 %
<b>Random measurement error (50 µL)</b>	≤ 0.4 %
<b>Systematic measurement error (50 µL)</b>	±1.2 %
<b>Gripper carrying capacity</b>	1,200 g
<b>Operation</b>	electronic
<b>Pipetting type</b>	air-cushion
<b>SBS/ANSI deck positions</b>	14

<sup>1)</sup> in pipetting mode, free jet, without pre-wetting, with distilled water, at 20 °C<sup>2)</sup> See Eppendorf Application Note 168 for typical pipetting performance

✂ Ordering information for other voltage options begins on page 484

## epMotion® 5075m



### Description

The epMotion 5075m is the most flexible member of the epMotion family of automated pipetting systems. With the large number of deck positions and the mixing, temperature control and magnetic bead separation abilities its ideally suited for various applications in the lab.

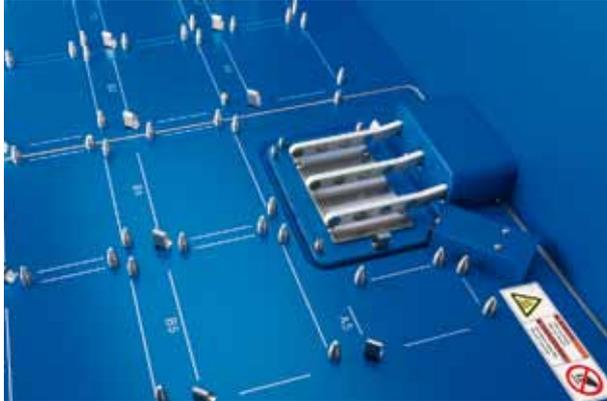
### Applications

- > Like 5075I, plus
- > Bead applications with mixing and tempering
- > Sequencing and PCR clean-up
- > Nucleic acid purification
- > Cell disruption
- > Immunoassays

### Product features

- > Same as 5075I, plus
- > Combination of magnetic finger module and Thermomixer
- > Dedicated MagSep reagent kits for nucleic acid purification form 1–24 samples
- > 3 x Prep assistants for user guided automation of nucleic acid purification with MagSep kits
- > 4 x PCR assistants to streamline PCR set-up workflow

**i** For more information go to [www.eppendorf.com](http://www.eppendorf.com)



Technical specifications	
<b>Model</b>	epMotion® 5075m
<b>Volume range</b>	1 µL – 1 mL
<b>Power supply</b>	100 – 240 V ±10 %, 50 – 60 Hz ± 5 %
<b>Max. power consumption</b>	700 W
<b>Dimensions (W x D x H)</b>	107 x 61 x 67 cm / 43 x 24 x 27 in
<b>Weight w/o accessories</b>	88 kg / 194 lb
<b>Conductor – X, Y, Z Positioning</b>	
<b>Random measurement error</b>	±0.1 mm
<b>Systematic measurement error</b>	±0.3 mm
<b>Detector</b>	
<b>Optical confocal infrared detector</b>	Contact-free recognition of fill level of inserted tools, labware, tip types and quantities
<b>Dispensing tool<sup>1)2)</sup></b>	
<b>Random measurement error (1 µL)</b>	≤ 5 %
<b>Systematic measurement error (1 µL)</b>	±15 %
<b>Random measurement error (1,000 µL)</b>	≤ 0.15 %
<b>Systematic measurement error (1,000 µL)</b>	±0.7 %
<b>Random measurement error (50 µL)</b>	≤ 0.4 %
<b>Systematic measurement error (50 µL)</b>	±1.2 %
<b>Gripper carrying capacity</b>	1200 g
<b>Operation</b>	electronic
<b>Pipetting type</b>	air-cushion
<b>SBS/ANSI deck positions</b>	14

<sup>1)</sup> in pipetting mode, free jet, without pre-wetting, with distilled water, at 20 °C<sup>2)</sup> See Eppendorf Application Note 168 for typical pipetting performance

✂ Ordering information for other voltage options begins on page 484

# epT.I.P.S.<sup>®</sup> Motion



## Applications

- > Available in multiple purity grades
- > Easily exchangeable, no additional labware files required
- > Also available as reload system
- > Also available as epT.I.P.S. Motion SafeRacks recommended for re-use tips feature

## Description

Automated pipetting processes place high demands on the design and material of pipette tips used. Eppendorf has specially designed the epT.I.P.S. for use on the epMotion<sup>®</sup> 5070 & 5075 Liquid Handling Workstation. epT.I.P.S. Motion pipette tips, with and without filters, developed in torsion-resistant, contamination-free racks.

## Product features

- > Color-coded trays for direct volume identification
- > Double O-ring on dispensing tools assures an optimal fit each time
- > Optical sensor automatically identified tip type

## Ordering information

Description	Order no.	Price
<b>epT.I.P.S.<sup>®</sup> Motion</b>		
sterile, 50 µL, 960 tips (10 racks x 96 tips)	0030 015.207	80.30 £
sterile, 300 µL, 960 tips (10 racks x 96 tips)	0030 015.223	80.30 £
sterile, 1,000 µL, 960 tips (10 racks x 96 tips)	0030 015.240	80.30 £
Eppendorf Quality™, 50 µL, 960 tips (10 racks x 96 tips)	0030 014.405	70.80 £
Eppendorf Quality™, 300 µL, 960 tips (10 racks x 96 tips)	0030 014.448	70.80 £
Eppendorf Quality™, 1,000 µL, 960 tips (10 racks x 96 tips)	0030 014.480	70.80 £
<b>epT.I.P.S.<sup>®</sup> Motion Filtertips, with filter</b>		
PCR clean and sterile, 50 µL, 960 tips (10 racks x 96 tips)	0030 015.215	155.00 £
PCR clean and sterile, 300 µL, 960 tips (10 racks x 96 tips)	0030 015.231	155.00 £
PCR clean and sterile, 1,000 µL, 960 tips (10 racks x 96 tips)	0030 015.258	155.00 £
PCR clean, 50 µL, 960 tips (10 racks x 96 tips)	0030 014.413	137.00 £
PCR clean, 300 µL, 960 tips (10 racks x 96 tips)	0030 014.456	137.00 £
PCR clean, 1,000 µL, 960 tips (10 racks x 96 tips)	0030 014.499	137.00 £
<b>epT.I.P.S.<sup>®</sup> Motion SafeRack, with filter</b>		
PCR clean, 1,000 µL, 960 tips (10 racks x 96 tips)	0030 014.650	144.00 £
PCR clean, 300 µL, 960 tips (10 racks x 96 tips)	0030 014.634	144.00 £
PCR clean, 50 µL, 960 tips (10 racks x 96 tips)	0030 014.618	144.00 £
<b>epT.I.P.S.<sup>®</sup> Motion SafeRack</b>		
Eppendorf Quality™, 1,000 µL, 960 tips (10 racks x 96 tips)	0030 014.642	82.70 £
Eppendorf Quality™, 300 µL, 960 tips (10 racks x 96 tips)	0030 014.626	82.70 £
Eppendorf Quality™, 50 µL, 960 tips (10 racks x 96 tips)	0030 014.600	82.70 £

## epT.I.P.S.<sup>®</sup> Motion as Reload System



### Description

epT.I.P.S. Motion can be used with epMotion 96 or integrated into your workstation as a reload system when combined with the tip holder. The high-quality reload tips are delivered in a PET thermoformed tray with sealed lid. Upgrading to the autoclavable, aluminum tip holder, which replaces the disposable box, provides waste reduction of up to 40 percent.

### Product features

- > Delivered in a PET blister packaging with a sealed cap to assure quality
- > Color coded trays for easy volume identification
- > Reload system with autoclavable aluminium tip holder reduces plastic waste of tip boxes by up to 40%
- > Available with standard and filter/PCR clean tips

### Applications

- > Easy conversion with TipHolder Adapter
- > TipHolder Adapter is autoclavable

### Ordering information

Description	Order no.	Price
<b>epT.I.P.S.<sup>®</sup> Motion as Reload System</b>		
Eppendorf Quality™, 50 µL, 2304 tips (24 trays x 96 tips)	0030 014.421	153.00 £
Eppendorf Quality™, 300 µL, 2304 tips (24 trays x 96 tips)	0030 014.464	153.00 £
Eppendorf Quality™, 1,000 µL, 2304 tips (24 trays x 96 tips)	0030 014.502	153.00 £
<b>epT.I.P.S.<sup>®</sup> Motion as Reload System, with filter</b>		
PCR clean, 50 µL, 2304 tips (24 trays x 96 tips)	0030 014.430	294.00 £
PCR clean, 300 µL, 2304 tips (24 trays x 96 tips)	0030 014.472	294.00 £
PCR clean, 1,000 µL, 2304 tips (24 trays x 96 tips)	0030 014.510	294.00 £
PCR clean and sterile, 300 µL, 2304 tips (24 trays x 96 tips)	0030 014.537	330.00 £
PCR clean and sterile, 50 µL, 2304 tips (24 trays x 96 tips)	0030 014.529	330.00 £
<b>TipHolder</b> , for epT.I.P.S. <sup>®</sup> Motion Reloads	5075 751.399	293.00 £

i For more information go to [www.eppendorf.com](http://www.eppendorf.com)

# epMotion® Systems

## Ordering information

Description	Order no.	Price
<b>epMotion® 96</b> , semi-automated electronic pipette for parallel 96 channel microplate processing, 100 – 240 V ±10 %/50 – 60 Hz ± 5 %, 0.5 – 300 µL	5069 000.020	POA
<b>epMotion® 5070</b> , basic device incl. epBlue™ software, mouse, waste box, 100 – 240 V ±10 %/50 – 60 Hz ± 5 %, 1 µL – 1 mL	5070 000.280	POA
<b>epMotion® 5070f</b> , basic device for use inside a cell culture bench or fume hood, incl. epBlue™ software, mouse, waste box, 100 – 240 V ±10 %/50 – 60 Hz ± 5 %, 1 µL – 1 mL	5070 000.281	POA
<b>epMotion® M5073</b> , for automated nucleic acid preparation from 1 – 24 samples with Eppendorf MagSep kits, 100 – 240 V ±10 %/50 – 60 Hz ± 5 %, 1 µL – 1 mL	5073 000.221	POA
<b>epMotion® M5073c</b> , for automated nucleic acid preparation from 1 – 24 samples with Eppendorf MagSep kits, 100 – 240 V/50 – 60 Hz, with CleanCap, control tablet, epBlue™ software with Prep Assistant, TS 50, TS 1000, PrepRack, ReagentRack, Rack24	5073 000.400	POA
<b>epMotion® P5073</b> , for automatic preparation of PCR reactions, 100 – 240 V ±10 %/50 – 60 Hz ± 5 %, 1 µL – 1 mL	5073 000.227	POA
<b>epMotion® P5073c</b> , for automatic preparation of PCR reactions, 100 – 240 V/50 – 60 Hz, with CleanCap, control tablet, epBlue™ software with PCR Assistant, TS 50, TS 300, thermoblock, Rack24 accessories	5073 000.302	POA
<b>epMotion® 5075l</b> , basic device incl. epBlue™ software, mouse, waste box, 100 – 240 V ±10 %/50 – 60 Hz ± 5 %, 1 µL – 1 mL	5075 000.301	POA
<b>epMotion® 5075v</b> , basic device incl. vacuum system, gripper, vac frame 2, vac frame holder, epBlue™ software, mouse, waste box, 100 – 240 V ±10 %/50 – 60 Hz ± 5 %, 1 µL – 1 mL	5075 000.303	POA
<b>epMotion® 5075t</b> , basic device incl. Eppendorf ThermoMixer®, epBlue™ software, mouse, waste box, 100 – 240 V ±10 %/50 – 60 Hz ± 5 %, 1 µL – 1 mL	5075 000.302	POA
<b>epMotion® 5075vt</b> , basic device incl. vacuum system, gripper, vac frame 2, vac frame holder, Eppendorf ThermoMixer®, epBlue™ software, mouse, waste box, 100 – 240 V ±10 %/50 – 60 Hz ± 5 %, 1 µL – 1 mL	5075 000.304	POA
<b>epMotion® 5075m</b> , basic device incl. MagSep module, Eppendorf ThermoMixer, epBlue™ software, mouse, waste box, 100 – 240 V ±10 %/50 – 60 Hz ± 5 %, 1 µL – 1 mL	5075 000.305	POA

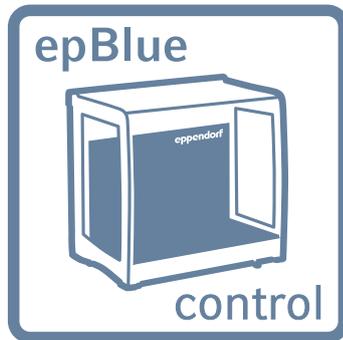
✎ Ordering information for other voltage options begins on page 484

### Configuration options to be ordered with basic epMotion® devices

Configuration option description	Ordering no.	5070	5070f	M5073	P5073c	M5073	M5073c	5075l	5075f	5075v	5075vt	5075m
Eppendorf EasyCon1™ tablet	5073 000.108	✓	✓	incl.	incl.	incl.	incl.	=	=	=	=	=
Eppendorf MultiCon1™ PC controller incl. keyboard	5075 001.101	=	=	=	=	=	=	✓	✓	✓	✓	✓
Completely contained housing	5075 751.623	incl.	incl.	incl.	=	incl.	=	✓	✓	✓	✓	✓
CleanCap 8 completely contained housing	5075 751.607	=	=	=	incl.	incl.	incl.	opt.	opt.	opt.	opt.	opt.
Thermal module on position C1	5075 002.604	=	=	opt.	opt.	=	=	opt.	opt.	opt.	opt.	opt.
Thermal module on position C2	5075 002.612	=	=	=	=	=	=	opt.	opt.	opt.	opt.	opt.
Thermal module on position C3	5075 002.620	=	=	=	=	=	=	opt.	=	opt.	=	=
epBlue ID1™, barcode & tracking software incl. manual barcode scanner	5075 002.701	=	=	=	=	=	=	opt.	opt.	opt.	opt.	opt.
epBlue GxP™, software for regulatory compliance	5075 002.728	=	=	=	=	=	=	opt.	opt.	opt.	opt.	opt.
PCR assistant software	5075 002.515	opt.	opt.	incl.	incl.	opt.	opt.	opt.	opt.	opt.	opt.	incl.
Prep assistant software	5075 002.523	=	=	=	=	incl.	incl.	=	=	=	=	incl.
LH assistant software	5075 002.507	incl.	opt.	=	=	=	=	incl.	opt.	opt.	opt.	opt.

Legend: ✓ = Please add this option for working configuration  
 incl. = Already included in this basic epMotion® device  
 = = Selection of this option is not possible for this basic epMotion® device  
 opt. = Add this option to increase functionality of this basic epMotion® device

# Software



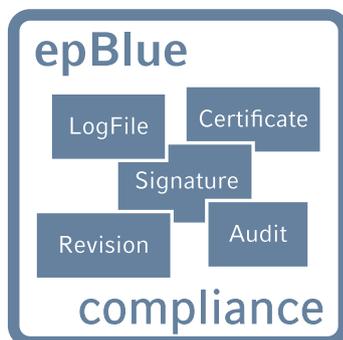
## epBlue™ epMotion® PC software

- > Graphical user interface
- > Main menu with direct access to the most important functions
- > 3D view of workstation and run simulation
- > User administration with password protection
- > Importing of files for normalization and cherry picking
- > Printing and archiving protocols
- > Pre-installed on all epMotion systems
- > Create, edit and simulate application on any Windows 7 or 8 PC with epMotion Editor 40 software product



## epBlue™ ID software

- > Visual tracking of the scan procedure
- > Automatic checking of the worktable
- > Scanning of individual reaction vessels and microplates
- > Documentation of reagent type and batch
- > CSV or XML-based results file
- > Compatible with LIMS-generated work lists
- > Data exchange with 2D barcode readers
- > Easy to operate



## epBlue™ GxP software

- > Complete electronic documentation
- > Access control and user level management
- > Audit trail and log file
- > Revision management
- > Electronic signatures
- > Electronic certificates according to industry-standard algorithm
- > Exporting and archiving of digitally signed documents
- > Database system
- > Supplied certificates and ISO 8655 compliance
- > Expansion via epBlue ID (optional)

## epMotion® Accessories



### Dispensing tools

- > 6 dispensing tools from 1  $\mu$ L to 1000  $\mu$ L are available
- > 3 single channel and 3 multi channel
- > Autoclavable and calibrated according ISO 8655



### Reservoir Rack

- > For holding up to 7 reservoir rack modules or reagent reservoirs
- > Temperature controlled when used with a thermal module



### Reservoir Rack Module TC

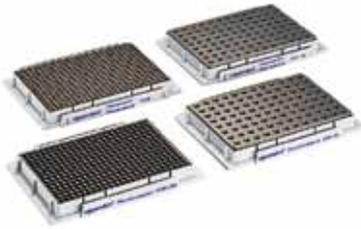
- > Modules for the reservoir rack
- > 8 modules are available for tube volumes from 0,2 mL to 50 mL
- > Temperature controlled when used with a thermal module



### Rack for single test tubes

- > For micro test tubes, glass, or plastic tubes of various sizes

i For more information go to [www.eppendorf.com](http://www.eppendorf.com)



### Thermoracks and adapter

- > For use with 96-well or 384-well plates and single 0.2 mL tubes
- > Temperature controlled when used with a thermal module



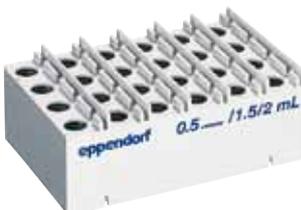
### Thermoadapter DWP 96

- > For heating and cooling of deepwell plates
- > Plates can be exchanged by gripper
- > Temperature controlled when used with a thermal module



### Thermoadapter LC Sample

- > Special adapter for handling of MagNA pure LC sample cartridge
- > Temperature controlled when used with a thermal module



### Thermorack for 24 tubes

- > Use with 1.5 mL or 2.0 mL Eppendorf Safe-Lock tubes
- > Adapters for 0.5 mL tubes includes
- > Available also for Cryotube®
- > Temperature controlled when used with a thermal module

## MagSep Reagent Kits



### Description

MagSep reagent kits are used with the *epMotion*® M5073 and 5075m to automatically purify nucleic acids from biological samples. Magnetic beads, Proteinase K and all other reagents are pre-prepared in special trays for the *epMotion* for 4 sets of 24 purifications. MagSep reagents deliver highly purified nucleic acids with very high yields. The special Prep Assistant software, combined with the *epMotion* M5073 or 5075m, offers simple, step-by-step guided operation through automatic nucleic acid purification for everyday use.

### Product features

- > Higher yields compared to manual purifications
- > High nucleic acid purity, suitable for PCR or other enzymatic reactions
- > Automatic recognition of kit type and remaining sample quantity
- > Variable use for 1 to 24 samples per tray (interim storage at 4 °C)
- > Minimal preparation time due to special trays
- > Elution in DNA LoBind vessels (supplied)
- > Storage at room temperature

### Applications

- > Genomic DNA from tissue and cell culture or bacteria - MagSep Tissue gDNA kit
- > Genomic DNA from 200 µL whole blood - MagSep Blood gDNA kit
- > Viral nucleic acids from serum, plasma or other cell-free body fluids - MagSep viral DNA/RNA kit

# Consumables

Ordering information		
Description	Order no.	Price
<b>epT.I.P.S.® Motion</b>		
sterile, 50 µL, 960 tips (10 racks x 96 tips)	0030 015.207	80.30 £
sterile, 300 µL, 960 tips (10 racks x 96 tips)	0030 015.223	80.30 £
sterile, 1,000 µL, 960 tips (10 racks x 96 tips)	0030 015.240	80.30 £
Eppendorf Quality™, 50 µL, 960 tips (10 racks x 96 tips)	0030 014.405	70.80 £
Eppendorf Quality™, 300 µL, 960 tips (10 racks x 96 tips)	0030 014.448	70.80 £
Eppendorf Quality™, 1,000 µL, 960 tips (10 racks x 96 tips)	0030 014.480	70.80 £
<b>epT.I.P.S.® Motion Filtertips, with filter</b>		
PCR clean and sterile, 50 µL, 960 tips (10 racks x 96 tips)	0030 015.215	155.00 £
PCR clean and sterile, 300 µL, 960 tips (10 racks x 96 tips)	0030 015.231	155.00 £
PCR clean and sterile, 1,000 µL, 960 tips (10 racks x 96 tips)	0030 015.258	155.00 £
PCR clean, 50 µL, 960 tips (10 racks x 96 tips)	0030 014.413	137.00 £
PCR clean, 300 µL, 960 tips (10 racks x 96 tips)	0030 014.456	137.00 £
PCR clean, 1,000 µL, 960 tips (10 racks x 96 tips)	0030 014.499	137.00 £
<b>epT.I.P.S.® Motion as Reload System</b>		
Eppendorf Quality™, 50 µL, 2304 tips (24 trays x 96 tips)	0030 014.421	153.00 £
Eppendorf Quality™, 300 µL, 2304 tips (24 trays x 96 tips)	0030 014.464	153.00 £
Eppendorf Quality™, 1,000 µL, 2304 tips (24 trays x 96 tips)	0030 014.502	153.00 £
<b>epT.I.P.S.® Motion as Reload System, with filter</b>		
PCR clean, 50 µL, 2304 tips (24 trays x 96 tips)	0030 014.430	294.00 £
PCR clean, 300 µL, 2304 tips (24 trays x 96 tips)	0030 014.472	294.00 £
PCR clean, 1,000 µL, 2304 tips (24 trays x 96 tips)	0030 014.510	294.00 £
PCR clean and sterile, 300 µL, 2304 tips (24 trays x 96 tips)	0030 014.537	330.00 £
PCR clean and sterile, 50 µL, 2304 tips (24 trays x 96 tips)	0030 014.529	330.00 £
<b>TipHolder</b> , for epT.I.P.S.® Motion Reloads	5075 751.399	293.00 £
<b>Reservoir 30 mL</b> , large-volume container for reagent presentation on the epMotion®, can only be inserted with the Reservoir Rack; production batch testing, certified		
30 mL, 10 x 5 reservoirs in the bag, PCR clean, polypropylene	0030 126.505	116.00 £
<b>Reservoir 100 mL</b> , large-volume container for reagent presentation on the epMotion®, can only be inserted with the Reservoir Rack; production batch testing, certified		
100 mL, 10 x 5 reservoirs in the bag, PCR clean, polypropylene	0030 126.513	116.00 £
<b>Reservoir 400 mL</b> , large-volume container in SBS format for reagent presentation on the epMotion®; production batch testing, certified		
400 mL, 10 reservoirs, autoclavable, polypropylene	5075 751.364	155.00 £
<b>MagSep Tissue gDNA Kit</b> , reagent kit for genomic DNA purification of 4 x 24 samples from cells & tissues	0030 450.000	394.00 £
<b>MagSep Blood gDNA Kit</b> , reagent kit for genomic DNA purification of 4 x 24 samples from blood	0030 451.007	316.00 £
<b>MagSep Viral DNA/RNA Kit</b> , reagent kit for viral DNA/RNA purification of 4 x 24 samples	0030 452.003	359.00 £
<b>epT.I.P.S.® Motion SafeRack, with filter</b>		
PCR clean, 50 µL, 960 tips (10 racks x 96 tips)	0030 014.618	144.00 £
PCR clean, 300 µL, 960 tips (10 racks x 96 tips)	0030 014.634	144.00 £
PCR clean, 1,000 µL, 960 tips (10 racks x 96 tips)	0030 014.650	144.00 £
<b>epT.I.P.S.® Motion SafeRack</b>		
Eppendorf Quality™, 50 µL, 960 tips (10 racks x 96 tips)	0030 014.600	82.70 £
Eppendorf Quality™, 300 µL, 960 tips (10 racks x 96 tips)	0030 014.626	82.70 £
Eppendorf Quality™, 1,000 µL, 960 tips (10 racks x 96 tips)	0030 014.642	82.70 £

# epMotion® Accessories

## Ordering information

Description	Order no.	Price
<b>Rack Smart</b> , for holding one tube rack of SmartCycler reaction tubes	5075 790.009	186.00 £
<b>Rack LC 20 µL/100 µL</b> , for up to 96 x 20 µL or 100 µL LightCycler® capillaries for use with Centrifuge 5804/5804 R or 5810/5810 R and other devices, set of 2	5075 795.000	POA
<b>Thermorack CB</b> , for up to 384 x 0.1 mL strip tubes in the Corbett Research Rotor-Gene™ 3000	5075 767.031	790.00 £
<b>Thermoadapter for PCR</b> , for temperature control of PCR plates		
96 wells, skirted	5075 787.008	478.00 £
384 wells, skirted	5075 788.004	524.00 £
<b>Thermoadapter Frosty</b> , combination of height adapter and PCR-Cooler, for cooling skirted PCR plates	5075 789.000	435.00 £
<b>CycleLock Starter Set</b> , 1 frame and 8 mats for automated sealing of Eppendorf PCR plates, can only be used with Mastercycler ep, PCR clean	0030 126.530	189.00 £
<b>CycleLock mats</b> , 5 sealing mats, frame not included, PCR clean	0030 126.548	48.80 £
<b>Adapter sleeves</b> , to retrofit the 1.5/2.0 mL thermoracks for use with 0.5 mL vessels		
1 set of 25 pieces	5075 772.000	182.00 £
<b>Height adapter</b> , for leveling labware, enables faster plate processing		
85 mm	5075 751.003	284.00 £
55 mm	5075 752.000	284.00 £
40 mm, for pipette tips	5075 755.009	284.00 £
<b>Thermoblock DWP 2000</b> , for 2 mL Eppendorf Deepwell Plates 96/2000	5075 751.330	367.00 £
<b>Thermoadapter DWP 96</b> , for Deepwell Plates 96/1000	5075 751.054	POA
<b>Thermoadapter LC Sample</b> , for MagNA Pure LC sample cartridge	5075 751.305	472.00 £
<b>Rack for single test tubes</b> , for presenting Eppendorf reaction vessels, glass or plastic tubes, not temperable		
Ø 17 mm x 100 mm max. length	5075 761.009	204.00 £
Ø 17 mm x 60 mm max. length	5075 775.000	204.00 £
Ø 16 mm x 100 mm max. length	5075 760.002	204.00 £
Ø 16 mm x 60 mm max. length	5075 776.006	204.00 £
Ø 15 mm x 100 mm max. length	5075 792.028	204.00 £
Ø 15 mm x 60 mm max. length	5075 792.044	204.00 £
Ø 14 mm x 100 mm max. length	5075 792.001	204.00 £
Ø 14 mm x 60 mm max. length	5075 792.060	204.00 £
Ø 13 mm x 100 mm max. length	5075 762.005	204.00 £
Ø 13 mm x 60 mm max. length	5075 792.087	204.00 £
Ø 12 mm x 100 mm max. length	5075 763.001	204.00 £
Ø 12 mm x 60 mm max. length	5075 792.109	204.00 £
<b>Rack</b> , for 24 HPLC tubes, Ø 12 mm x 40 mm max. length	5075 792.125	204.00 £
<b>Rack</b> , racks for 96 screw cap tubes, 1.5/2.0 mL	5075 791.005	518.00 £
<b>Reservoir rack</b> , for presenting 30 mL and 100 mL reagent reservoirs. Up to 7 reservoirs or Reservoir Rack modules can be presented.	5075 754.002	111.00 £
<b>Extension plate 5075I to TMX and VAC</b> , to be ordered with 5075 000.620 and 5075 000.630 (for units SN>4000)	5075 000.640	774.00 £
<b>Modification kit TMX for 5075I</b> , to modify a 5075I with ThermoMixer to a 5075t (for units SN>4000)	5075 000.630	POA
<b>Modification kit VAC for 5075I</b> , to modify a 5075I to a 5075v version (for units SN>4000)	5075 000.620	POA
<b>LH to MC modification kit</b> , for converting an LH version to a MC version	5075 000.601	POA
<b>VAC</b> , for retrofitting a 5075 LH or 5075I version into a VAC version	5075 000.610	POA

i For more information go to [www.eppendorf.com](http://www.eppendorf.com)

## Ordering information

Description	Order no.	Price
<b>TMX</b> , for retrofitting a 5075 LH version into a 5075 TMX version	5075 000.628	POA
<b>Software and hardware modification kit 1</b> , PC version modification kit for epMotion 5075 with serial numbers < 1,000, preparation for modification kit 2	5075 851.440	POA
<b>Software and hardware modification kit 2</b> , PC version modification kit for epMotion 5070 and 5075 with serial numbers 1,000-3,000 (integrated PC)	5075 851.520	POA
<b>epBlue ID™ software and hardware modification kit</b> , for 5070 and 5075 PC versions, barcode support includes software, barcode reader and stand, compatible with all epMotion PC versions except epMotion 5075 MC PC version, not compatible with the epMotion operator panel versions	5075 000.830	POA
<b>TMX expansion board VAC</b> , order with 5075 000.628	5075 000.636	POA
<b>Thermal module</b> , thermal module for heating or cooling thermo adaptors, thermoblock and thermoracks	5075 757.001	POA
<b>TS 50 single-channel dispensing tool</b> , 1-50 µL volume range	5280 000.010	POA
<b>TS 300 single-channel dispensing tool</b> , 20-300 µL volume range	5280 000.037	POA
<b>TS 1000 single-channel dispensing tool</b> , 40-1000 µL volume range	5280 000.053	POA
<b>TM 50-8 eight-channel dispensing tool</b> , 1-50 µL volume range	5280 000.215	POA
<b>TM 300-8 eight-channel dispensing tool</b> , 20-300 µL volume range	5280 000.231	POA
<b>TM 1000-8 eight-channel dispensing tool</b> , 40-1000 µL volume range	5280 000.258	POA
<b>Holder for 6 dispensing tools</b>	5075 774.003	204.00 £
<b>Gripper</b> , incl. holder, for transporting plates on the worktable and automatic operation of the vacuum manifold	5282 000.018	POA
<b>Work surface adapter</b> , for raising the epMotion worktable by 5.5 cm, 4 feet	5070 752.001	223.00 £
<b>Thermoblock for PCR</b> , for presentation of 96 vessels 0.2 mL, 77 PCR tubes 0.5 mL or one PCR plate 96	5075 766.000	478.00 £
<b>Thermoblock for PCR</b> , for one PCR plate 384	5075 767.007	524.00 £
<b>Thermorack for 24 tubes</b> , for 24 Safe-Lock tubes, temperable, 0.5 mL	5075 769.000	613.00 £
<b>Thermorack for 24 tubes</b> , for 24 Safe-Lock tubes, temperable, 1.5/2.0 mL	5075 771.004	613.00 £
<b>Thermorack TMX</b> , for 24 Safe-Lock micro test tubes, 0.5 mL	5075 751.160	619.00 £
<b>Thermorack TMX</b> , for 24 Safe-Lock micro test tubes, 1.5/2.0 mL	5075 751.186	619.00 £
<b>Thermorack</b> , for 24 Cryo tubes	5075 777.055	615.00 £
<b>Holder for Vac Frame</b>	5075 778.009	284.00 £
<b>Vacuum lid</b>	5075 779.005	198.00 £
<b>Mat for vacuum lid</b>	5075 793.008	133.00 £
<b>Vac Frame 1</b>	5075 784.009	596.00 £
<b>Vac Frame 2</b>	5075 785.005	596.00 £
<b>Elution plate adapter</b> , for processing micro tubes in racks	5075 785.030	69.20 £
<b>Anticontamination plate adapter</b> , for vacuum processes with foaming solutions in multiwell plates	5075 794.004	32.00 £
<b>Vac Thermo lid</b>	5075 796.007	POA
<b>MultiMediaCard</b> , for archiving parameters and transporting data between the control panel and PC, not for Eppendorf EasyCon™ control panel	5075 780.003	82.70 £
<b>Waste container with lid</b> , for holding used pipette tips	5075 753.006	86.00 £
<b>Panel plate</b> , for control panel rest, mounted at front left side of epMotion® unit	5075 798.000	79.80 £
<b>Monitor</b> , 22" TFT widescreen monitor for use with epMotion® versions with integrated PC	5075 001.276	POA
<b>Elution plate adapter</b> , type for VAC station	5075 785.064	68.20 £
<b>Holder for gripper</b>	5075 759.004	332.00 £

## epMotion® Accessories

### Ordering information

Description	Order no.	Price
<b>PrepRack for 24 Eppendorf Safe-Lock Tubes 2 mL</b> , for nucleic acid preparation with Eppendorf MagSep™ kits	5073 751.006	POA
<b>ReagentRack to hold the reagent tray</b> , form MagSep reagent kits	5075 751.429	93.20 £
<b>Liquid Waste Tub, incl. lid</b> , to mount in the waste box, autoclavable, working volume 115 mL	5075 751.500	76.30 £
<b>Reservoir Rack 3</b> , for max. three 30 mL or 100 mL reservoirs, only for 5075t, 5075m	5075 754.070	89.20 £
<b>Reservoir Rack Module TC</b> , for use in epMotion® Reservoir Racks, temperable		
4 x Eppendorf Tubes® 5.0 mL	5075 799.340	240.00 £
8 x PCR tubes 0.2 mL	5075 799.049	231.00 £
4 x Safe-Lock tubes 0.5/1.5/2.0 mL	5075 799.081	245.00 £
4 x reaction vessels Ø 12 mm	5075 799.103	245.00 £
4 x reaction vessels Ø 16 mm	5075 799.120	245.00 £
4 x reaction vessels Ø 17 mm	5075 799.162	245.00 £
2 x reaction vessels Ø 29 mm	5075 799.189	245.00 £
1 x reservoir 30 mL	5075 799.146	98.80 £
1 x reservoir 100 mL	5075 799.260	98.80 £

i For more information go to [www.eppendorf.com](http://www.eppendorf.com)

# Software

Ordering information		
Description	Order no.	Price
<b>epBlue™ ID barcode &amp; tracking software incl. manual barcode scanner</b> , modular expansion of epBlue™ for barcode support. Incl. manual barcode reader with stand. Compatible with epBlue™ version 40.1 and higher.	5075 002.701	POA
<b>epBlue™ GxP software modification kit</b> , for use in regulated process environments (according to GLP, GMP, 21 CFR), for pre-installed epMotion® PC versions, with epBlue™ GxP software, corresponding firmware, USB hardware key, certificates. Requires 627B version of integrated PC	5075 000.849	POA
<b>epBlue™ GxP software</b> , for use in regulated process environments (according to GLP, GMP, 21 CFR), as configuration option or for pre-installed epMotion® MultiCon versions with epBlue™ version 40.1 or higher, with epBlue™ GxP software, corresponding firmware, certificates.	5075 002.728	POA
<b>epMotion® Editor</b> , incl. editor key, software package for creating and editing applications and printing and archiving program runs on the PC	5075 014.009	POA
<b>epMotion® Editor</b> , incl. editor key, software package for creating and editing applications and printing and archiving program runs on the PC, additional license	5075 015.200	POA
<b>epMotion® Editor 40</b> , epMotion® Editor 40, software CD ROM with instructions, used to create, edit and simulate application on a PC, compatible with epBlue™ version >40.x.	5075 014.220	POA
<b>epBlue ID™ software and hardware modification kit</b> , for 5070 and 5075 PC versions, barcode support includes software, barcode reader and stand, compatible with all epMotion PC versions except epMotion 5075 MC PC version, not compatible with the epMotion operator panel versions	5075 000.830	POA

# epMotion® GxP Certification Plans

## Certification Services

National and international authorities call for the compliance of currently effective laws, guidelines and norms in regulated areas concerning the validation of computer-assisted systems. Eppendorf offers global certification services conforming to FDA 21 CFR Part 11, EU GMP Annex 11, GLP and GAMP® 5 to assure a uniform and standardized operation. We facilitate an uncomplicated validation, from implementation to the point of shut down, by supporting in the Installation and Operational Qualification (IQ/OQ) process of the instrument and software. The entire qualification will be documented in detail and the user personnel will be extensively trained and certified.



Certification Plans	BASIC	STANDARD	PREMIUM
<b>Order no.</b>	5075 005.182	5075 005.190	5075 005.204
<b>Installation and Operational Qualification (IQ/OQ):</b>			
according to Eppendorf SOPs incl. 1 single and 1 x 8-channel dispensing tool calibration (EN ISO 8655), complete documentation and certificates	■	■	■
<b>epMotion®/epBlue™ User Starter Training:</b>			
incl. training documents and certificates	■	■	■
<b>epMotion® GxP User and Administrator Lab and Administrator IT Training:</b>			
incl. training documents and certificates	■	■	■
<b>Lab Automation Seminar/Workshop:</b>			
at Eppendorf Training Center - one person. epMotion® basics incl. training documents and certificates		■	■
<b>epMotion® GxP Seminar/Workshop:</b>			
one person. Electronic signatures, audit trail, Barcode ID, archiving, administrator functions (21 CFR Part 11, GAMP 5) incl. training documents and certificates			■
<b>epMotion® Application Support:</b>			
customized one day support (e.g. support with customer method programming)			■
<b>Consultancy for Validation Process, GxP and Regulatory Details:</b>			
incl. Validation Plan, Performance Qualification and Validation Report templates one day consultancy support			■


  
for premium performance

### Service features

- > Qualification, training and consultancy by manufacturer certified personnel
- > Cost transparency and calculability
- > Availability of standardized validation documents

### Long-term benefits

- > System performance verifiably complies with the specifications
- > Good preparation for audits by fulfilling the currently effective standards
- > Reduced validation costs through standardized qualification and documentation



For more information go to [www.eppendorf.com/epServices](http://www.eppendorf.com/epServices).  
In selected countries only.

Additional Services:	Order no.
<b>epMotion® GxP Upgrade</b> Installation and User/Administrator Training, epMotion®/epBlue™ Version	5075 005.220
<b>epMotion® GxP Operational Qualification (OQ)</b> , according to Eppendorf SOP's, incl. 1 single channel and 1 x 8 channel dispensing tool calibration (EN ISO 8655)	5075 005.212
<b>epMotion® GxP – single channel dispensing tool calibration*</b> (EN ISO 8655)	5075 005.239
<b>epMotion® GxP - 8-channel dispensing tool calibration*</b> (EN ISO 8655)	5075 005.247
<b>Calibration/Temperature Adjustment TMX Module*</b> (epMotion® M 5073/5075 TMX/t/vt)	5075 005.174
<b>Calibration/Adjustment for each Thermal Module*</b> (epMotion® 5075)	5075 005.018
<b>Maintenance</b> , Cleaning, exchange of wear and tear parts	on request
<b>Re-qualification (customer-specific), after changes of system/process or environment</b>	5070 005.052
<b>Shut Down Services</b>	5075 005.255
<b>epMotion® GxP User Training</b>	5075 005.263
<b>ETC "Lab Automation Seminar/Workshop"</b> – one person	on request
<b>ETC "epMotion® GxP Seminar/Workshop"</b> – one person	on request
<b>epMotion® Application Support</b>	5075 005.271

# epMotion® Performance Plans

## Preventive Maintenance & Calibration Services

Preventive maintenance is a schedule of planned service, designed to check your system and preserve its maximum performance quality.

Preventive maintenance service for epMotion 5070, epMotion 5073 and epMotion 5075, performed by our dedicated, Eppendorf professionally trained service technicians, includes inspection, cleaning, lubricating, partial overhauls, calibration and any necessary adjustments according to system specifications. Our Performance Plans consist of one or two audits per year.

Dispensing tools are precision devices. For this reason they should be regularly maintained and calibrated, which will help ensure their continuing high performance in precision and accuracy.

Calibration of the dispensing tools can be performed according to ISO 8655 with NIST-traceable standards supporting GLP documentation.



Performance Plans	epMotion 5070/CB/f BASIC	epMotion 5070/CB/f STANDARD	epMotion 5070/CB/f PREMIUM	epMotion P5073/M5073 BASIC
<b>Order no.</b> for 1 service per year	5070 005.095	5070 005.109	-	5073 920.010
<b>Order no.</b> for 2 services per year	5070 005.001	5070 005.010	5070 005.028	5073 920.029
Cleaning and lubricating the device and components	■	■	■	■
Mechanical inspection and adjustment, if necessary (e.g. tip ejector)	■	■	■	■
Software update (upon customer request)	■	■	■	■
Replacement of all dispensing tool seals	■	■	■	■
Calibration and adjustment if applicable of: level sensor and carrier, first thermal module, vacuum chamber, TMX module	■	■	■	■
Function test according to service test methods (incl. Barcode Scanner of epBlue ID™)	■	■	■	■
Full documentation	■	■	■	■
Function test according to Operation Qualification (OQ)		■	■	
OQ Certificate		■	■	
Cost for all replaced parts included			■	
Warranty extension			12 months	
<b>Additional Service:</b>			<b>Order no.</b>	
Calibration of single-channel dispensing tool, according to EN ISO 8655			5070 005.036	
Calibration of 8-channel dispensing tool, according to EN ISO 8655			5070 005.044	
Calibration/adjustment of each Thermal Module (epMotion 5075 only)			5075 005.018	
Calibration/temperature adjustment of TMX module (epMotion M5073, 5075 TMX/t/vt)			5075 005.174	
HEPA filter exchange (epMotion 5073/epMotion 5075 with CleanCap only)			5073 920.061	
UV lamp exchange (epMotion 5073/epMotion 5075 with CleanCap only)			5073 920.070	



# epMotion® 96 Performance Plans

## Preventive Maintenance & Verification Services

The Eppendorf epMotion 96 is a semi-automated electronic pipette for fast and precise parallel 96 channel microplate processing. The reliability of the electronic parallel pipetting system movement is the prerequisite for high precision and reproducibility of the results across the whole 96 or 384 well plate. Maintaining and verifying your systems accuracy and precision on a regular basis is thus highly recommended to make sure your system still dispenses according to the specification. In the end you will receive assured results with your downstream applications and your valuable samples and reagents. Eppendorf offers a range of services for different user requirements.



Performance Plans	ESSENTIAL CHECK
<b>Order no.</b>	0082 030.003
<b>Checks &amp; Maintenance</b>	
Cleaning	
Lubrication of dispensing head	
Checking and exchanging of 96 O-rings from cones	■
Software/firmware update if applicable	
<b>Verification (Calibration)</b>	
Leak Test (50 µl + 300 µl)	■
Gravimetric Test - systematic error (50 µl + 300 µl)	■
Photometric Test - random error (2 volumes)	
<b>Documentation</b>	
Check List provided	■
Dated service sticker to confirm Eppendorf service	■
Calibration Report	
IQ Report	
OQ Report/Certificate	
<b>Supporting Information</b>	
Contract period	one year
Number of routine service visits included	one
Cost of repairs/parts replacement outside scope of preventive maintenance visit (where Eppendorf product warranty has expired)	not included
<b>Order number for combined Installation &amp; Operational Qualification (IQ/OQ) services: 0082 030.009. Additionally, if you require a Customized Service we will be very pleased to discuss your requirements.</b>	

<sup>1)</sup> Please contact your local Eppendorf Service representative for details of discounts and/or any potential additional charges applying.



**Service features**

- > Leak test
- > Exchange of O-rings
- > Gravimetric test for accuracy verification
- > Photometric test for precision verification

**Long-term benefits**

- > Confirmation of performance within manufacturer specifications
- > Confidence in results
- > GLP compliant documentation

For more information go to [www.eppendorf.com/epServices](http://www.eppendorf.com/epServices).  
In selected countries only.

ADVANCED MAINTENANCE	PREMIUM SERVICE	Installation Qualification (IQ)	Operational Qualification (OQ)
0082 030.004	0082 030.005	0082 030.007	0082 030.008
■	■		
■	■		
■	■		
■	■		
■	■	■	■
■	■	■	■
■	■		■
■	■		
■	■	■	■
■	■	■	■
		■	■
			■
			■
one year	one year	n/a	n/a
one	one	n/a	n/a
not included	discount on block exchange, labor, travel time <sup>1)</sup>	n/a	n/a

# Sample Handling



## Technology leader in sample handling for more than 60 years

Eppendorf products set standards in a wide variety of laboratory areas at an early stage – standards that still serve as yardsticks for others today. Sample handling encompasses many different work processes and steps: centrifugation, heating, freezing, mixing, amplification, and analysis of samples. Eppendorf offers the devices and consumables needed for each of these steps and allows users to feel assured that the work they perform is of the highest quality.

- > Mixers and temperature control systems **122-145**
- > Reaction tubes and plates **148-173**
- > Centrifuges and rotors **174-251**
- > Concentrators **252-255**
- > PCR thermocycler and consumables **260-283**
- > Freezers **286-319**
- > Performance Plans **256, 258, 284, 320**



Model	Eppendorf ThermoMixer® C	Eppendorf ThermoStat™ C	Eppendorf ThermoMixer® F0.5
Page(s)	126	130	138
Dimensions (W × D × H)	20.6 × 30.4 × 13.6 cm	20.6 × 30.4 × 13.6 cm	20.6 × 30.4 × 16.3 cm
Weight w/o accessories	6.3 kg	4.4 kg	6.2 kg
Max. power consumption	200 W	200 W	200 W
Heating rate	Max. 7 °C/min (when using SmartBlock plates) <sup>1)</sup>	Max. 9 °C/min (when using the SmartBlock PCR 384) <sup>1)</sup>	Max. 15 °C/min
Cooling rate	Max. 2.5 °C/min between 100 °C and RT	Max. 5.0 °C/min between 110 °C and RT <sup>1)</sup>	
Timer	15 sec – 99:30 h, continuous	15 s to 99:30 h, continuous	
Mixing and vortexing radius	1.5 mm		1.5 mm
Mixing orbit	3 mm		3 mm
Mixing frequency	300 – 3,000 rpm <sup>1)</sup>		300-2,000 rpm
Temperature settings	1 °C / 100 °C	-10 °C / 110 °C (110 °C when using the 12 mm and cryo SmartBlocks)	1 °C / 100 °C
Temperature range	Min: 15 °C (depends on SmartBlock used) below RT, max: 100 °C	Min: 30 °C <sup>1)</sup> below RT, max: 110 °C (110 °C when using the 12 mm and cryo SmartBlocks)	Min: 4 °C above RT, max: 100 °C
Temperature accuracy	Max. ±0.5 °C at 20 – 45 °C	Max. ±0.5 °C at 20-45 °C <sup>1)</sup>	Max. ±0.5 °C at 20– 45 °C
Interfaces	USB interface	USB interface	USB interface
Applications	<ul style="list-style-type: none"> <li>&gt; Plasmid/RNA/DNA purification</li> <li>&gt; cDNA synthesis</li> <li>&gt; Extraction of DNA fragments from agarose gels</li> <li>&gt; Enzymatic reactions (e.g., DNA restriction digestion, Proteinase K digestion and ligation)</li> <li>&gt; Transformation of bacteria strains and plasmids</li> <li>&gt; Denaturation of DNA, RNA and proteins</li> <li>&gt; Labeling of DNA, RNA and proteins</li> <li>&gt; Bacterial growth in microreaction vessels, conical tubes and deepwell plates</li> <li>&gt; Lysis reactions at 100 °C</li> <li>&gt; Mixing of PCR setups</li> </ul>	<ul style="list-style-type: none"> <li>&gt; Gentle thawing and cooling buffers and samples at low temperatures</li> <li>&gt; Preheating media</li> <li>&gt; Biochemical reactions at low temperatures</li> <li>&gt; Ligation</li> <li>&gt; cDNA synthesis</li> <li>&gt; Denaturation of RNA, DNA and protein</li> <li>&gt; Proteinase K digestion</li> <li>&gt; ELISA assays</li> <li>&gt; Immunoprecipitation</li> <li>&gt; Cell lysis</li> </ul>	<ul style="list-style-type: none"> <li>&gt; Growth of bacteria and yeasts</li> <li>&gt; Enzymatic reactions</li> <li>&gt; Transformation of bacteria strains and plasmids</li> <li>&gt; Denaturation of DNA, RNA and proteins</li> <li>&gt; Lysis reactions at 100 °C</li> <li>&gt; Labeling of nucleic acids and proteins</li> <li>&gt; Proteinase K digestion of cells and tissues</li> <li>&gt; Resuspension of pellets</li> <li>&gt; Mixing protein quantification assays</li> <li>&gt; ELISA assays</li> </ul>

<sup>1)</sup> depends on SmartBlock used



**Eppendorf ThermoMixer®  
F1.5**

<b>136</b>
20.6 × 30.4 × 17.0 cm
6.3 kg
200 W
Max. 11 °C/min
1.5 mm
3 mm
300-1,500 rpm
1 °C / 100 °C
Min: 4 °C above RT, max: 100 °C
Max. ±0.5 °C at 20– 45 °C
USB interface
> Growth of bacteria and yeasts
> Enzymatic reactions
> Transformation of bacteria strains and plasmids
> Denaturation of DNA, RNA and proteins
> Lysis reactions at 100 °C
> Labeling of nucleic acids and proteins
> Proteinase K digestion of cells and tissues
> Resuspension of pellets
> Mixing protein quantification assays
> ELISA assays



**Eppendorf ThermoMixer®  
F2.0**

<b>138</b>
20.6 × 30.4 × 17.0 cm
6.3 kg
200 W
Max. 13 °C/min
1.5 mm
3 mm
300-1,500 rpm
1 °C / 100 °C
Min: 4 °C above RT, max: 100 °C
Max. ±0.5 °C at 20– 45 °C
USB interface
> Growth of bacteria and yeasts
> Enzymatic reactions
> Transformation of bacteria strains and plasmids
> Denaturation of DNA, RNA and proteins
> Lysis reactions at 100 °C
> Labeling of nucleic acids and proteins
> Proteinase K digestion of cells and tissues
> Resuspension of pellets
> Mixing protein quantification assays
> ELISA assays



**Eppendorf ThermoMixer®  
FP**

<b>136</b>
20.6 × 30.4 × 16.4 cm
6.1 kg
200 W
Max. 18 °C/min
1.5 mm
3 mm
300-2,000 rpm
1 °C / 100 °C
Min: 4 °C above RT, max: 100 °C
Max. ±1 °C at 20– 45 °C
USB interface
> Growth of bacteria and yeasts
> Enzymatic reactions
> Transformation of bacteria strains and plasmids
> Denaturation of DNA, RNA and proteins
> Lysis reactions at 100 °C
> Labeling of nucleic acids and proteins
> Proteinase K digestion of cells and tissues
> Resuspension of pellets
> Mixing protein quantification assays
> ELISA assays

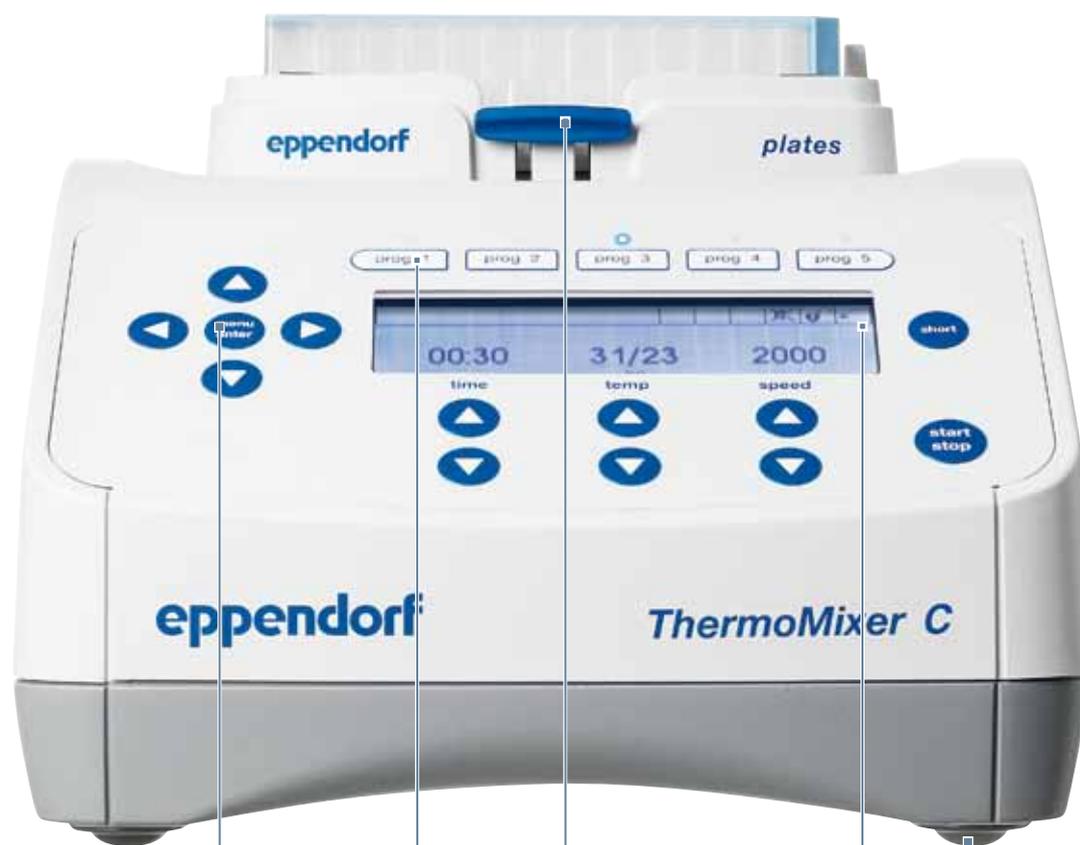


**MixMate®**

<b>140</b>
17 × 23 × 13 cm
4.2 kg
40 W
15 s – 99.3 h, continuous
1.5 mm
3 mm
300 – 3,000 rpm
N/A
> Resuspending pellets (e.g., bacteria, DNA, cell culture pellets)
> Mixing PCR setups
> Mixing viscous liquids and suspensions (incl. beads)
> Mixing restriction digestions
> Immunoassays (e.g., ELISA)
> Colorimetric assays (e.g., Bradford, Lowry, BCA)
> Reporter gene assays (e.g. β-galactosidase, luciferase)
> Vortexing numerous tube formats (e.g., 15 and 50 mL conical tubes)

**i** For more information go to [www.eppendorf.com/temperaturecontrol-mixing](http://www.eppendorf.com/temperaturecontrol-mixing)

## Eppendorf ThermoMixer® C



### Menu

- > Simple and intuitive operation
- > Save up to 20 user defined programs
- > Set heating and cooling rates, select desired time mode
- > Change device settings key lock, signal tones, contrast, service interval and menu language

### Program keys

- > Fast and simple access to the most frequently used mixing/temperature parameters
- > Freely programmable

### Eppendorf QuickRelease

- > Ergonomic and simple exchange of SmartBlocks

### Digital display

- > Clearly arranged display for easy reading and precise parameter selection

### High stability and low footprint

- > Very stable - remains stationary even at maximum mixing speed

i For more information go to [www.eppendorf.com/thermomixer-c](http://www.eppendorf.com/thermomixer-c)



### Description

Sample preparation redefined. The ThermoMixer C combines unique mixing performance with excellent temperature control to guarantee complete, dependable and reproducible test results. Improve your assay results by mixing and incubating samples at the same time. The ThermoMixer C convinces users with its quick and easy-to-exchange SmartBlocks for all common lab vessels, new and improved program functions, and high level of stability for every mixing frequency. There is no limit to the variety of applications waiting for you!

### Applications

- > Plasmid/RNA/DNA purification
- > cDNA synthesis
- > Extraction of DNA fragments from agarose gels
- > Enzymatic reactions (e.g., DNA restriction digestion, Proteinase K digestion and ligation)
- > Transformation of bacteria strains and plasmids
- > Denaturation of DNA, RNA and proteins
- > Labeling of DNA, RNA and proteins
- > Bacterial growth in microreaction vessels, conical tubes and deepwell plates
- > Lysis reactions at 100 °C
- > Mixing of PCR setups

### Product features

- > Heating, mixing and cooling in all common vessel and plate formats from 5  $\mu$ L to 50 mL
- > Increased mixing frequency up to **3,000 rpm** (depending on the SmartBlock used)
- > Excellent mixing performance due to unique <sup>2D</sup>Mix-Control technology
- > Anti-spill technology prevents lid wetting and cross-contamination
- > Reliable prevention of condensate formation with the new ThermoTop (**condens.protect**<sup>®</sup>)
- > Excellent temperature management and maximum temperature accuracy
- > Maximum flexibility due to large selection of exchangeable SmartBlocks
- > Simple and intuitive operation due to predefined program keys and clearly arranged menu guides
- > Versatile program functions
- > Ergonomic design and optimized features according to the Eppendorf PhysioCare Concept<sup>®</sup>

# Eppendorf ThermoMixer® C



The unique <sup>2D</sup>Mix-Control technology mixes liquids in a very controlled, circular movement. The lack of chaotic splashing enables mixing without lid wetting or cross contamination.

	Plate type	96-well plates	384-well plates
<b>Mixing of different buffers</b>			
Buffer with detergent	PCR	30 s 1.800 rpm	30 s 2.800 rpm
Buffer without detergent	PCR	1 min 2.000 rpm	30 s 3.000 rpm
Buffer with high salt concentration	DWP	5 s 1.400 rpm	30 s 2.000 rpm
Buffer with DMSO	MTP	5 s 1.100 rpm	5 s 2.000 rpm
<b>Mixing of viscous solutions</b>			
Genomic-DNA	PCR	30 s 2.000 rpm	1 min 3.000 rpm
<b>Resuspension of pellets</b>			
Bacteria cell pellets	DWP	30 s 2.000 rpm	2 min 2.000 rpm

ThermoMixer C provides enough mixing power to handle the most challenging mixing tasks. Most samples are efficiently mixed within less than a minute independent of vessel geometry or sample properties. For more informations see AppNote 130.

Technical specifications	
Timer	15 sec – 99:30 h, continuous
Heating rate	Max. 7 °C/min (when using SmartBlock plates) <sup>1)</sup>
Cooling rate	Max. 2.5 °C/min between 100 °C and RT
Interfaces	USB interface
Power supply	220 – 240 V, 50 – 60 Hz
Max. power consumption	200 W
Dimensions (W × D × H)	20.6 × 30.4 × 13.6 cm
Weight w/o accessories	6.3 kg
Temperature range	Min: 15 °C <sup>1)</sup> below RT, max: 100 °C
Mixing and vortexing radius	1.5 mm
Mixing orbit	3 mm
Mixing frequency	300 – 3,000 rpm <sup>1)</sup>
Max. speed	3,000 rpm <sup>1)</sup>
Temperature accuracy	Max. ±0.5 °C at 20 – 45 °C
Temperature settings	1 °C / 100 °C

<sup>1)</sup> depends on SmartBlock used

i For more information go to [www.eppendorf.com/thermomixer-c](http://www.eppendorf.com/thermomixer-c)



A wide variety of Eppendorf SmartBlocks are available for the Eppendorf ThermoMixer C. This new generation of exchangeable thermoblocks offers the utmost flexibility for use of all common vessel and plate formats.

All Eppendorf SmartBlocks are equipped with the unique Eppendorf QuickRelease™ system that makes the block exchange super fast and easy. Just press the lever on the front of the block and the block is exchanged in just seconds - no tools are needed.

#### Ordering information

Description	Order no.	Price
<b>Eppendorf ThermoMixer® C</b> , basic device without thermoblock, 220 – 240 V/50 – 60 Hz (GB)	5382 000.031	1,959.00 £
<b>Eppendorf ThermoTop®</b> , with <i>condens.protect®</i> technology	5308 000.003	344.00 £
<b>Eppendorf SmartBlock™ 0.5 mL</b> , thermoblock for 24 reaction vessels 0.5 mL	5361 000.031	406.00 £
<b>Eppendorf SmartBlock™ 1.5 mL</b> , thermoblock for 24 reaction vessels 1.5 mL	5360 000.038	406.00 £
<b>Eppendorf SmartBlock™ 2.0 mL</b> , thermoblock for 24 reaction vessels 2.0 mL	5362 000.035	406.00 £
<b>Eppendorf SmartBlock™ 5.0 mL</b> , thermoblock for 8 Eppendorf Tubes® 5.0 mL, 8 x 5.0 mL reaction vessels	5309 000.007	406.00 £
<b>Eppendorf SmartBlock™ 15 mL</b> , thermoblock for 8 conical tubes 15 mL	5366 000.021	406.00 £
<b>Eppendorf SmartBlock™ 50 mL</b> , thermoblock for 4 conical tubes 50 mL	5365 000.028	406.00 £
<b>Eppendorf SmartBlock™ 12 mm</b> , thermoblock for 24 reaction vessels, diameter 11 mm – 11.9 mm, height 30 mm – 76 mm	5364 000.024	505.00 £
<b>Eppendorf SmartBlock™ cryo</b> , thermoblock for 24 cryo tubes, 1.5 mL – 2 mL, max. external diameter 12.5 mm, all base designs	5367 000.025	406.00 £
<b>Eppendorf SmartBlock™ PCR 384</b> , thermoblock for PCR plates 384, incl. lid	5307 000.000	505.00 £
<b>Eppendorf SmartBlock™ PCR 96</b> , thermoblock for PCR plates 96, incl. lid	5306 000.006	505.00 £
<b>Eppendorf SmartBlock™ plates</b> , thermoblock for microplates and deepwell plates, incl. lid	5363 000.039	505.00 £
<b>Lid</b> , for Eppendorf ThermoMixer® F0.5 / F1.5 / F2.0 and FP, for Eppendorf SmartBlock™ 0.5 – 2.0 mL, plates, PCR 96 and 384	5363 000.233	91.40 £

✎ Ordering information for other voltage options begins on page 484

# Eppendorf ThermoStat™ C



## Description

The ideal device to accurately set and maintain temperatures. The ThermoStat C features excellent temperature management. Peltier technology provides the comfortable and precise temperature control of all conventional lab vessels. The operation is easier and more intuitive than ever before. Predefined temperature keys provide quick access to five important experimental temperatures. Due to comprehensive program functions, you can also individually store 15 programs. With an extensive range of exchangeable SmartBlocks, the ThermoStat C adapts to any application.

## Applications

- > Gentle thawing and cooling buffers and samples at low temperatures
- > Preheating media
- > Biochemical reactions at low temperatures
- > Ligation
- > cDNA synthesis
- > Denaturation of RNA, DNA and protein
- > Proteinase K digestion
- > ELISA assays
- > Immunoprecipitation
- > Cell lysis

## Product features

- > Heating and active cooling in all common vessel and plate formats from 5  $\mu$ L to 50 mL
- > Excellent temperature management
- > Precise temperature control from -10 °C to 110 °C <sup>\*1</sup>
- > Precise maintenance of various temperature levels
- > Reliable prevention of condensate formation with the new ThermoTop (**condens.protect**<sup>®</sup>)
- > Maximum flexibility thanks to large selection of exchangeable SmartBlocks
- > Dry incubation for improved lab hygiene
- > Simple and intuitive operation due to predefined temperature keys (4 °C, 16 °C, 37 °C, 56 °C and 95 °C)
- > Comprehensive range of program functions

<sup>\*1</sup>110 °C can be set when using the 12 mm and cryo SmartBlocks.

**i** For more information go to [www.eppendorf.com/temperaturecontrol-mixing](http://www.eppendorf.com/temperaturecontrol-mixing)



Technical specifications	
<b>Model</b>	<b>Eppendorf ThermoStat™ C</b>
<b>Timer</b>	15 s to 99:30 h, continuous
<b>Heating rate</b>	Max. 9 °C/min (when using the SmartBlock PCR 384) <sup>1)</sup>
<b>Cooling rate</b>	Max. 5.0 °C/min between 110 °C and RT <sup>1)</sup>
<b>Interfaces</b>	USB interface
<b>Power supply</b>	220 – 240 V, 50 – 60 Hz
<b>Max. power consumption</b>	200 W
<b>Dimensions (W × D × H)</b>	20.6 × 30.4 × 13.6 cm
<b>Weight w/o accessories</b>	4.4 kg
<b>Temperature range</b>	Min: 30 °C below RT, max: 110 °C (110 °C when using the 12 mm and cryo SmartBlocks)
<b>Temperature accuracy</b>	Max. ±0.5 °C at 20-45 °C <sup>1)</sup>
<b>Temperature settings</b>	-10 °C / 110 °C (110 °C when using the 12 mm and cryo SmartBlocks)

<sup>1)</sup> depends on SmartBlock used

#### Ordering information

Description	Order no.	Price
<b>Eppendorf ThermoStat™ C</b> , basic device without thermoblock, 220 – 240 V/50 – 60 Hz (GB)	5383 000.035	1,340.00 £
<b>Eppendorf ThermoTop®</b> , with <b>condens.protect®</b> technology	5308 000.003	344.00 £

✎ Ordering information for other voltage options begins on page 484

i For more information go to [www.eppendorf.com/temperaturecontrol-mixing](http://www.eppendorf.com/temperaturecontrol-mixing)

# Eppendorf SmartBlock™



## Eppendorf SmartBlocks for the following reaction vessels:

- A. 24 x cryo tubes
- B. 24 x lab vessels 11–11.9 mm in diameter
- C. 8 x 15 mL conical tubes
- D. 4 x 50 mL conical tubes
- E. 8 x 5.0 mL Eppendorf Tubes
- F. Lid for Eppendorf SmartBlocks plates, PCR 96, PCR 384, 0.5 mL, 1.5 mL and 2.0 mL
- G. 96-well PCR plates
- H. MTPs and deepwell plates
- I. 384-well PCR plates
- J. 24 x 1.5 mL vessels
- K. 24 x 0.5 mL vessels
- L. 24 x 2.0 mL vessels

## Description

Flexibility has never been this easy. Eppendorf offers a wide variety of exchangeable SmartBlocks for all common vessel formats from 5  $\mu$ L to 50 mL to use with Eppendorf ThermoMixer C and ThermoStat C. What's more, the product range is augmented by individual SmartBlocks for PCR vessels. All SmartBlocks are equipped with the unique Eppendorf QuickRelease system that makes the block exchange super fast and easy. Just press the lever on the front of the block and the block is exchanged in just seconds - no tools are needed. Screws and tools are no longer necessary.

## Product features

- > Fast and simple block exchange due to Eppendorf QuickRelease™ technology
- > Optimized block design guarantees maximum temperature transfer to the sample
- > Individually sensor-controlled Eppendorf SmartBlocks™ allow for block-specific calibration to provide maximum temperature accuracy and homogeneity
- > Insulated thermoblocks for ergonomic operation - you won't burn your fingers
- > Safe and ergonomic work via thermal insulation of blocks

i For more information go to [www.eppendorf.com/temperaturecontrol-mixing](http://www.eppendorf.com/temperaturecontrol-mixing)



Technical specifications					
Description	Lid <sup>1)</sup>	Max. speed	Max. temp.	ThermoMixer C ThermoStat C	ThermoTop
Eppendorf SmartBlock™ 0.5 mL	■	2,000 rpm	100 °C	■	■
Eppendorf SmartBlock™ 1.5 mL	■	2,000 rpm	100 °C	■	■
Eppendorf SmartBlock™ 2.0 mL	■	2,000 rpm	100 °C	■	■
Eppendorf SmartBlock™ 5.0 mL		1,000 rpm	100 °C	■	
Eppendorf SmartBlock™ 15 mL		1,000 rpm	100 °C	■	
Eppendorf SmartBlock™ 50 mL		1,000 rpm	100 °C	■	
Eppendorf SmartBlock™ 12 mm		2,000 rpm	110 °C <sup>3)</sup>	■	
Eppendorf SmartBlock™ cryo		2,000 rpm	110 °C <sup>3)</sup>	■	
Eppendorf SmartBlock™ plates	■	3,000 rpm <sup>2)</sup>	100 °C	■	■
Eppendorf SmartBlock™ PCR 96	■	2,000 rpm	100 °C	■	■
Eppendorf SmartBlock™ PCR 384	■	3,000 rpm	100 °C	■	■

<sup>1)</sup> Maximum mixing frequency is 2,000 rpm when lid is used<sup>2)</sup> max. mixing frequency using DWP is 2,000 rpm<sup>3)</sup> Only available with ThermoStat C

### Ordering information

Description	Order no.	Price
Eppendorf SmartBlock™ 0.5 mL, thermoblock for 24 reaction vessels 0.5 mL	5361 000.031	406.00 £
Eppendorf SmartBlock™ 1.5 mL, thermoblock for 24 reaction vessels 1.5 mL	5360 000.038	406.00 £
Eppendorf SmartBlock™ 2.0 mL, thermoblock for 24 reaction vessels 2.0 mL	5362 000.035	406.00 £
Eppendorf SmartBlock™ 5.0 mL, thermoblock for 8 Eppendorf Tubes® 5.0 mL, 8 x 5.0 mL reaction vessels	5309 000.007	406.00 £
Eppendorf SmartBlock™ 15 mL, thermoblock for 8 conical tubes 15 mL	5366 000.021	406.00 £
Eppendorf SmartBlock™ 50 mL, thermoblock for 4 conical tubes 50 mL	5365 000.028	406.00 £
Eppendorf SmartBlock™ 12 mm, thermoblock for 24 reaction vessels, diameter 11 mm – 11.9 mm, height 30 mm – 76 mm	5364 000.024	505.00 £
Eppendorf SmartBlock™ cryo, thermoblock for 24 cryo tubes, 1.5 mL – 2 mL, max. external diameter 12.5 mm, all base designs	5367 000.025	406.00 £
Eppendorf SmartBlock™ PCR 384, thermoblock for PCR plates 384, incl. lid	5307 000.000	505.00 £
Eppendorf SmartBlock™ PCR 96, thermoblock for PCR plates 96, incl. lid	5306 000.006	505.00 £
Eppendorf SmartBlock™ plates, thermoblock for microplates and deepwell plates, incl. lid	5363 000.039	505.00 £
Lid, for Eppendorf ThermoMixer® F0.5 / F1.5 / F2.0 and FP, for Eppendorf SmartBlock™ 0.5 – 2.0 mL, plates, PCR 96 and 384	5363 000.233	91.40 £

## Eppendorf ThermoTop®



### Description

Now you can control the temperature of your samples with ease: the new ThermoTop, with unique **condens.protect®** technology, reliably prevents the formation of condensate on the tube lid and tube wall. Operation is simple, intuitive and does not require an additional cable connection. When the ThermoTop is placed on the device, it begins heating immediately. The temperature optimally adapts to the test temperature to ensure that it does not negatively affect the sample: optimal sample protection with optimal reaction conditions produce optimal results.

### Applications

> All temperature control procedures for which the formation of condensation on the tube lid and wall should be reliably avoided

### Product features

- > Efficient and reliable prevention of condensation on the tube lid and wall
- > Guarantees constant reaction conditions for optimal enzymatic performance
- > Improves handling times, tubes don't have to be spun down at the end of the incubation
- > ThermoTop improves temperature homogeneity in the reaction vessel
- > Simple, wireless handling with automatic recognition, initialization and operation

i For more information go to [www.eppendorf.com/thermotop](http://www.eppendorf.com/thermotop)



The ThermoTop is compatible with the ThermoMixer C, ThermoStat C, and ThermoMixer F0.5 / F1.5 / F2.0 / FP. Combined with the ThermoMixer C and ThermoStat C, the ThermoTop can be used with thermoblocks for plates and lab vessels with a volume up to 2 mL. Compatible thermoblocks feature the *condens.protect* symbol.



When the ThermoTop is placed on the device, it begins heating immediately. The temperature optimally adapts to the test temperature to ensure that it does not negatively affect the sample. Condensation droplets have no opportunity to form.



**Advantages of condensation prevention during incubation**  
Evaporation of H<sub>2</sub>O and condensation on the tube lid changes the buffer concentration in the reaction. Enzymatic reactions can no longer run under optimal conditions.



Use of the Eppendorf ThermoTop effectively prevents the formation of condensate, thus guaranteeing optimal reaction conditions. Vessels also no longer need to be spun down at the end of incubation which saves your valuable handling time.

**Ordering information**

Description	Order no.	Price
Eppendorf ThermoTop®, with <i>condens.protect</i> ® technology	5308 000.003	344.00 £

# Eppendorf ThermoMixer® F1.5 and Eppendorf ThermoMixer® FP



## Description

To simplify your lab routines. Whether you regularly work with 1.5 mL reaction vessels or plates (MTP and DWP) - the customized systems from Eppendorf offer you the perfect solution for your special applications. The devices combine precise heating and mixing with the highest stability, even at maximum mixing frequency. You can also carry out independent mixing and incubation steps.

## Applications

- > Growth of bacteria and yeasts
- > Enzymatic reactions
- > Transformation of bacteria strains and plasmids
- > Denaturation of DNA, RNA and proteins
- > Lysis reactions at 100°C
- > Labeling of nucleic acids and proteins
- > Proteinase K digestion of cells and tissues
- > Resuspension of pellets
- > Mixing protein quantification assays
- > ELISA assays

## Product features

- > Heating and mixing in 1.5 mL reaction vessels (F1.5) or plates (FP)
- > Efficient mixing up to 1,500 rpm (F1.5) or 2,000 rpm (FP)
- > Excellent mixing performance due to unique <sup>2D</sup>Mix-Control technology
- > Anti-spill technology prevents lid wetting and cross-contamination
- > Reliable prevention of condensate formation with the new ThermoTop (**condens.protect**®)
- > Simple and intuitive operation using predefined temperature keys (37 °C, 42 °C, 56 °C and 95 °C)
- > Very quiet operation via precise fit of vessels in block
- > Heat-insulated Eppendorf SmartBlocks for ergonomic operation - you won't burn your fingers

i For more information go to [www.eppendorf.com/thermomixer-f](http://www.eppendorf.com/thermomixer-f)



Technical specifications		
	Eppendorf ThermoMixer® F1.5	Eppendorf ThermoMixer® FP
Model	Eppendorf ThermoMixer® F1.5	Eppendorf ThermoMixer® FP
Max. speed	1,500 rpm	2,000 rpm
Heating rate	Max. 11 °C/min	Max. 18 °C/min
Interfaces	USB interface	USB interface
Power supply	220 – 240 V, 50 – 60 Hz	220 – 240 V, 50 – 60 Hz
Max. power consumption	200 W	200 W
Dimensions (W × D × H)	20.6 × 30.4 × 17.0 cm	20.6 × 30.4 × 16.4 cm
Weight w/o accessories	6.3 kg	6.1 kg
Temperature range	Min: 4 °C above RT, max: 100 °C	Min: 4 °C above RT, max: 100 °C
Mixing and vortexing radius	1.5 mm	1.5 mm
Mixing orbit	3 mm	3 mm
Mixing frequency	300-1,500 rpm	300-2,000 rpm
Temperature accuracy	Max. ±0.5 °C at 20– 45 °C	Max. ±1 °C at 20– 45 °C
Temperature settings	1 °C / 100 °C	1 °C / 100 °C

#### Ordering information

Description	Order no.	Price
Eppendorf ThermoMixer® F1.5, with thermoblock for 24 reaction vessels 1.5 mL, 220 – 240 V/50 – 60 Hz (GB)	5384 000.039	1,874.00 £
Eppendorf ThermoMixer® FP, with thermoblock for microplates and deepwell plates, including lid, 220 – 240 V/50 – 60 Hz (GB)	5385 000.032	2,002.00 £
Eppendorf ThermoTop®, with <i>condens.protect</i> ® technology	5308 000.003	344.00 £

✎ Ordering information for other voltage options begins on page 484

i For more information go to [www.eppendorf.com/thermomixer-f](http://www.eppendorf.com/thermomixer-f)

NEW

# Eppendorf ThermoMixer® F0.5 and Eppendorf ThermoMixer® F2.0



## Description

To simplify your lab routines. Whether you regularly work with 0.5 mL or 2.0 mL reaction vessels - the customized systems from Eppendorf offer you the perfect solution for your special applications. The devices combine precise heating and mixing with the highest stability, even at maximum mixing frequency. You can also carry out independent mixing and incubation steps.

## Applications

- > Growth of bacteria and yeasts
- > Enzymatic reactions
- > Transformation of bacteria strains and plasmids
- > Denaturation of DNA, RNA and proteins
- > Lysis reactions at 100°C
- > Labeling of nucleic acids and proteins
- > Proteinase K digestion of cells and tissues
- > Resuspension of pellets
- > Mixing protein quantification assays
- > ELISA assays

## Product features

- > Heating and mixing in 0.5 mL (F0.5) or 2.0 mL reaction vessels (F2.0)
- > Efficient mixing up to 1,500 rpm (F2.0) or 2,000 rpm (F0.5)
- > Excellent mixing performance due to unique <sup>2D</sup>Mix-Control technology
- > Anti-spill technology prevents lid wetting and cross-contamination
- > Reliable prevention of condensate formation with the new ThermoTop (**condens.protect**®)
- > Simple and intuitive operation using predefined temperature keys (37 °C, 42 °C, 56 °C and 95 °C)
- > Very quiet operation via precise fit of vessels in block
- > Heat-insulated Eppendorf SmartBlocks for ergonomic operation - you won't burn your fingers

i For more information go to [www.eppendorf.com/thermomixer-f](http://www.eppendorf.com/thermomixer-f)



Technical specifications		
Model	Eppendorf ThermoMixer® F0.5	Eppendorf ThermoMixer® F2.0
Max. speed	2,000 rpm	1,500 rpm
Heating rate	Max. 15 °C/min	Max. 13 °C/min
Interfaces	USB interface	USB interface
Power supply	220 – 240 V, 50 – 60 Hz	220 – 240 V, 50 – 60 Hz
Max. power consumption	200 W	200 W
Dimensions (W × D × H)	20.6 × 30.4 × 16.3 cm	20.6 × 30.4 × 17.0 cm
Weight w/o accessories	6.2 kg	6.3 kg
Temperature range	Min: 4 °C above RT, max: 100 °C	Min: 4 °C above RT, max: 100 °C
Mixing and vortexing radius	1.5 mm	1.5 mm
Mixing orbit	3 mm	3 mm
Mixing frequency	300-2,000 rpm	300-1,500 rpm
Temperature accuracy	Max. ±0.5 °C at 20– 45 °C	Max. ±0.5 °C at 20– 45 °C
Temperature settings	1 °C / 100 °C	1 °C / 100 °C

#### Ordering information

Description	Order no.	Price
Eppendorf ThermoMixer® F0.5, with thermoblock for 24 reaction vessels 0.5 mL, 220 – 240 V/50 – 60 Hz	5386 000.036	1,922.00 £
Eppendorf ThermoMixer® F2.0, with thermoblock for 24 reaction vessels 2.0 mL, 220 – 240 V/50 – 60 Hz	5387 000.030	1,874.00 £
Eppendorf ThermoTop®, with condens.protect® technology	5308 000.003	344.00 £

✎ Ordering information for other voltage options begins on page 484

i For more information go to [www.eppendorf.com/thermomixer-f](http://www.eppendorf.com/thermomixer-f)

# MixMate®



The MixMate comes by standard with tube holders for 0.5 mL, 1.5/2 mL, and 0.2 mL/96-well semiskirted PCR plates for maximum flexibility with all common lab vessels.

## Description

The MixMate is a compact and amazingly versatile mixer, specially designed for mixing small volumes (5  $\mu$ L – 2 mL) in numerous plate and tube formats. The fast and precisely controlled mixing movements (<sup>2D</sup>Mix-Control) enable efficient and homogeneous mixing of samples in all vessel formats - allowing MixMate to be used for virtually any application. It accommodates micro test tubes, PCR plates, PCR strips, deepwell plates and MTPs. The integrated touch vortex function, with minimal hand/arm vibration transfer (Eppendorf PhysioCare Concept®), completes this unique product profile. The innovative additional 2 second run timer allows vortexing your next sample without restarting.

## Applications

- > Resuspending pellets (e.g., bacteria, DNA, cell culture pellets)
- > Mixing PCR setups
- > Mixing viscous liquids and suspensions (incl. beads)
- > Mixing restriction digestions
- > Immunoassays (e.g., ELISA)
- > Colorimetric assays (e.g., Bradford, Lowry, BCA)
- > Reporter gene assays (e.g.  $\beta$ -galactosidase, luciferase)
- > Vortexing numerous tube formats (e.g., 15 and 50 mL conical tubes)

## Product features

- > High-speed mixer (3,000 rpm) for fast and efficient mixing of small volumes in all common vessel formats up to 2 mL
- > <sup>2D</sup>Mix-Control technology (planar mixing orbit without vertical movement) for controlled mixing and reproducible results in seconds
- > Anti-spill technology for controlled mixing movements without lid wetting and cross-contamination
- > Plate holder provides easy operation and secure fit for all plate formats (MTP, DWP and PCR plates)
- > Efficiently mixes plates from 96 to 384 wells
- > Tube holders enable mixing of semi- and unskirted PCR plates as well as micro test tubes up to 2 mL
- > Easy to use thanks to 5 soft keys with pre-defined most common used mixing parameters
- > Minimal hand/arm vibration transfer during vortexing (certificate available) for ergonomic operation
- > Whisper quiet operation to benefit the work environment
- > Very stable - remains stationary even at maximum mixing speed

**i** For more information go to [www.eppendorf.com/temperaturecontrol-mixing](http://www.eppendorf.com/temperaturecontrol-mixing)



Timelapse photography of controlled mixing with MixMate. The unique <sup>2D</sup>Mix-Control technology mixes liquids in a very controlled, circular movement. The lack of chaotic splashing enables mixing without lid wetting or cross contamination.

	Plate type	96-well plates	384-well plates
<b>Mixing of different buffers</b>			
Buffer with detergent	PCR	15 s 1,800 rpm	45 s 2,800 rpm
Buffer without detergent	PCR	30 s 2,100 rpm	30 s 3,000 rpm
Buffer with high salt concentration	DWP	5 s 1,400 rpm	1 min 2,000 rpm
Buffer with DMSO	MTP	5 s 1,100 rpm	5 s 2,200 rpm
<b>Mixing of viscous solutions</b>			
Genomic-DNA	PCR	30 s 2,000 rpm	45 s 3,000 rpm
<b>Resuspension of pellets</b>			
Bacteria cell pellets	DWP	30 s 2,000 rpm	3 min 2,000 rpm

MixMate provides enough mixing power to handle the most challenging mixing tasks. Most samples are efficiently mixed within less than a minute independent of vessel geometry or sample properties. For more information see AppNote 130.

Technical specifications	
Model	MixMate®
Sample capacity	max. 96 x 0.2 mL, 24 x 0.5 mL, 24 x 1.5 mL, 24 x 2.0 mL, 1 x DWP or 1 x PCR plate
Timer	15 s – 99.3 h, continuous
Noise level	< 50 dB(A)
Max. power consumption	40 W
Dimensions (W x D x H)	17 x 23 x 13 cm
Weight w/o accessories	4.2 kg
Temperature range	N/A
Mixing and vortexing radius	1.5 mm
Mixing orbit	3 mm
Mixing frequency	300 – 3,000 rpm
Touch vortex frequency	3,500 rpm

Ordering information		
Description	Order no.	Price
MixMate®, incl. 3 tube holders: PCR 96, 0.5 mL, 1.5/2.0 mL, 230 V/50 – 60 Hz (GB)	5353 000.030	1,443.00 £
Tube Holder 0.5 mL, for 24 x 0.5 mL reaction vessels	5353 040.121	31.70 £
Tube Holder 1.5/2.0 mL, for 24 x 1.5 mL or 2.0 mL reaction vessels	5353 040.130	31.70 £
Tube Holder PCR 96, for 96 x 0.2 mL PCR tubes, PCR strips or 1 x 96-well PCR plate, semi-skirted or unskirted	5353 040.113	39.80 £

✎ Ordering information for other voltage options begins on page 484

i For more information go to [www.eppendorf.com/temperaturecontrol-mixing](http://www.eppendorf.com/temperaturecontrol-mixing)

## Exchangeable Thermoblocks



### Exchangeable thermoblocks accommodate:

- A. MTPs and deepwell plates
- B. 4 x 50 mL conical tubes
- C. 8 x 15 mL conical tubes
- D. Exclusively for ThermoStat plus: CombiBox provides universal temperature control (e.g., for the preparation/cooling of enzymes) for flasks and beakers with a height = 60 mm
- E. Adapter plate for 96 x 0.2 mL PCR tubes and PCR plates 96 easily inserts into exchangeable thermoblock for MTPs (A)

- F. 24 x 1.5–2 mL cryo tubes
- G. Test tubes with a diameter of 11–11.9 mm and a height of 30–76 mm
- H. 24 x 0.5 mL, 1.5 mL and 2.0 mL microcentrifuge tubes\*<sup>1</sup>
- I. 1–4 standard glass slides

<sup>®</sup>: IsoTherm-System is a registered trademark of Eppendorf

\*<sup>1</sup> Includes an IsoTherm rack and IsoTherm cool pack for 0 °C.

### Description

The exchangeable thermoblock system for the Eppendorf Thermomixer® comfort and ThermoStat plus ensures a precise “fit” for all common lab tubes: from simple temperature control of a chemical to complex enzyme reactions and hybridization experiments, and from MTPs to 50 mL conical tubes — the application possibilities are virtually endless!

### Product features

- > A wide range of exchangeable thermoblocks to cover tubes from 0.2 mL to 50 mL as well as plates and glass slides
- > Heat insulated thermoblocks for ergonomic and safe operation (no direct contact with hot surfaces - you won't burn your fingers)
- > Dry incubation technology eliminates contamination risk associated with classical waterbath incubation
- > Simple replacement of thermoblocks
- > Tubes are easy accessible
- > Whisper quiet operation and optimal temperature transfer due to complete enclosure and custom fit of tubes in the exchangeable thermoblocks

i For more information go to [www.eppendorf.com/temperaturecontrol-mixing](http://www.eppendorf.com/temperaturecontrol-mixing)

Technical Specifications	Max. temp.	Max. speed	Thermomixer comfort	Thermostat plus
<b>Exchangeable thermoblock</b>				
for 24 x 0.5 mL reaction vessels	99 °C	1,500 rpm	■	■
<b>Exchangeable thermoblocks</b>				
for 24 x 1.5 mL reaction vessels	99 °C	1,400 rpm	■	■
for 24 x 2.0 mL reaction vessels	99 °C	1,400 rpm	■	■
for 8 x 5.0 mL Eppendorf tubes®	99 °C	750 rpm	■	■
for 8 x 15 mL conical tubes	99 °C	750 rpm	■	■
for 4 x 50 mL conical tubes	99 °C	750 rpm	■	■
<b>Thermoblock for MTPs and deepwell plates</b>				
with lid	99 °C	1,400 rpm <sup>1)</sup>	■	■
<b>Thermoblock for 24 test tubes</b>				
diameter 11 – 11.9 mm, height 30 – 76 mm	99 °C	1,400 rpm	■	■
<b>Thermoblock for 24 cryo tubes</b>				
1.5 – 2 mL, diameter max. 12.5 mm, all base shapes	99 °C	1,400 rpm	■	■
<b>Exchangeable thermoblock</b>				
for 4 slides	99 °C	1,400 rpm	■	■
<b>CombiBox for all tube types</b>				
interior 13.5 x 9.0 x 6.0 cm (W x D x H), only for ThermoStat plus	99 °C	0 rpm	–	■

<sup>1)</sup> with a load of, e.g. 200 g, the max. speed is 800 rpm

#### Ordering information

Description	Order no.	Price
<b>Exchangeable thermoblock</b> , for 24 reaction vessels, complete with rack and cool pack 0 °C (from IsoTherm-System®)		
for 24 x 0.5 mL reaction vessels	5361 000.015	398.00 £
<b>Exchangeable thermoblocks</b> , for 24 reaction vessels, complete with rack and cool pack 0 °C (from IsoTherm-System®)		
for 24 x 1.5 mL reaction vessels	5360 000.011	398.00 £
for 24 x 2.0 mL reaction vessels	5362 000.019	398.00 £
<b>Exchangeable thermoblocks</b> , for 8 Eppendorf Tubes®, for 8 x 5.0 mL Eppendorf tubes®	5309 000.333	398.00 £
<b>Lid</b> , for Eppendorf ThermoMixer® F0.5 / F1.5 / F2.0 and FP, for Eppendorf SmartBlock™ 0.5 – 2.0 mL, plates, PCR 96 and 384	5363 000.233	91.40 £
<b>Exchangeable thermoblocks</b> , for conical tubes		
for 8 x 15 mL conical tubes	5366 000.013	398.00 £
for 4 x 50 mL conical tubes	5365 000.010	398.00 £
<b>CombiBox for all tube types</b> , interior 13.5 x 9.0 x 6.0 cm (W x D x H), only for ThermoStat plus	5352 100.007	478.00 £
<b>Thermoblock for MTPs and deepwell plates</b> , with lid	5363 000.012	496.00 £
<b>Adapter plate for 96 x 0.2 mL PCR tubes and PCR plates 96</b> , to insert in thermoblock for MTPs	5363 007.009	131.00 £
<b>Thermoblock for 24 test tubes</b> , diameter 11 – 11.9 mm, height 30 – 76 mm	5364 000.016	496.00 £
<b>Thermoblock for 24 cryo tubes</b> , 1.5 – 2 mL, diameter max. 12.5 mm, all base shapes	5367 000.017	398.00 £
<b>Exchangeable thermoblock</b>		
for 4 slides	5368 000.010	525.00 £

## IsoTherm-System®



### Product features

- > Ideal for cooling, transporting and storing deep-frozen samples
- > Dry incubation technology eliminates contamination risk associated with classical icebath incubation
- > Holds 24 micro tubes (e.g., 0.5 mL or 1.5 mL/2.0 mL)
- > Two versions of IsoPack (cold pack) available:
  - White maintains 0 °C for up to 6 hours
  - Blue maintains -21 °C for up to 3 hour
- > No more melting ice baths, reduced risk of contamination
- > All system components can be used separately
- > Racks are stackable, autoclavable and can be centrifuged in the MTP rotor

### Description

The IsoTherm-System, which consists of an IsoRack (work rack), IsoSafe (insulating box) and two IsoPacks (cool packs), specializes in cooling samples effectively and consistently at -21 °C or 0 °C over many hours. The IsoTherm-System can be used to prevent enzymes from becoming inactive as well as for PCR sample preparation, sample transport and slow thawing of frozen samples.

### Ordering information

Description	Order no.	Price
<b>IsoTherm-System starter set</b> , includes IsoSafe, IsoRack, 0 °C IsoPack and -21 °C IsoPack		
for 0.5 mL tubes	3880 000.011	111.00 £
for 1.5/2.0 mL tubes	3880 001.018	111.00 £
<b>IsoPack and IsoRack set</b> , includes one IsoPack and one IsoRack		
for 0.5 mL vessels, 0 °C	3880 000.160	36.30 £
for 0.5 mL vessels, -21 °C	3880 000.178	36.30 £
for 1.5/2.0 mL vessels, 0 °C	3880 001.166	36.30 £
for 1.5/2.0 mL vessels, -21 °C	3880 001.174	36.30 £
<b>IsoRack</b> , set of 4 racks		
for 0.5 mL vessels	3880 000.038	94.80 £
for 1.5 mL/2.0 mL vessels	3880 001.034	94.80 £
<b>IsoSafe and IsoPack</b> , includes 1 IsoSafe and 3 IsoPack		
for 0.5 mL vessels, 0 °C	3880 000.020	121.00 £
for 0.5 mL vessels, -21 °C	3880 000.046	121.00 £
for 1.5/2.0 mL vessels, 0 °C	3880 001.026	121.00 £
for 1.5/2.0 mL vessels, -21 °C	3880 001.042	121.00 £

i For more information go to [www.ependorf.com/IsoTherm](http://www.ependorf.com/IsoTherm)

# PCR-Cooler



## Description

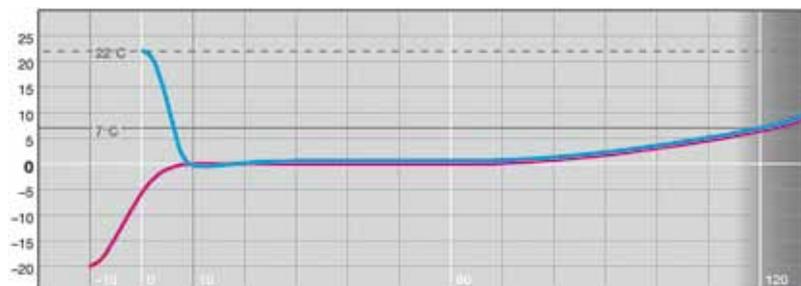
Add some color to your sample preparation! The Eppendorf PCR-Cooler contains a temperature indicator that changes the color of the PCR-Cooler from violet to pink or dark blue to light blue when its temperature exceeds 7 °C. The Eppendorf PCR-Cooler is ideal for setting up PCR reactions in 0.2 mL and 0.5 mL PCR tubes as well as 96-well PCR plates.

## Product features

- > For the protection, transport and storage of sensitive samples, as well as for safely stopping reactions
- > Ideal for PCR reaction setup
- > Accommodates 96-well PCR plates, PCR strips and 0.2 mL and 0.5 mL PCR tubes
- > Dry incubation technology eliminates contamination risk associated with classical icebath incubation
- > Keeps an entire 96-well PCR plate cold for more than an hour at 0 °C (with two-hour precooling at -20 °C)
- > Features temperature indication: Color of the PCR cooler changes when temperature exceeds 7 °C (violet or dark blue when ice cold, pink or light blue when above 7 °C)
- > Space saving and stackable
- > Special contour design prohibits freezing of samples

## Cooling curve

Temperature behavior of a precooled PCR-Cooler and a sample inserted at room temperature (the background color indicates the color change)



## Ordering information

Description	Order no.	Price
<b>PCR-Cooler</b>		
Starter Set (1 x pink, 1 x blue)	3881 000.015	72.90 £
Pink	3881 000.023	39.70 £
Blue	3881 000.031	39.70 £

i For more information go to [www.eppendorf.com/temperaturecontrol-mixing](http://www.eppendorf.com/temperaturecontrol-mixing)

# Temperature Control and Mixing Performance Plans

## Preventive Maintenance

System lifetime and operational capability of your instrument can be affected by various conditions. Preventive maintenance provides professional cleaning and visual inspection of the surface, thermoblocks and internal assemblies with special brushes and/or compressed air. Various parts and functions are tested including: block recognition, drive, sensor, vortex, heating, cooling and overload protection.

## Operational Qualification

Operational Qualification (OQ) assures that your Eppendorf instrumentation is operating according to manufacturer specifications and continually meets your needs. This service also includes temperature control tests and adjustment, rotational speed frequency and timer verification as well as electrical testing to country specific regulations where applicable. We will issue an OQ certificate for documentation in regulated environments.

Temperature control and adjustment as well as electrical testing are also offered as separate services. The exchange of the oscillation frame and adjustment might be necessary in cases of extreme mixing usage over long periods.



Performance Plans	Eppendorf ThermoMixer® C	Eppendorf ThermoMixer® comfort	Eppendorf ThermoStat™ C
<b>Recommended service period</b>	once per year	once per year	once per year
<b>Preventive Maintenance:</b>	<b>Order no.</b>	<b>Order no.</b>	<b>Order no.</b>
Maintenance* <sup>1</sup>	5350 998.030	5350 997.050	5350 998.014
<b>Certification Service:</b>			
Operational Qualification (OQ) incl. Maintenance* <sup>1</sup>	5350 998.065	5350 997.093	5350 998.049
Electrical safety testing according to country-specific regulations	5350 997.107	5350 997.107	5350 997.107
<b>Additional Service:</b>			
Oscillation frame exchange and adjustment* <sup>2</sup>		5350 997.115	
Temperature calibration/ adjustment	5350 997.018	5350 997.018	5350 997.018

\*<sup>1</sup> Spare parts, apart from wear and tear parts, that may be required are not included and will be invoiced additionally. \*<sup>2</sup> Oscillation frame is included.

**epServices**  
for premium performance

**Service features**

- > Eppendorf customer care and quality commitment
- > Genuine and quality inspected Eppendorf parts
- > Certified service reports and dated service labels

**Long-term benefits**

- > Reliable system operation and results over the total system lifetime
- > GLP compliant documentation
- > Optimized service improves your process yield



For more information go to [www.eppendorf.com/epServices](http://www.eppendorf.com/epServices).  
In selected countries only.

<b>Eppendorf ThermoStat™ plus</b>	<b>Eppendorf ThermoMixer® FP/F0.5/F1.5/F2.0</b>	<b>Eppendorf ThermoMixer® compact</b>	<b>MixMate®</b>
once per year	once per year	once per year	once per year
<b>Order no.</b>	<b>Order no.</b>	<b>Order no.</b>	<b>Order no.</b>
5350 997.034	5350 998.022	5350 997.042	5350 997.026
5350 997.077	5350 998.057	5350 997.085	5350 997.069
5350 997.107	5350 997.107	5350 997.107	5350 997.107
		5350 997.115	5350 997.115
5350 997.018	5350 997.018	5350 997.018	



Model	Tube 3810X	Safe-Lock Tube 0.5 mL	Safe-Lock Tube 1.5 mL
Page(s)	151	152	152
Volume	1.5 mL	0.5 mL	1.5 mL
Bottom shape	conical	conical	conical
Max. RCF Eppendorf Quality™	30,000 x g	30,000 x g	30,000 x g
Max. RCF PCR clean	30,000 x g	30,000 x g	30,000 x g
Max. RCF Eppendorf Biopur®	–	22,000 x g	22,000 x g
Max. RCF Sterile	–	–	–

<sup>1)</sup> Test conditions: Rotor FA-45-6-30 in Eppendorf Centrifuge 5810 R (using a suitable centrifuge adapter for 15 mL tube), sample: saline solution (density: 1.0 g/mL), controlled centrifugation temp.: 25 °C, centrifugation time: 90 min



Model	MTP 96/F	MTP 96/U	MTP 96/V	MTP 384/F	MTP 384/V
Page(s)	160	160	160	160	160
Number of wells	96 wells	96 wells	96 wells	384 wells	384 wells
Total volume	400 µL	360 µL	360 µL	150 µL	150 µL
Work volume	50-350 µL	20-320 µL	20-320 µL	10-120 µL	10-120 µL
Material	polypropylene	polypropylene	polypropylene	polypropylene	polypropylene
Bottom shape	flat	round	conical	flat	conical
Dimensions (W x D x H)	127.8 x 85.5 x 14.4 mm				
Max. RCF	6,000 x g				

<sup>1)</sup> For more Cell Imaging plates go to chapter Cell Imaging Consumables

i For more information go to [www.eppendorf.com/consumables](http://www.eppendorf.com/consumables)



Safe-Lock Tube 2.0 mL	Eppendorf Tubes® 5.0 mL	Eppendorf Conical Tubes 15 mL	Eppendorf Conical Tubes 50 mL
<b>152</b>	<b>154</b>	<b>158</b>	<b>158</b>
2.0 mL	5.0 mL	15 mL	50 mL
round	conical	conical	conical
25,000 x g	25,000 x g	–	–
25,000 x g	25,000 x g	–	–
22,000 x g	25,000 x g	–	–
–	25,000 x g	19,500 x g <sup>1)</sup>	19,500 x g <sup>1)</sup>



MTP UV-VIS 96/F	MTP VIS 96/F	MTP Cell Imaging <sup>1)</sup>	DWP 96/2000	DWP 96/1000	DWP 96/500	DWP 384/200
<b>162</b>	<b>162</b>	<b>162</b>	<b>164</b>	<b>164</b>	<b>164</b>	<b>164</b>
96 wells	96 wells	96 wells	96 wells	96 wells	96 wells	384 wells
420 µL	420 µL	420 µL	2,400 µL	1,200 µL	700 µL	240 µL
50-350 µL	50-350 µL	50-350 µL	50-2,000 µL	30-1,000 µL	30-550 µL	20-225 µL
polystyrene/ film	polystyrene	polystyrene/ film	polypropylene	polypropylene	polypropylene	polypropylene
flat	flat	flat	conical	conical	conical	conical
127.8 x 85.5 x 14.4 mm	127.8 x 85.5 x 14.4 mm	127.8 x 85.5 x 14.4 mm	127.8 x 85.5 x 44.1 mm	127.8 x 85.5 x 44.1 mm	127.8 x 85.5 x 27.1 mm	127.8 x 85.5 x 25.1 mm
300 x g	3,000 x g	300 x g	6,000 x g	6,000 x g	6,000 x g	6,000 x g

i For more information go to [www.eppendorf.com/consumables](http://www.eppendorf.com/consumables)

# Eppendorf Purity Grades for Tubes and Plates



Eppendorf sample handling consumables stand for highest quality and purity. (For further details read page 6-7).

Our tubes and plates are available in a variety of purity grades (see table below). The purity grades "sterile", "Protein-free", "PCR clean" and "Biopur®" are tested and certified by an accredited external lab. As a special service, we make the inspection certificate for each delivered lot available online ([www.eppendorf.com/certificates](http://www.eppendorf.com/certificates)).

## Purity grades

Eppendorf purity grades for tubes and plates	Eppendorf Quality™	Eppendorf sterile	Eppendorf PCR clean	Eppendorf Biopur®
<b>Continuous quality control for the following relevant criteria:</b>				
Function, tightness, precision	■	■	■	■
Low wetting	■	■	■	■
High chemical resistance	■	■	■	■
High thermal resistance	■	■	■	■
High resistance to centrifugation forces*1	■	■	■	■
High transparency	■	■	■	■
Precisely shaped	■	■	■	■
<b>Lot testing*2 (certified) for the following purity criteria:</b>				
Pyrogen-free (endotoxin-free)		■		■
Sterile (Ph.Eur./USP)		■		■
Human DNA-free			■	■
DNA-free (Human- + bacteria DNA)				■
DNase-free			■	■
RNase-free			■	■
PCR-inhibitor-free			■	■
ATP-free				■
<b>Eppendorf tubes</b>				
Safe-Lock Tubes	■		■	■*3
3810X	■		■	
Eppendorf Tubes® 5.0 mL	■	■	■*3	
Conical Tubes 15 mL and 50 mL		■*4		
DNA + Protein LoBind Tubes			■	
PCR Tubes (PCR + real-time PCR)			■	
Cap Strips (PCR + real-time PCR)			■	
<b>Eppendorf plates and accessories</b>				
Deepwell Plates + Microplates		■	■	
Protein LoBind Deepwell Plates			■	
DNA LoBind Deepwell Plates			■	
Eppendorf twin.tec® PCR Plates (PCR + real-time PCR)			■	
Eppendorf twin.tec® microbiology PCR Plates				■
Heat Sealing Film + Foil			■	
PCR Storage Films + Foils			■	
Plate Lid		■	■	

\*1 For accurate details regarding resistance to centrifugation, please refer to the respective product pages. \*2 Lot-specific certificate can be downloaded from [www.eppendorf.com/certificates](http://www.eppendorf.com/certificates).

\*3 Individually packaged. \*4 Eppendorf sterile, RNase free, DNase free, DNA free (humand and bacteria DNA)

# Eppendorf Tubes® 3810X



## Product features

- > Tube lid is easy to open and close for ergonomic operation
- > Polypropylene provides high resistance to chemicals, mechanical stress, and temperature extremes
- > g-Safe®: Exceptional centrifugation stability up to 30,000 x g prevents sample loss due to tube breakage and provides extra safety when working with hazardous samples
- > Manufactured without the use of slip agents, plasticizers, and biocides – substances that have been shown to leach from plastic consumables into the sample and negatively affect bio-assay results
- > Graduation for simple verification of the pipetted volume
- > Frosted lid and surface on the side for easy labeling
- > Guaranteed functionality from -86 °C to 100 °C
- > Autoclavable when open (121 °C, 20 min)
- > Available in PCR clean: Every lot is individually tested and certified for guaranteed purity

The 3810X tube guarantees tried and tested tight lid closure and easy, stress-free opening and closing.

## Description

The easy-to-open, securely closing, Eppendorf Tube 3810X offers comfort and dependability for sample preparation, centrifugation and storage. One vessel for all applications in molecular biology, clinical chemistry and biochemistry.

### Safer than ever:

3810X Tubes can be centrifuged up to 30,000 x g without any problems!

## Ordering information

Description	Tube color	Order no.	Price
<b>Eppendorf Tubes® 3810X, 1.5 mL</b>			
Eppendorf Quality™, 1,000 pcs.	<input type="checkbox"/> colorless	0030 125.150	28.70 £
Eppendorf Quality™, 1,000 pcs.	<input checked="" type="checkbox"/> blue	0030 125.177	46.90 £
Eppendorf Quality™, 1,000 pcs.	<input type="checkbox"/> yellow	0030 125.207	46.90 £
Eppendorf Quality™, 1,000 pcs.	<input type="checkbox"/> green	0030 125.185	46.90 £
Eppendorf Quality™, 1,000 pcs.	<input type="checkbox"/> red	0030 125.193	46.90 £
PCR clean, 1,000 pcs.	<input type="checkbox"/> colorless	0030 125.215	30.00 £

i For more information go to [www.eppendorf.com/consumables](http://www.eppendorf.com/consumables)

## Eppendorf Safe-Lock Tubes



### Product features

- > Hinged Eppendorf Safe-Lock lid prevents unintentional lid opening during incubation and storage
- > Polypropylene provides high resistance to chemicals, mechanical stress and temperature extremes
- > Manufactured without the use of slip agents, plasticizers, and biocides – substances that have been shown to leach from plastic consumables into the sample and negatively affect bio-assay results
- > g-Safe®: Exceptional centrifugation stability up to 30,000 x g prevents sample loss due to tube breakage and provides extra safety when working with hazardous samples
- > Precise lid sealing for minimal evaporation rates during long-term storage
- > Large frosted lid and surface on the side for easy labeling
- > Guaranteed functionality from -86 °C to 100 °C
- > Autoclavable when open (121 °C, 20 min)
- > Available in lot-certified PCR clean and Biopur® quality for guaranteed purity
- > Available in Eppendorf Protein and DNA LoBind material for maximum recovery of valuable samples



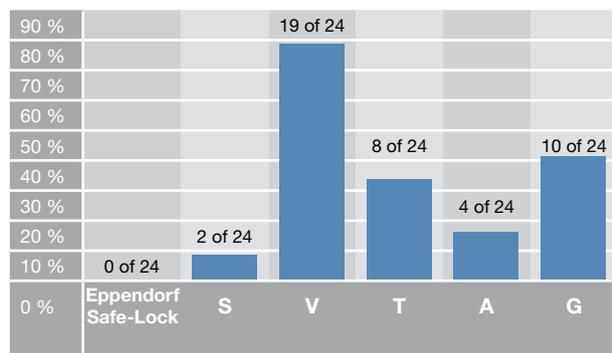
### Description

Eppendorf Safe-Lock Tubes are the result of 50 years of continuous improvement and development. The original Safe-Lock tubes protect your sample with excellent centrifugation stability, feature perfect sealing properties, and reliably prevent sample evaporation. Trust in the original Eppendorf Safe-Lock Tubes, because your samples deserve nothing but the best.

#### Safer than ever!

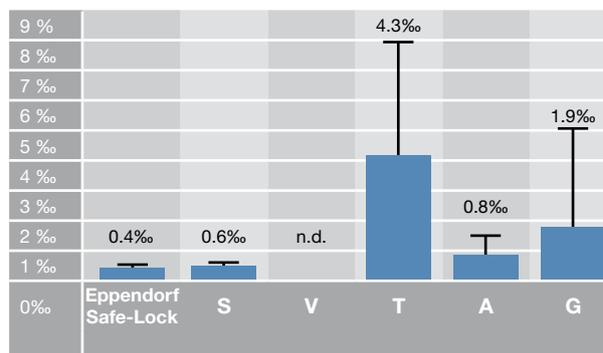
Tests at 30,000 x g have shown that vessels can break during centrifugation. Eppendorf Tubes® are guaranteed to withstand forces up to 30,000 x g, allowing you to safely centrifuge without sample losses.

i For more information go to [www.eppendorf.com/SafeLock](http://www.eppendorf.com/SafeLock)



### Lid sealing:

Number of opened lids. Shown is the percentage of tubes that opened during a 30 min incubation at 100 °C in a water bath. Tubes filled with 1 mL aqueous solution. None of the Eppendorf Tube lids opened during the 30 min incubation at 100 °C.



**Evaporation in ‰:** Evaporation tightness was tested by measuring the weight loss of tubes filled with 1 mL ethanol solution after a 1 h incubation at 70 °C. Shown are the mean values and standard deviation (n=24). Tubes from supplier V could not be measured as several tube lids popped open during the incubation step.

### Ordering information

Description	Tube color	Order no.	Price
<b>Eppendorf Safe-Lock Tubes, 0.5 mL</b>			
Eppendorf Quality™, 500 pcs.	□ colorless	0030 121.023	32.90 £
Eppendorf Quality™, 500 pcs.	■ yellow	0030 121.112	43.60 £
Eppendorf Quality™, 500 pcs.	■ red	0030 121.120	43.60 £
Eppendorf Quality™, 500 pcs.	■ blue	0030 121.139	43.60 £
Eppendorf Quality™, 500 pcs.	■ green	0030 121.147	43.60 £
Eppendorf Quality™, 500 pcs.	■ amber (light protection)	0030 121.155	46.70 £
Eppendorf Quality™, 500 pcs.	assorted colors (per 100 or 200)	0030 121.708	34.90 £
Eppendorf Biopur®, 50 pcs., individually packed	□ colorless	0030 121.570	22.10 £
PCR clean, 500 pcs.	□ colorless	0030 123.301	34.90 £
<b>Eppendorf Safe-Lock Tubes, 1.5 mL</b>			
Eppendorf Quality™, 1,000 pcs.	□ colorless	0030 120.086	33.30 £
Eppendorf Quality™, 1,000 pcs.	■ yellow	0030 120.159	46.70 £
Eppendorf Quality™, 1,000 pcs.	■ red	0030 120.167	46.70 £
Eppendorf Quality™, 1,000 pcs.	■ blue	0030 120.175	46.70 £
Eppendorf Quality™, 1,000 pcs.	■ green	0030 120.183	46.70 £
Eppendorf Quality™, 1,000 pcs.	■ amber (light protection)	0030 120.191	49.80 £
Eppendorf Quality™, 1,000 pcs.	assorted colors (per 100 or 200)	0030 121.694	34.90 £
Eppendorf Biopur®, 100 pcs., individually packed	□ colorless	0030 121.589	22.70 £
PCR clean, 1,000 pcs.	□ colorless	0030 123.328	34.90 £
<b>Eppendorf Safe-Lock Tubes, 2.0 mL</b>			
Eppendorf Quality™, 1,000 pcs.	□ colorless	0030 120.094	45.40 £
Eppendorf Quality™, 1,000 pcs.	■ yellow	0030 120.205	61.90 £
Eppendorf Quality™, 1,000 pcs.	■ red	0030 120.213	61.90 £
Eppendorf Quality™, 1,000 pcs.	■ blue	0030 120.221	61.90 £
Eppendorf Quality™, 1,000 pcs.	■ green	0030 120.230	61.90 £
Eppendorf Quality™, 1,000 pcs.	■ amber (light protection)	0030 120.248	64.60 £
Eppendorf Quality™, 1,000 pcs.	assorted colors (per 100 or 200)	0030 121.686	48.10 £
Eppendorf Biopur®, 100 pcs., individually packed	□ colorless	0030 121.597	30.00 £
PCR clean, 1,000 pcs.	□ colorless	0030 123.344	47.70 £

# Eppendorf Tubes® 5.0 mL

## Ergonomic operation

Simple, practical and ergonomic single-hand operation. Large labeling area.

## Certified purity

Available in lot tested and certified Eppendorf Quality, PCR clean, Sterile and Eppendorf Biopur® purity levels.

## Centrifugation safety

Maximum safety and stability for centrifugation up to 25,000 x g. Fast and efficient protocols.



## Lid design

Hinged lid for minimized sample evaporation during storage and incubation in a wide range of temperatures from -86° C to 80° C.

## Material

Exceptionally high-quality, transparent polypropylene, free of plasticizers, biocides or mold release agents, for reliable test results.

## Conical shape

Compatible with accessories for conical 15 mL tubes - many existing adapters and racks can be used.



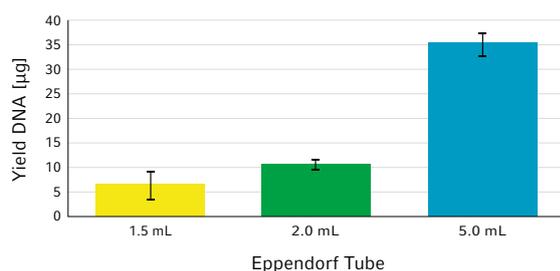
## Description

Eppendorf Tubes are the benchmark for simple and safe sample preparation from 0.5 to 2.0 mL. For larger volumes, 15 mL and 50 mL conical tubes are available. With medium sample volumes you may face an issue: they need to be processed with large conical screw cap tubes - impractical, inconvenient and often prone to contamination. Eppendorf now offers the »missing link«: the Eppendorf Tube 5.0 mL. This product fills the gap between existing tube versions and enables the simple and safe processing of sample volumes up to 5.0 mL!

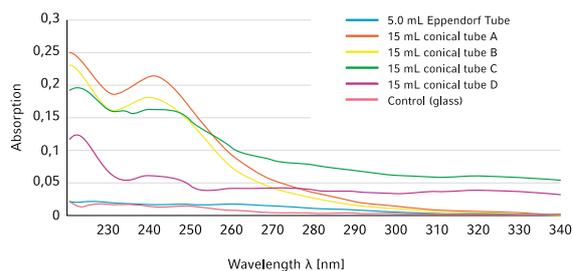
## Applications

- > Easier processing of samples up to 5.0 mL
- > Higher yields in DNA isolation, especially with samples with limited quantity of source material
- > Convenient and safe cell culture applications
- > Easier sample access lowers the risk of contamination
- > Preparation of mastermixes and buffers
- > Less storage space needed
- > Safe cell and tissue lysis

i For more information go to [www.eppendorf.com/5mL](http://www.eppendorf.com/5mL)



**Higher yields in DNA isolation** – E.g. the yield of low-copy plasmid DNA can be significantly improved by increasing the culture volume to 5 mL. For additional information and protocol description please see Application note 262.



#### Minimization of leachables

Conical 15 mL screw cap tubes, often used in the medium volume range, show contamination from leaching substances which absorb in the UV range and can thereby disrupt DNA and protein quantifications. The Eppendorf Tube 5.0 mL offers a safe alternative for sample preparation and storage. For additional information and a description of the protocol, see Application Note no. 264.

i For more information go to [www.eppendorf.com/5mL](http://www.eppendorf.com/5mL)

## Eppendorf Tubes® 5.0 mL – System Accessories



Perfect mixing, heating and cooling with the ThermoMixer C



Safe centrifugation with Eppendorf Centrifuges



Easy integration in the epMotion automated pipetting system



The ideal solution for sample preparation and storage: new racks and storage boxes



Precise one-step pipetting with Eppendorf pipettes and epT.I.P.S.® 5.0 mL



Optimized adapters for existing swing-bucket and fixed-angle rotors

### Description

Of course, the Eppendorf system concept is the focus for the new Eppendorf Tubes® 5.0 mL. All lab procedures can continue to be executed – simple, practical and costeffective. Eppendorf offers a sophisticated range of matching accessories. Efficient and simple pipetting, gentle mixing, incubating, safe centrifugation, automatic pipetting and storage down to –86 °C. All works perfectly with Eppendorf Tubes® 5.0 mL. The tube's conical shape is designed to be compatible with most accessories for common conical 15 mL tubes. This allows you to continue using many of your existing adapters and racks!

### Product features

- > Matching high-speed rotors for Eppendorf Centrifuges 5430/R, 5427 R, 5804/R and 5810/R
- > 5.0 mL adapters and inserts for all existing Eppendorf rotors, with bore holes for 15 mL or 50 mL tubes
- > functional rack for bench work
- > Storage boxes for freezing
- > 5.0 mL thermoblocks for Eppendorf ThermoMixer™ C, Thermomixer® comfort, ThermoStat C and ThermoStat plus
- > 5.0 mL ReservoirRack Module for the automated pipetting system epMotion

i For more information go to [www.eppendorf.com/5mL](http://www.eppendorf.com/5mL)

## Ordering information

Description	Order no.	Price
<b>Eppendorf Tubes® 5.0 mL, 5.0 mL</b>		
Eppendorf Quality™, 200 tubes (2 bags x 100 tubes)	0030 119.401	28.20 £
PCR clean, 200 tubes (2 bags x 100 tubes)	0030 119.460	31.60 £
Eppendorf Biopur®, 50 tubes, individually wrapped	0030 119.479	34.80 £
sterile, 200 tubes (10 bags x 20 tubes)	0030 119.487	34.80 £
<b>Eppendorf Tubes® 5.0 mL, amber, 5.0 mL</b>		
Eppendorf Quality™, amber (light protection), 200 tubes (2 bags x 100 tubes)	0030 119.452	35.90 £
<b>Adapter</b> , for 1 Eppendorf Tubes® 5.0 mL 5.0 mL, for Rotor F-34-6-38, set of 2 pcs.	5804 777.000	54.10 £
<b>Adapter</b> , for 1 Eppendorf Tubes® 5.0 mL 5.0 mL, for Rotor FA-45-6-30, set of 2 pcs.	5820 730.005	54.10 £
<b>Adapter</b> , for 1 Eppendorf Tubes® 5.0 mL 5.0 mL, for Rotor A-4-38, set of 2 pcs.	5702 733.008	58.30 £
<b>DNA LoBind Tubes</b> , DNA LoBind, 5.0 mL		
PCR clean, 200 tubes (4 bags x 50 tubes)	0030 108.310	38.20 £
<b>Eppendorf SmartBlock™ 5.0 mL</b> , thermoblock for 8 Eppendorf Tubes® 5.0 mL, 8 x 5.0 mL reaction vessels	5309 000.007	406.00 £
<b>Protein LoBind Tubes</b> , Protein LoBind, 5.0 mL		
PCR clean, 100 tubes (2 bags x 50 tubes)	0030 108.302	29.90 £
<b>Eppendorf Tubes® 5.0 mL starter pack</b> , 5.0 mL, 400 tubes (2 packages with 2 bags of 100 each), 2 racks (with 16 locations each), white, 8 universal adapters for rotors with bore holes for 15 mL conical tubes, PCR clean	0030 119.380	99.60 £
<b>Tube Rack</b> , 16 wells, for 5.0 mL tubes, 2 pcs., white, also suitable for 15 mL conical screw cap tubes	0030 119.495	32.40 £
<b>Storage Box 5.0 mL</b> , for 25 tubes 5.0 mL, 2 pcs., 5 x 5 grid, blue and red, made of polypropylene, for freezing to -86°C, with lid and alphanumeric code, height 65 mm	0030 127.943	14.90 £
<b>Rotor FA-45-12-17</b> , incl. rotor lid, for 12 Eppendorf Tubes® 5.0 mL	5409 700.006	580.00 £
<b>Rotor FA-45-20-17</b> , incl. rotor lid, for 20 Eppendorf Tubes® 5.0 mL	5820 765.003	930.00 £
<b>Rotor FA-45-16-17</b> , incl. rotor lid	5427 750.002	580.00 £
<b>Adapter</b> , for Eppendorf Tubes® 5.0 mL, for Rotor F-35-6-30, small rotor bore, set of 2 pcs.	5427 746.005	62.20 £
<b>Adapter</b> , for Eppendorf Tubes® 5.0 mL, for Rotor F-35-6-30, large rotor bore, set of 2 pcs.	5427 747.001	62.20 £
<b>Universal adapter</b> , for 1 Eppendorf Tubes® 5.0 mL, for centrifuges with rotors for conical 15 mL tubes, set of 8 pcs.	5820 732.008	16.60 £
<b>Exchangeable thermoblocks</b> , for 8 Eppendorf Tubes®, for 8 x 5.0 mL Eppendorf tubes®	5309 000.333	398.00 £
<b>ReservoirRack Module TC</b> , for use in epMotion® Reservoir Racks, temperable		
4 x Eppendorf Tubes® 5.0 mL	5075 799.340	240.00 £
<b>Adapter</b> , for 14 Eppendorf Tubes® 5.0 mL, for Rotor S-4-104, set of 2 pcs.	5825 739.000	194.00 £
<b>Adapter</b> , for 8 Eppendorf Tubes® 5.0 mL, for Rotor S-4-72, set of 2 pcs.	5804 793.005	126.00 £

i For more information go to [www.eppendorf.com/5mL](http://www.eppendorf.com/5mL)

NEW

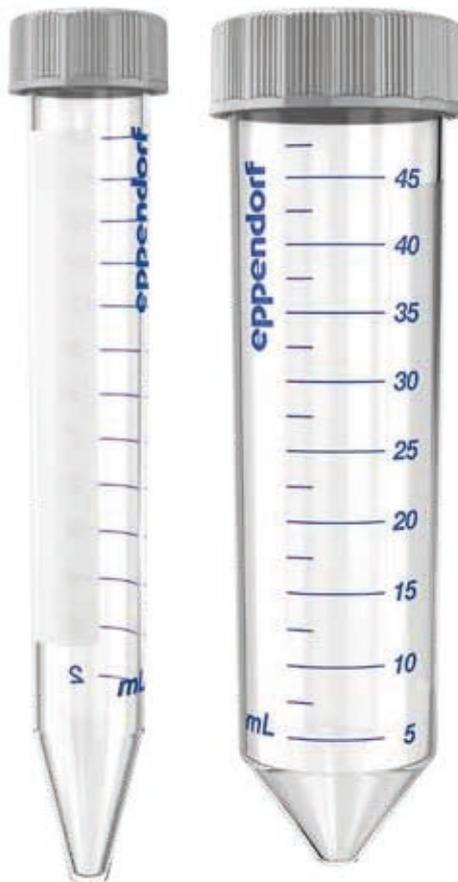
## Eppendorf Conical Tubes 15 mL and 50 mL

Cap with flattened and grooved sides

- > supports a user-friendly ergonomic handling
- > enables a stable upright positioning
- > minimizes contamination risk

Reliable and safe labelling due to a large writing area on the tube and due to a flat and light-colored cap

Precise dimensions enable maximum compatibility with centrifuge rotors, mixers and shakers



Premium USP class 6 raw material and no use of slip agents, plasticizers, and biocides during manufacturing ensure

- > highest sample integrity
- > high g-Safe® centrifugation stability
- > optimal sample and pellet visibility

Sterile and pyrogen-free

- > DNase-, RNase-, and DNA-free
- > each individual lot is checked and certified for quality and purity

### Description

The Eppendorf Conical Tubes 15 mL and 50 mL extend the volume range of Eppendorf's microcentrifuge tubes. Safe design and easy handling ensure best sample processing. They represent the optimal solution for cell culture and cell biology applications as well as for sample preparation protocols in microbiology and molecular biology laboratories. Whether centrifugation, mixing, or other applications – the Eppendorf Conical Tubes 15 mL and 50 mL will perfectly fit into your workflows.

### Applications

- > Convenient and safe cell culture applications
- > Sample preparation in microbiology and molecular biology labs
- > Storage of samples and solution with larger volumes
- > Preparation of mastermixes and buffers



Technical specifications		
Model	Eppendorf Conical Tubes 15 mL	Eppendorf Conical Tubes 50 mL
Material	Tube: Polypropylene (raw material USP class 6), Screw cap: High-density-Polyethylene (HDPE)	Tube: Polypropylene (raw material USP class 6), Screw cap: High-density-Polyethylene (HDPE)
Dimensions	121 mm / 17 mm	116 mm / 30 mm
Operating temperature	-86 °C – 100 °C	-86 °C – 100 °C
Centrifugation stability	up to 19.500 x g <sup>1)</sup>	up to 19.500 x g <sup>1)</sup>
Purity grade	Sterile, pyrogen-, DNase-, RNase-, and DNA-free	Sterile, pyrogen-, DNase-, RNase-, and DNA-free

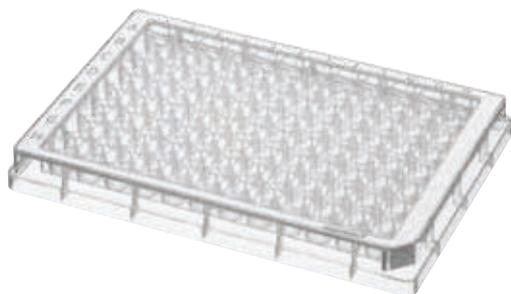
<sup>1)</sup> Test conditions: Rotor FA-45-6-30 in Eppendorf Centrifuge 5810 R (using a suitable centrifuge adapter for 15 mL tube), sample: saline solution (density: 1.0 g/mL), controlled centrifugation temp.: 25 °C, centrifugation time: 90 min

#### Ordering information

Description	Order no.	Price
<b>Eppendorf Conical Tubes 15 mL, 15 mL</b>		
Sterile, pyrogen-, DNase-, RNase-, and DNA-free, 500 tubes (10 bags x 50 tubes)	0030 122.151	117.00 £
<b>Eppendorf Conical Tubes 50 mL, 50 mL</b>		
Sterile, pyrogen-, DNase-, RNase-, and DNA-free, 500 tubes (20 bags x 25 tubes)	0030 122.178	139.00 £

i For more information go to [www.eppendorf.com/consumables](http://www.eppendorf.com/consumables)

# Eppendorf Microplates



## Description

The Eppendorf Microplates bring a unique clarity to your laboratory! It has never been this easy to pipette, control and recover samples with a polypropylene microplate. The easy-to-read alphanumeric label of the OptiTrack® matrix on each plate makes it unbelievably easy to identify individual wells, speeds up the filling process and significantly reduces the risk of errors. The high transparency is „one-of-a-kind“ and ensures that you can always quickly locate your samples. The Microplates are also available in Eppendorf LoBind material for maximum sample recovery

## Applications

- > Sample storage and preparation
- > Assays that require high resistance against temperature or solvents
- > Active ingredient screening
- > Combinatorial chemistry
- > Storage of cDNA or genomic banks
- > Protein analysis
- > Genotyping
- > Storage of siRNA or oligonucleotide libraries
- > Preparation of tissue and plant lysates

## Product features

- > Unmatched, transparent polypropylene (PP) for improved sample visibility
- > OptiTrack® Matrix: 30 % faster sample identification and fewer pipetting errors via high-contrast alphanumeric labeling
- > RecoverMax® well design: Optimized well geometry for minimal remaining volume and excellent mixing properties
- > Raised well rims and smooth surface for reliable closing, even with heat sealing
- > g-Safe®: exceptional centrifugation stability up to 6,000 x g
- > Polypropylene guarantees high resistance to chemicals, mechanical stress and temperature extremes
- > Manufactured without demoulding aids, softeners or biocides – materials which could have a negative effect on bioassays
- > Guaranteed functionality from -86 °C to 100 °C
- > Autoclavable (121 °C, 20 min)
- > Available with barcode. Additional details available at: [www.eppendorf.com/barcode](http://www.eppendorf.com/barcode)

**i** For more information go to [www.eppendorf.com/consumables](http://www.eppendorf.com/consumables)

**Ordering information**

Description	OptiTrack® frame color	Order no.	Price
<b>Microplate 96/F</b> , wells clear			
PCR clean, 80 plates (5 bags x 16 plates)	<input type="checkbox"/> white	0030 601.106	152.00 £
sterile, 80 plates (5 bags x 16 plates)	<input type="checkbox"/> white	0030 602.102	174.00 £
<b>Microplate 96/U</b> , wells clear			
PCR clean, 80 plates (5 bags x 16 plates)	<input type="checkbox"/> white	0030 601.203	152.00 £
sterile, 80 plates (5 bags x 16 plates)	<input type="checkbox"/> white	0030 602.200	174.00 £
<b>Microplate 96/V</b> , wells clear			
PCR clean, 80 plates (5 bags x 16 plates)	<input type="checkbox"/> white	0030 601.300	152.00 £
sterile, 80 plates (5 bags x 16 plates)	<input type="checkbox"/> white	0030 602.307	174.00 £
<b>Microplate 384/F</b> , wells clear			
PCR clean, 80 plates (5 bags x 16 plates)	<input type="checkbox"/> white	0030 621.107	387.00 £
sterile, 80 plates (5 bags x 16 plates)	<input type="checkbox"/> white	0030 622.103	445.00 £
<b>Microplate 384/V</b>			
PCR clean, 80 plates (5 bags x 16 plates)	<input type="checkbox"/> white	0030 621.301	387.00 £
sterile, 80 plates (5 bags x 16 plates)	<input type="checkbox"/> white	0030 622.308	445.00 £

## Sealing options for Sample Preparation and Storage



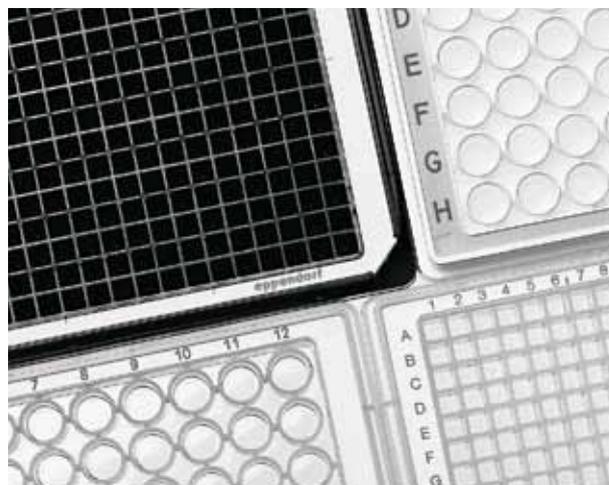
**Product features**

- > Storage Film and Foil glued seals for simple and dependable sealing during sample storage
- > Heat Sealing Film and Foil for continuous locking with the best evaporation protection (see heat sealing materials)
- > Foil products are made of aluminum, can be pierced, and protect light-sensitive samples
- > Film products are transparent and provide protection against unwanted punctures
- > Eppendorf Plate Lid: stable, flexible protection of samples during short-term storage
- > Eppendorf Sealing Mats are autoclavable and reusable
- > Eppendorf Plates® are designed to be heat-sealed up to 5 times

**Ordering information**

Description	Order no.	Price
<b>Eppendorf Storage Film</b> , self-adhesive, PCR clean, 100 pcs. (2 bags x 50 pcs.)	0030 127.870	94.00 £
<b>Eppendorf Storage Foil</b> , self-adhesive, PCR clean, 100 pcs.	0030 127.889	85.10 £
<b>Eppendorf Sealing Mat</b> , for DWP 96/1000, Eppendorf Quality™, 80 pcs. (5 bags x 16 pcs.)	0030 127.552	109.00 £
<b>Eppendorf Sealing Mat</b> , for DWP 96/2000, Eppendorf Quality™, 50 pcs. (5 bags x 10 pcs.)	0030 127.579	109.00 £
<b>Eppendorf Plate® Lid</b> , for MTP and DWP, PCR clean, 80 pcs. (5 bags x 16 pcs.)	0030 131.517	82.70 £
<b>Eppendorf Plate® Lid</b> , for MTP and DWP, sterile, 80 pcs. (5 bags x 16 pcs.)	0030 131.525	104.00 £

# Eppendorf Assay/Reader Microplates



## Description

Eppendorf assay plates are optimized for measuring absorbance assays in the visible and UV range, fluorescence and chemiluminescence assays. Solid plates are suitable for top-reading plate readers. Clear plates and black/clear plates can be used with top- and bottom-reading plate readers.

The black Eppendorf Microplates are ideal for fluorescence detection. An excellent signal-to-noise ratio provides low detection limits in assays - for clear signals even with low-concentration samples! The white Eppendorf Microplates maximize reflection for high sensitivity during detection of luminescence or weak fluorescence signals.

## Applications

- > Clear VIS and UV-VIS plates for all absorbance assays in the visible and UV range
- > Black and white Microplates for fluorescence and luminescence detection.
- > DNA- and Protein concentration with absorbance or fluorescent dyes
- > Cell based assays
- > Cell viability and apoptosis assays
- > Cell imaging
- > Protocols that require high resistance against temperature or solvents
- > Dilution series
- > Preparation of tissue and plant lysates

## Product features

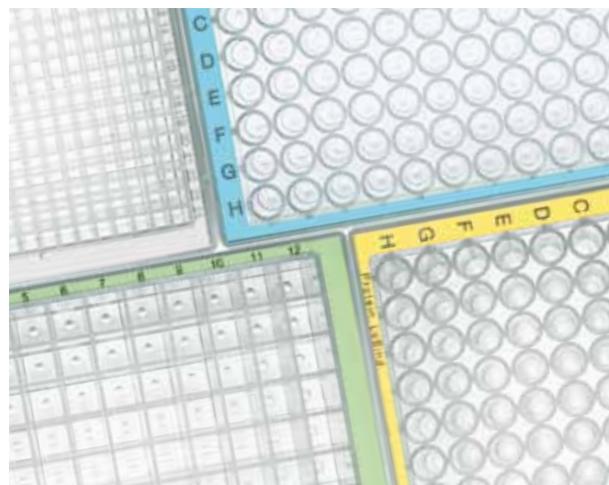
- > UV-VIS microplates feature an ultrathin film bottom for excellent light transmission in the UV range
- > Black Microplates offer an excellent signal-to-noise ratio - for clear signals even with low-concentration samples
- > White Eppendorf Microplates are optimized for highest sensitivity in the detection of luminescence signals by maximizing reflection
- > Solid black and white assay plates are made of polypropylene resulting in high resistance to chemicals, mechanical stress and temperature extremes
- > All plates are optimized for minimal autofluorescence and autoluminescence
- > PCR clean or Sterile: Every lot is individually tested and certified for guaranteed purity and highest reliability

**Ordering information**

Description	Material	Order no.	Price
<b>Microplate 96/F</b> , wells white			
PCR clean, border gray, 80 plates (5 bags x 16 plates)	polypropylene	0030 601.475	211.00 £
<b>Microplate 96/U</b> , wells white			
PCR clean, border gray, 80 plates (5 bags x 16 plates)	polypropylene	0030 601.572	211.00 £
<b>Microplate 96/V</b> , wells white			
PCR clean, border gray, 80 plates (5 bags x 16 plates)	polypropylene	0030 601.670	211.00 £
<b>Microplate 384/V</b> , wells white			
PCR clean, border gray, 80 plates (5 bags x 16 plates)	polypropylene	0030 621.670	543.00 £
<b>Microplate 96/F</b> , wells black			
PCR clean, border white, 80 plates (5 bags x 16 plates)	polypropylene	0030 601.700	211.00 £
<b>Microplate 96/U</b> , wells black			
PCR clean, border white, 80 plates (5 bags x 16 plates)	polypropylene	0030 601.807	211.00 £
<b>Microplate 96/V</b> , wells black			
PCR clean, border white, 80 plates (5 bags x 16 plates)	polypropylene	0030 601.904	211.00 £
<b>Microplate 384/V</b> , wells black			
PCR clean, border white, 80 plates (5 bags x 16 plates)	polypropylene	0030 621.905	543.00 £
<b>Microplate UV-VIS 96/F</b> , wells clear			
PCR clean, border colorless, 40 plates (4 bags x 10 plates)	polystyrene/film	0030 741.048	359.00 £
<b>Microplate VIS 96/F</b> , wells clear			
PCR clean, border colorless, 40 plates (4 bags x 10 plates)	polystyrene	0030 730.020	48.90 £
<b>Eppendorf Cell Imaging Plates</b> , with lid, black with clear F-bottom. TC treated, sterile, free of detectable pyrogens, RNase and DNase, DNA. Non-cytotoxic.			
96-Well Cell Imaging Plate with 25 µm film bottom, individually wrapped, 20 pcs.	polystyrene/film	0030 741.013	204.00 £

<sup>11</sup> For more Cell Imaging plates go to chapter Cell Imaging Consumables

# Eppendorf Deepwell Plates



## Description

Eppendorf Deepwell Plates 96 and 384 are high-performance plates for all manual and automated applications – from sample storage at -86 °C to DNA denaturation at 100 °C. Manufactured from pure polypropylene (PP), these plates offer innovative features: more dependability. More efficiency. More stability. The plates are available with a white, yellow, green or blue border. For easy identification of wells, a high-contrast alphanumeric label is laser-engraved in the border. This allows you to find your sample up to 30 % more quickly while reducing pipetting errors. With all of these sophisticated features, these plates set new standards for your laboratory.

## Applications

- > Sample storage and preparation
- > Bacteria and yeast cultivation
- > DNA and RNA isolation with high throughput
- > Storage of cDNA or genomic banks
- > Storage of siRNA or oligonucleotide libraries
- > Protein analysis
- > Storage of valuable protein and DNA samples in Eppendorf LoBind Plates
- > Plasmid purification with high throughput
- > Creating dilutions series

## Product features

- > OptiTrack® matrix: 30 % faster sample identification and fewer pipetting errors via high-contrast alphanumeric labeling
- > Conical RecoverMax® well design: Optimized well geometry for maximum sample recovery and excellent mixing properties
- > Minimal remaining volume and high uniformity from well to well
- > Raised well rims and smooth surface for reliable closing, even with heat sealing
- > Easy and reliable stacking
- > g-Safe®: exceptional centrifugation stability up to 6,000 x g for faster protocols and improved sample quality
- > High-quality polypropylene guarantees high resistance to chemicals, mechanical stress and temperature extremes
- > Manufactured without demoulding aids, softeners or biocides – materials which could have a negative effect on bioassays
- > Autoclavable (121 °C, 20 min)
- > Available with barcode. Additional details available at: [www.eppendorf.com/barcode](http://www.eppendorf.com/barcode)

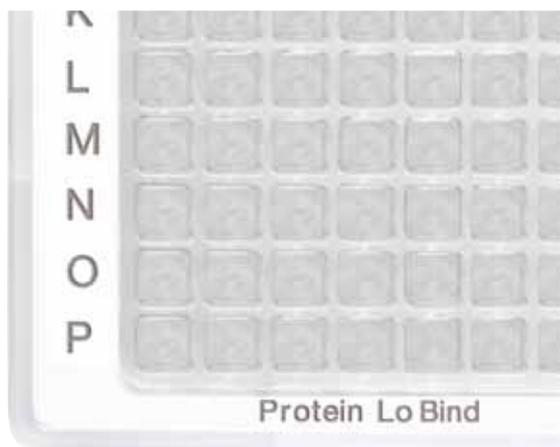
**i** For more information go to [www.eppendorf.com/Deepwellplates](http://www.eppendorf.com/Deepwellplates)

## Ordering information

Description	OptiTrack® frame color	Order no.	Price
<b>Deepwell Plate 96/2000 µL, wells clear, 2,000 µL</b>			
PCR clean, 20 plates (5 bags x 4 plates)	□ white	0030 501.306	126.00 £
PCR clean, 20 plates (5 bags x 4 plates)	■ yellow	0030 501.314	126.00 £
PCR clean, 20 plates (5 bags x 4 plates)	■ green	0030 501.330	126.00 £
PCR clean, 20 plates (5 bags x 4 plates)	■ blue	0030 501.349	126.00 £
PCR clean, 80 plates (10 bags x 8 plates)	□ white	0030 505.301	457.00 £
sterile, 20 plates (5 bags x 4 plates)	□ white	0030 502.302	147.00 £
sterile, 20 plates (5 bags x 4 plates)	■ yellow	0030 502.310	147.00 £
sterile, 20 plates (5 bags x 4 plates)	■ green	0030 502.337	147.00 £
sterile, 20 plates (5 bags x 4 plates)	■ blue	0030 502.345	147.00 £
sterile, 80 plates (10 bags x 8 plates)	□ white	0030 506.308	529.00 £
<b>Deepwell Plate 96/1000 µL, wells clear, 1,000 µL</b>			
PCR clean, 20 plates (5 bags x 4 plates)	□ white	0030 501.209	108.00 £
PCR clean, 20 plates (5 bags x 4 plates)	■ yellow	0030 501.217	108.00 £
PCR clean, 20 plates (5 bags x 4 plates)	■ green	0030 501.233	108.00 £
PCR clean, 20 plates (5 bags x 4 plates)	■ blue	0030 501.241	108.00 £
PCR clean, 80 plates (10 bags x 8 plates)	□ white	0030 505.204	387.00 £
sterile, 20 plates (5 bags x 4 plates)	□ white	0030 502.205	124.00 £
sterile, 20 plates (5 bags x 4 plates)	■ yellow	0030 502.213	124.00 £
sterile, 20 plates (5 bags x 4 plates)	■ green	0030 502.230	124.00 £
sterile, 20 plates (5 bags x 4 plates)	■ blue	0030 502.248	124.00 £
sterile, 80 plates (10 bags x 8 plates)	□ white	0030 506.200	445.00 £
<b>Deepwell Plate 96/500 µL, wells clear, 500 µL</b>			
PCR clean, 40 plates (5 bags x 8 plates)	□ white	0030 501.101	235.00 £
PCR clean, 40 plates (5 bags x 8 plates)	■ yellow	0030 501.110	235.00 £
PCR clean, 40 plates (5 bags x 8 plates)	■ green	0030 501.136	235.00 £
PCR clean, 40 plates (5 bags x 8 plates)	■ blue	0030 501.144	235.00 £
PCR clean, 120 plates (10 bags x 12 plates)	□ white	0030 505.107	635.00 £
sterile, 40 plates (5 bags x 8 plates)	□ white	0030 502.108	272.00 £
sterile, 40 plates (5 bags x 8 plates)	■ yellow	0030 502.116	272.00 £
sterile, 40 plates (5 bags x 8 plates)	■ green	0030 502.132	272.00 £
sterile, 40 plates (5 bags x 8 plates)	■ blue	0030 502.140	272.00 £
sterile, 120 plates (10 bags x 12 plates)	□ white	0030 506.103	730.00 £
<b>Deepwell Plate 384/200 µL, wells clear, 200 µL</b>			
PCR clean, 40 plates (5 bags x 8 plates)	□ white	0030 521.102	265.00 £
PCR clean, 120 plates (10 bags x 12 plates)	□ white	0030 525.108	715.00 £
sterile, 40 plates (5 bags x 8 plates)	□ white	0030 522.109	304.00 £
sterile, 120 plates (10 bags x 12 plates)	□ white	0030 526.104	823.00 £

i For more information go to [www.eppendorf.com/Deepwellplates](http://www.eppendorf.com/Deepwellplates)

# Protein LoBind Plates



## Description

When biological samples are stored or incubated in standard vessels, over 90 % of the sample volume can be lost within 24 hours as a result of binding to the plastic surface. Eppendorf LoBind Plates maximize sample recovery by significantly reducing sample binding to the surface. A special, two-component polymer mix creates a hydrophilic surface that guarantees optimal recovery rates of valuable samples. Protein LoBind Plates have been specially designed for use in protein research or with sensitive proteomic test methods, and frequently provide significantly improved analysis results.

## Applications

- > Preparation or storage of protein, peptide or antibody samples
- > Enzymatic assays – the hydrophilic surface reduces denaturation when it comes into contact with the tube inner wall
- > Prevention of sample loss during storage of virus stock solutions
- > Storage of cell suspensions

## Product features

- > LoBind material guarantees maximum sample recovery for improved assay results
- > Free of surface coating (e.g., silicone) to minimize the risk of sample interference
- > Lot-tested and certified free of DNA, DNAase, RNase and PCR inhibitors (PCR clean)
- > Available in tube, microplate, and deepwell plate formats for easy-up scaling
- > Unique OptiTrack® matrix: 30 % faster sample identification and fewer pipetting errors
- > RecoverMax® well design: Optimized well geometry for minimal remaining/dead volume and excellent mixing properties
- > Raised well rims and a smooth surface guarantee reliable sealing in plates
- > Available with barcode. Additional details available at: [www.eppendorf.com/barcode](http://www.eppendorf.com/barcode)

**i** For more information go to [www.eppendorf.com/consumables](http://www.eppendorf.com/consumables)

**Ordering information**

Description	OptiTrack® frame color	Order no.	Price
<b>Microplate 384/V-PP, Protein LoBind</b>			
PCR clean, 80 plates (5 x 16 plates)	<input type="checkbox"/> white	0030 624.300	699.00 £
PCR clean, 240 plates (10 x 24 plates)	<input type="checkbox"/> white	0030 628.306	1,570.00 £
<b>Deepwell Plate 96/2000 µL, Protein LoBind</b>			
PCR clean, 20 plates (5 bags x 4 plates)	<input type="checkbox"/> white	0030 504.305	255.00 £
<b>Deepwell Plate 96/1000 µL, Protein LoBind</b>			
PCR clean, 20 plates (5 bags x 4 plates)	<input type="checkbox"/> white	0030 504.208	216.00 £
PCR clean, 20 plates (5 bags x 4 plates)	<input checked="" type="checkbox"/> yellow	0030 504.216	216.00 £
PCR clean, 80 plates (10 bags x 8 plates)	<input type="checkbox"/> white	0030 508.203	775.00 £
<b>Deepwell Plate 96/500 µL, Protein LoBind</b>			
PCR clean, 40 plates (5 bags x 8 plates)	<input type="checkbox"/> white	0030 504.100	472.00 £
PCR clean, 40 plates (5 bags x 8 plates)	<input checked="" type="checkbox"/> yellow	0030 504.119	472.00 £
PCR clean, 120 plates (10 bags x 12 plates)	<input type="checkbox"/> white	0030 508.106	1,272.00 £
<b>Deepwell Plate 384/200 µL, Protein LoBind</b>			
PCR clean, 40 plates (5 bags x 8 plates)	<input type="checkbox"/> white	0030 524.101	529.00 £
PCR clean, 120 plates (10 bags x 12 plates)	<input type="checkbox"/> white	0030 528.107	1,429.00 £

i For more information go to [www.eppendorf.com/consumables](http://www.eppendorf.com/consumables)

# DNA LoBind Plates



## Description

DNA LoBind Plates improve recovery of nucleic acids by reducing their absorption to the tube wall. A combination of special manufacturing technologies and selected polypropylene batches ensures nearly 100 % recovery of DNA/RNA molecules – without surface coating to eliminate the risk of sample contamination. DNA LoBind Plates are batch-tested and certified by an independent laboratory to be free from DNA, DNase, RNase, and PCR inhibitors. Eppendorf DNA LoBind Plates are ideal for sample preparation of long-term storage of nucleic acids in forensic, microarrays, NGS applications, and many others.

## Applications

- > Preparation or storage of DNA and RNA samples
- > Forensic trace analysis
- > Preparing dilution series in quantitative PCR
- > Sample preparation in next-generation sequencing
- > Creation of genomic or oligonucleotide libraries

## Product features

- > LoBind material guarantees maximum sample recovery for improved assay results
- > Free of surface coating (e.g. silicone) to minimize the risk of sample interference
- > Lot-tested and certified free of DNA, DNAase, RNase and PCR inhibitors (PCR clean)
- > Available in tube, microplate, and deepwell plate formats for easy-up scaling
- > Unique OptiTrack® matrix: 30 % faster sample identification and fewer pipetting errors
- > RecoverMax® well design: Optimized well geometry for minimal remaining/dead volume and excellent mixing properties
- > Raised well rims and a smooth surface guarantee reliable sealing
- > Available with barcode. Additional details available at: [www.eppendorf.com/barcode](http://www.eppendorf.com/barcode)

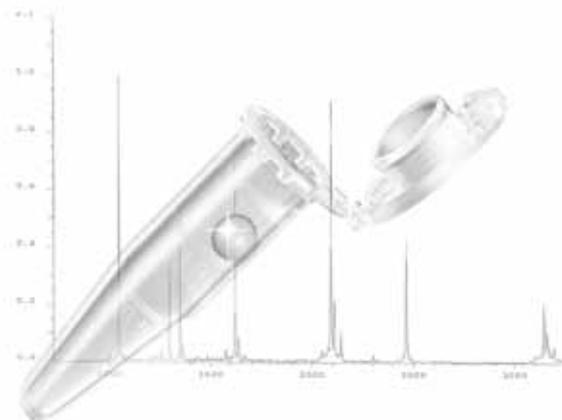
i For more information go to [www.eppendorf.com/consumables](http://www.eppendorf.com/consumables)

**Ordering information**

Description	OptiTrack® frame color	Order no.	Price
<b>Microplate 96/V-PP, DNA LoBind</b>			
PCR clean, 80 plates (5 bags x 16 plates)	<input type="checkbox"/> white	0030 603.303	164.00 £
<b>Microplate 384/V-PP, DNA LoBind</b>			
PCR clean, 80 plates (5 bags x 16 plates)	<input type="checkbox"/> white	0030 623.304	445.00 £
PCR clean, 240 plates (10 bags x 24 plates)	<input type="checkbox"/> white	0030 627.300	1,003.00 £
<b>Deepwell Plate 96/1000 µL, DNA LoBind</b>			
PCR clean, 20 plates (5 bags x 4 plates)	<input type="checkbox"/> white	0030 503.201	119.00 £
PCR clean, 20 plates (5 bags x 4 plates)	<input checked="" type="checkbox"/> blue	0030 503.244	119.00 £
PCR clean, 80 plates (10 bags x 8 plates)	<input type="checkbox"/> white	0030 507.207	426.00 £
<b>Deepwell Plate 96/500 µL, DNA LoBind</b>			
PCR clean, 40 plates (5 bags x 8 plates)	<input type="checkbox"/> white	0030 503.104	259.00 £
PCR clean, 40 plates (5 bags x 8 plates)	<input checked="" type="checkbox"/> blue	0030 503.147	259.00 £
PCR clean, 120 plates (10 bags x 12 plates)	<input type="checkbox"/> white	0030 507.100	702.00 £
<b>Deepwell Plate 384/200 µL, DNA LoBind</b>			
PCR clean, 40 plates (5 bags x 8 plates)	<input type="checkbox"/> white	0030 523.105	292.00 £
PCR clean, 120 plates (10 bags x 12 plates)	<input type="checkbox"/> white	0030 527.100	787.00 £

i For more information go to [www.eppendorf.com/consumables](http://www.eppendorf.com/consumables)

# Protein LoBind Tubes



## Description

When biological samples are stored or incubated in standard vessels, over 90 % of the sample volume can be lost within 24 hours as a result of binding to the plastic surface. Eppendorf LoBind Tubes maximize sample recovery by significantly reducing sample binding to the surface. A special, two-component polymer mix creates a hydrophilic surface that guarantees optimal recovery rates of valuable samples. Protein LoBind Tubes have been specially designed for use in protein research or with sensitive proteomic test methods, and frequently provide significantly improved analysis results.

## Applications

- > Preparation or storage of protein, peptide or antibody samples
- > Enzymatic assays - the hydrophilic surface reduces denaturation when it comes into contact with the tube inner wall
- > Prevention of sample loss during storage of virus stock solutions
- > Storage of cell suspensions

## Product features

- > LoBind material guarantees maximum sample recovery for improved assay results
- > Free of surface coating (e.g., silicone) to minimize the risk of sample interference
- > Lot-tested and certified free of DNA, DNAase, RNase and PCR inhibitors (PCR clean)
- > Available in tube, microplate, and deepwell plate formats for easy-up scaling
- > Precise lid sealing for minimum evaporation rates

## Ordering information

Description	Order no.	Price
<b>Protein LoBind Tubes</b> , Protein LoBind, 0.5 mL PCR clean, 100 tubes (2 bags x 50 tubes)	0030 108.094	9.80 £
<b>Protein LoBind Tubes</b> , Protein LoBind, 1.5 mL PCR clean, 100 tubes (2 bags x 50 tubes)	0030 108.116	7.50 £
<b>Protein LoBind Tubes</b> , Protein LoBind, 2.0 mL PCR clean, 100 tubes (2 bags x 50 tubes)	0030 108.132	11.90 £
<b>Protein LoBind Tubes</b> , Protein LoBind, 5.0 mL PCR clean, 100 tubes (2 bags x 50 tubes)	0030 108.302	29.90 £

i For more information go to [www.eppendorf.com/consumables](http://www.eppendorf.com/consumables)

# DNA LoBind Tubes



## Description

DNA LoBind Tubes improve recovery of nucleic acids by reducing their absorption to the tube wall. A combination of special manufacturing technologies and selected polypropylene batches ensures nearly 100 % recovery of DNA/RNA molecules – without surface coating to eliminate the risk of sample contamination. DNA LoBind Tubes are batch-tested and certified by an independent laboratory to be free from DNA, DNase, RNase, and PCR inhibitors. Eppendorf DNA LoBind Tubes are ideal for sample preparation of long-term storage of nucleic acids in forensic, microarrays, NGS applications, and many others.

## Applications

- > Preparation or storage of DNA and RNA samples
- > Forensic trace analysis
- > Preparing dilution series in quantitative PCR
- > Sample preparation in next-generation sequencing
- > Creation of genomic or oligonucleotide libraries

## Product features

- > LoBind material guarantees maximum sample recovery for improved assay results
- > Free of surface coating (e.g., silicone) to minimize the risk of sample interference
- > Lot-tested and certified free of DNA, DNAase, RNase and PCR inhibitors (PCR clean)
- > Available in tube, microplate, and deepwell plate formats for easy-up scaling
- > Precise lid sealing for minimal evaporation rates in tube format
- > Rated up to 30,000 x g (25,000 x g for 2.0 mL tube) centrifugation speed for molecular biology applications

## Ordering information

Description	Order no.	Price
<b>DNA LoBind Tubes, DNA LoBind, 0.5 mL</b>		
PCR clean, 250 tubes (5 bags x 50 tubes)	0030 108.035	18.50 £
<b>DNA LoBind Tubes, DNA LoBind, 1.5 mL</b>		
PCR clean, 250 tubes (5 bags x 50 tubes)	0030 108.051	10.20 £
<b>DNA LoBind Tubes, DNA LoBind, 2.0 mL</b>		
PCR clean, 250 tubes (5 bags x 50 tubes)	0030 108.078	12.30 £
<b>DNA LoBind Tubes, DNA LoBind, 5.0 mL</b>		
PCR clean, 200 tubes (4 bags x 50 tubes)	0030 108.310	38.20 £

i For more information go to [www.eppendorf.com/consumables](http://www.eppendorf.com/consumables)

# Tube Racks



## Tube Rack

- > Ergonomic design
- > Numbered slots
- > Optimized capacity (24 places for 0.5 mL - 2.0 mL vessels, 16 places for 5.0 mL vessels)
- > UV-resistant
- > Autoclavable (121 °C, 20 min)
- > Variable: rack for Eppendorf 5.0 mL vessels, can also be used for 15 mL conical screw cap tubes
- > Robust coupling mechanism for 0.5 mL - 2.0 mL racks
- > Stackable

### Ordering information

Description	Order no.	Price
<b>Tube Rack</b> , 24 locations, for 0.5 mL vessels	0030 123.107	20.90 £
<b>Tube Rack</b> , 24 locations, for 1.5/2.0 mL vessels	0030 123.115	20.90 £
<b>Tube Rack</b> , 16 wells, for 5.0 mL tubes, 2 pcs., white, also suitable for 15 mL conical screw cap tubes	0030 119.495	32.40 £

i For more information go to [www.eppendorf.com/temperaturecontrol-mixing](http://www.eppendorf.com/temperaturecontrol-mixing)

# Tubes Accessories



## Micropestle

- > Two sides for optimal fit in 1.5 mL and 2.0 mL vessels
- > Autoclavable (121°C, 20 min)

### Ordering information

Description	Order no.	Price
<b>Micropestle</b> , for resuspending pellets in 1.5/2.0 mL vessels, 10 pcs.	0030 120.973	29.90 £



## Storage Box 5.0 mL

- > Made of Polypropylene (PP) for high stability in freezing applications
- > Alphanumeric code for easy sample reference
- > Dimensions optimized for Eppendorf Tubes 5.0 mL for space saving storage

### Ordering information

Description	Order no.	Price
<b>Eppendorf Tubes® 5.0 mL</b> , 5.0 mL		
Eppendorf Quality™, 200 tubes (2 bags x 100 tubes)	0030 119.401	28.20 £
<b>Storage Box 5.0 mL</b> , for 25 tubes 5.0 mL, 2 pcs., 5 x 5 grid, blue and red, made of polypropylene, for freezing to -86°C, with lid and alphanumeric code, height 65 mm	0030 127.943	14.90 £

i For more information go to [www.eppendorf.com/temperaturecontrol-mixing](http://www.eppendorf.com/temperaturecontrol-mixing)



Model	MiniSpin/ MiniSpin plus	5418/5418 R	5424/5424 R	5427 R
Positioning	Entry-level	Medium capacity for molecular biology	The laboratory standard	High throughput
Page(s)	<b>176</b>	<b>178</b>	<b>180</b>	<b>184</b>
Max. capacity	12 x 1.5/2.0 mL	18 x 1.5/2.0 mL	24 x 1.5/2.0 mL	48 x 1.5/2.0 mL
Max. RCF	12,000 x g/14,100 x g	16,873 x g	20,238 x g/21,130 x g	25,000 x g
Max. speed	13,400 rpm/ 14,500 rpm	14,000 rpm	14,680 rpm/ 15,000 rpm	16,220 rpm
Rotors available	2	1	4	9
Temperature range	–	– /0 °C to +40 °C	– /-10 °C to +40 °C	-11 °C to 40 °C
Dimensions (W x D x H)	22.6 x 23.9 x 13.0 cm	21 x 30 x 21 cm/30 x 46 x 25 cm	24 x 32 x 23 cm/29 x 48 x 26 cm	31.9 x 54.0 x 25.4 cm
Height (with open lid)	25 cm	43 cm/52 cm	44 cm/51 cm	
Weight w/o accessories	4.3 kg	7.7 kg/22 kg	13.4 kg/21 kg	30 kg
Max. power consumption	70 W/85 W	170 W/320 W	250 W/350 W	550 W
Tubes/plates capacity <sup>1</sup>				
1.5/2.0 mL Eppendorf tubes	12	18	24	48
Eppendorf Tubes® 5.0 mL	–	–	–	12
8-place PCR strips	2	–	4	6
15 mL conical	–	–	–	–
50 mL conical	–	–	–	–
2.6 – 7 mL (13 mm)	–	–	–	–
3 – 15 mL (16 mm)	–	–	–	–
7 – 17 mL (17.5 mm)	–	–	–	–
180 – 250 mL bottle	–	–	–	–
500 mL Corning®	–	–	–	–
750 mL bottle	–	–	–	–
1,000 mL bottle	–	–	–	–
MTP/PCR-plates	–	–	–	–
Deepwell plates (DWP)	–	–	–	–

<sup>1</sup> F = Fixed-angle rotor, S = Swing-bucket rotor



5430/5430 R	5702/5702 R/5702 RH	5804/5804 R	5810/5810 R	5920 R
Microcentrifuge with multipurpose capabilities	Low speed centrifuge optimized for medium capacity needs in clinical research and cell culture labs.	Compact high speed centrifuge for medium capacity needs. With swing-bucket rotor and deepwell plate capacity	The workhorse for medium to high-throughput laboratories: Highly versatile, high speed and high capacity	The workhorse for high to very high-throughput laboratories: Highly versatile, high speed and high capacity
<b>190</b>	<b>196</b>	<b>204</b>	<b>204</b>	<b>230</b>
48 x 1.5/2.0 mL, 6 x 50 mL, 2 x MTP	4 x 100 mL	4 x 250 mL/ 2 x 5 MTP	4 x 750 mL/ 4 x 4 MTP	4 x 1,000 mL/ 4 x 7 MTP
30,130 x g	3,000 x g	20,913 x g	20,913 x g	22,132 x g
17,500 rpm	4,400 rpm	14,000 rpm	14,000 rpm	14,000 rpm
12	6	12	18	
- /-11 °C to 40 °C	- /-9 °C to 40 °C/ -9 °C to 42 °C	- /-9 °C to 40 °C	- /-9 °C to 40 °C	-11 °C to 40 °C
33 x 42 x 25 cm/38 x 64 x 29 cm	32 x 40 x 24 cm/38 x 58 x 26 cm/38 x 58 x 26 cm	47 x 55 x 34 cm/64 x 55 x 34 cm	54 x 61 x 35 cm/70 x 61 x 35 cm	74 x 71 x 40 cm
56 cm/63 cm	53 cm/60 cm/60 cm	74 cm	80 cm	94 cm
29 kg/56 kg	20 kg/36 kg/36 kg	55 kg/80 kg	68 kg/99 kg	139 kg
475 W/1,050 W	200 W/380 W/380 W	900 W/1,650 W	900 W/1,650 W	1,300 W
48	24 (F)/16 (S)	104	200	200
16	4	20 (F)/32 (S)	20 (F)/56 (S)	20 (F)/56 (S)
8	-	6	6	
6	20 (F)/8 (S)	40 (F)/32 (S)	40 (F)/56 (S)	6 (F)/108 (S)
6	4 (A)	6 (F)/16 (S)	6 (F)/28 (S)	6 (F)/52 (S)
12	36	6 (F)/56 (S)	6 (F)/100 (S)	6 (F)/196 (S)
12	30	6 (F)/52 (S)	6 (F)/80 (S)	6 (F)/144 (S)
12	24	6 (F)/48 (S)	6 (F)/80 (S)	6 (F)/80 (S)
-	-	4	4	8
-	-	-	4	4
-	-	-	4	4
-	-	-	-	4
2	-	10	16	28
2	-	4	4	8

i For more information go to [www.eppendorf.com/centrifugation](http://www.eppendorf.com/centrifugation)

## MiniSpin®/ MiniSpin® plus



### Description

Powerful and user-friendly MiniSpin and MiniSpin plus are small enough so that each workstation can be equipped with a "personal" centrifuge. Two models are available to meet your performance requirements. MiniSpin plus provides speed sufficient for molecular biology separations.

### Product features

- > Rotor capacity: 12 × 1.5/2.0 mL vessels, 2 × PCR strip
- > Max. speed: 14,100 × g (14,500 rpm)
- > Extremely compact footprint
- > Acceleration and deceleration time < 13 s
- > User-friendly digital display for time and speed
- > Metal rotor bowl
- > Separate short-spin key for fast and comfortable centrifugation
- > Optional ventilation flow reduces heating and protects temperature-sensitive samples
- > Soft-touch lid closure for ergonomic lid locking
- > Automatic lid opening at the end of the run to prevent sample warming and to allow easy access to samples

### Special features for MiniSpin plus

- > Automatic rpm/rcf conversion
- > Extended time to 99 min or continuous centrifugation

**i** For more information go to [www.eppendorf.com/centrifugation](http://www.eppendorf.com/centrifugation)



PCR-strip rotor (F-55-16-5-PCR)

Technical specifications		
Model	MiniSpin	MiniSpin plus
Max. RCF	12,000 x g	14,100 x g
Speed	800 – 13,400 rpm (100 rpm steps)	800 – 14,500 rpm (100 rpm steps)
Max. capacity	12 x 1.5/2.0 mL	12 x 1.5/2.0 mL
Rotors available	2	
Acceleration time	13 s	13 s
Deceleration time	12 s	12 s
Timer	15 s – 30 min	15 s to 99 min, with continuous run function
Noise level	< 49 dB(A)	< 52 dB(A)
Max. power consumption	70 W	85 W
Dimensions (W x D x H)	22.6 x 23.9 x 13.0 cm	22.6 x 23.9 x 13.0 cm
Height (with open lid)	25 cm	25 cm
Weight w/o accessories	4.3 kg	4.3 kg

## Ordering information

Description	Order no.	Price
Centrifuge MiniSpin®, with Rotor F-45-12-11, 230 V/50 – 60 Hz (GB)	5452 000.069	721.00 £
Centrifuge MiniSpin® plus, with Rotor F-45-12-11, 230 V/50 – 60 Hz (GB)	5453 000.062	937.00 £
Rotor F-45-12-11	5452 720.008	172.00 £
Rotor F-55-16-5-PCR	5452 727.007	194.00 £
Adapter, for 1 tube 0.5 mL, max. Ø 6 mm or microtainer 0.6 mL, max. Ø 6 mm, for all 1.5/2.0 mL rotors, set of 6 pcs.	5425 716.001	10.10 £
Adapter, for 1 tube 0.4 mL, max. Ø 6 mm, for all 1.5/2.0 mL rotors, set of 6 pcs.	5425 717.008	10.10 £
Adapter, for 1 PCR tube 0.2 mL, max. Ø 6 mm, for all 1.5/2.0 mL rotors, set of 6 pcs.	5425 715.005	10.10 £

✎ Ordering information for other voltage options begins on page 484

## Centrifuges 5418/ 5418 R



### Description

Centrifuges 5418 and 5418 R with their 18-place capacity rotors are specifically designed for low to medium capacity in 1.5/2.0 mL tubes and Microtainer®. Their speed of up to 16,873 x g allows for standard molecular biology and clinical applications. Both models have an especially low access height and are characterized by a remarkably quiet operation.

### Product features

- > Max. rotor capacity: 18 x 1.5/2.0 mL vessels
- > Max. speed: 16,873 x g (14,000 rpm)
- > Small footprint and low access height of 23 cm
- > OptiBowl® design for quiet operation - even without a rotor lid
- > Eppendorf QuickLock® rotor allows for fast and ergonomic lid locking
- > Soft-touch one-finger lid closure for ergonomic operation
- > Full digital display with time and speed display
- > Separate short-spin key for quick centrifugation

- > Automatic lid opening at the end of the run - prevents sample warming and allows easy access to samples (only Centrifuge 5418)
- > Certified aerosol-tight rotor comes standard for safe centrifugation of hazardous samples

### Special features for Centrifuge 5418 R

- > Temperature range from 0 °C to +40 °C
- > Guaranteed temperature of 4 °C at maximum rotational speed
- > FastTemp™ function for quick pre-cooling and maximum temperature accuracy inside the rotor
- > ECO power shut-off engages after 8 hours of non use to reduce energy consumption (46 % over night) and extend compressor life (can be deactivated)
- > The patented compressor technology reduces vibrations and protects your samples
- > Built-in condensation drain to eliminate water accumulation in the rotor chamber

i For more information go to [www.eppendorf.com/centrifugation](http://www.eppendorf.com/centrifugation)



Rotor FA-45-18-11 for 18 x 1.5/2.0 mL tubes comes standard with unique Eppendorf QuickLock aerosol-tight lid for fast and reliable locking

Technical specifications		
Model	5418	5418 R
Max. RCF	16,873 x g	16,873 x g
Speed	100 – 14,000 rpm (100 rpm steps)	100 – 14,000 rpm (100 rpm steps)
Max. capacity	18 x 1.5/2.0 mL	18 x 1.5/2.0 mL
Rotors available	1	1
Acceleration time	16 s	11 s
Deceleration time	18 s	12 s
Timer	30 s to 9:59 h, with continuous run function	30 s – 99 min, with continuous run function
Noise level	< 51 dB(A)	< 55 dB(A), with rotor lid: < 47 dB(A)
Max. power consumption	170 W	320 W
Dimensions (W x D x H)	21 x 30 x 21 cm	30 x 46 x 25 cm
Height (with open lid)	43 cm	52 cm
Weight w/o accessories	7.7 kg	22 kg
Temperature range	–	0 °C to +40 °C

#### Ordering information

Description	Order no.	Price
Centrifuge 5418, with Rotor FA-45-18-11 and rotor lid, 230 V/50 – 60 Hz (GB)	5418 000.068	1,361.00 £
Centrifuge 5418 R, refrigerated, with Rotor FA-45-18-11 and rotor lid, 230 V/50 – 60 Hz (GB)	5401 000.064	3,287.00 £
Adapter, for 1 tube 0.5 mL, max. Ø 6 mm or microtainer 0.6 mL, max. Ø 6 mm, for all 1.5/2.0 mL rotors, set of 6 pcs.	5425 716.001	10.10 £
Adapter, for 1 tube 0.4 mL, max. Ø 6 mm, for all 1.5/2.0 mL rotors, set of 6 pcs.	5425 717.008	10.10 £
Adapter, for 1 PCR tube 0.2 mL, max. Ø 6 mm, for all 1.5/2.0 mL rotors, set of 6 pcs.	5425 715.005	10.10 £

✎ Ordering information for other voltage options begins on page 484

# Centrifuges 5424/ 5424 R



## Description

Centrifuge 5424 and Centrifuge 5424 R are the new laboratory standard. With their 24-place capacity and speed up to 21,130 x g they are perfectly equipped for all modern molecular biology applications in Eppendorf and PCR tubes. When working with MiniPrep spin columns kits, the unique Eppendorf Kit rotor® with raised rim solves the issue of open tube caps shearing off during the elution step. Refrigerated Centrifuge 5424 R features state of the art cooling technology to ensure energy efficiency and high temperature accuracy for maximum sample protection. For ease-of-operation and time savings, Centrifuge 5424 R cools down to 4 °C in only 8 minutes.

## Product features

- > Max. rotor capacity: 24 x 1.5/2.0 mL vessels
- > Max. speed: 20,238 x g (14,680 rpm)
- > OptiBowl® design for quiet operation, even without a rotor lid
- > Soft-touch one-finger lid closure for ergonomic operation
- > SOFT brake to protect sensitive samples
- > Full digital display with time and speed display

- > Separate short-spin key for quick centrifugation
- > Automatic lid opening at the end of the run - prevents sample warming and allows easy access to samples (only Centrifuge 5424)
- > Certified aerosol-tight rotor comes standard for safe centrifugation of hazardous samples
- > Available as a rotary knob version for fast parameter selection, or keypad version for easy cleaning

## Special features for Centrifuge 5424 R

- > Temperature range from -10 °C to +40 °C
- > Guaranteed temperature of 4 °C at maximum rotational speed
- > FastTemp function for quick pre-cooling of the centrifuge, e.g. from ~ 21 °C to 4 °C in only 8 minutes
- > ECO power shut-off engages after 8 hours of non use to reduce energy consumption (40 % over night) and extend compressor life (can be deactivated)
- > The patented compressor technology reduces vibrations and protects your samples
- > Built-in condensation drain to eliminate water accumulation in the rotor chamber

i For more information go to [www.eppendorf.com/centrifugation](http://www.eppendorf.com/centrifugation)



Technical specifications		
Model	5424	5424 R
Max. RCF	20,238 x g	21,130 x g
Speed	100 – 14,680 rpm (50 rpm steps)	100 – 15,000 rpm (50 rpm steps)
Max. capacity	24 x 1.5/2.0 mL	24 x 1.5/2.0 mL
Rotors available	4	4
Acceleration time	16 s	15 s
Deceleration time	18 s	16 s
Timer	30 s to 9:59 h, with continuous run function	30 s to 9:59 h, with continuous run function
SOFT brake function	yes	yes
Noise level	< 51 dB(A) with Rotor FA-45-24-11	< 54 dB(A), with rotor lid: < 48 dB(A) with Rotor FA-45-24-11
Max. power consumption	250 W	350 W
Dimensions (W x D x H)	24 x 32 x 23 cm	29 x 48 x 26 cm
Height (with open lid)	44 cm	51 cm
Weight w/o accessories	13.4 kg	21 kg
Cooling		refrigerated
Temperature range	–	-10 °C to +40 °C

#### Ordering information

Description	Order no.	Price
<b>Centrifuge 5424</b> , with Rotor FA-45-24-11		
rotary knobs, 230 V/50 – 60 Hz (GB)	5424 000.460	1,743.00 £
keypad, 230 V/50 – 60 Hz (GB)	5424 000.061	1,743.00 £
<b>Centrifuge 5424</b> , without rotor		
rotary knobs, 230 V/50 – 60 Hz (GB)	5424 000.665	1,402.00 £
keypad, 230 V/50 – 60 Hz (GB)	5424 000.266	1,402.00 £
<b>Centrifuge 5424 R</b> , refrigerated, with Rotor FA-45-24-11		
rotary knobs, 230 V/50 – 60 Hz (GB)	5404 000.464	3,909.00 £
keypad, 230 V/50 – 60 Hz (GB)	5404 000.065	3,909.00 £
<b>Centrifuge 5424 R</b> , refrigerated, without rotor		
rotary knobs, 230 V/50 – 60 Hz (GB)	5404 000.669	3,465.00 £
keypad, 230 V/50 – 60 Hz (GB)	5404 000.260	3,465.00 £

Ordering information for other voltage options begins on page 484

## Rotors for Centrifuge 5424/ 5424 R



### Rotor FA-45-24-11

- > Max. speed: 21,130 x g (15,000 rpm)
- > Max. capacity: 24 x 1.5/2.0 mL tubes
- > Aerosol-tight for safe centrifugation of hazardous samples



### Rotor FA-45-24-11-Special

- > Max. speed: 21,130 x g (15,000 rpm)
- > Max. capacity: 24 x 1.5/2.0 mL tubes
- > Aerosol-tight for safe centrifugation of hazardous samples
- > PTFE coating for increased chemical resistance



### Rotor F-45-18-11-Kit

- > Max. speed: 18,111 x g (15,000 rpm)
- > Max. capacity: 18 x spin columns or 1.5/2.0 mL tubes
- > Extended rim that protects tube caps from shearing off



### Rotor F-45-32-5-PCR

- > Max. speed: 18,615 x g (15,000 rpm)
- > Max. capacity: 4 x PCR strips



**Adapter for 0.2 mL PCR Tubes**

Ideal to spin down PCR Tubes after reaction setup. Adapter fits in any Eppendorf 1.5/2.0 mL rotor



**Adapter for 0.8 mL BD Microtainer® and 0.5 mL tubes**

The adapter can be used with every Eppendorf rotor for 1.5/2.0 mL tubes



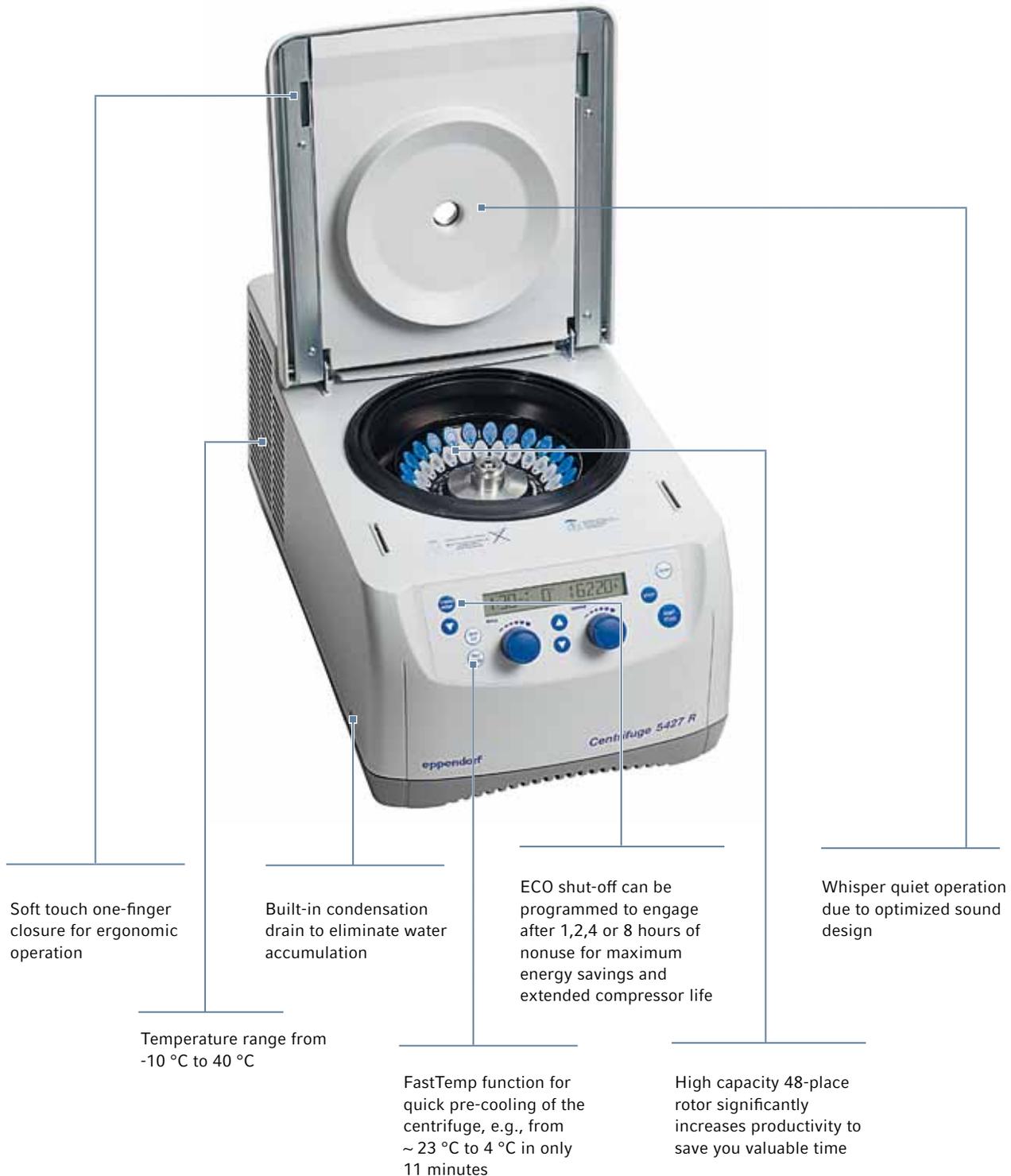
Watch video clips of Centrifuges 5424/R on our dedicated mobile website or [www.eppendorf.com/centrifugation](http://www.eppendorf.com/centrifugation)

**Ordering information**

Description	Order no.	Price
<b>Rotor FA-45-24-11</b>	5424 702.007	453.00 £
<b>Rotor FA-45-24-11-Special</b>	5424 700.004	573.00 £
<b>Rotor F-45-18-11-Kit</b>	5424 706.002	358.00 £
<b>Rotor F-45-32-5-PCR</b>	5424 704.000	324.00 £
<b>Adapter</b> , for 1 tube 0.5 mL, max. Ø 6 mm or microtainer 0.6 mL, max. Ø 6 mm, for all 1.5/2.0 mL rotors, set of 6 pcs.	5425 716.001	10.10 £
<b>Adapter</b> , for 1 tube 0.4 mL, max. Ø 6 mm, for all 1.5/2.0 mL rotors, set of 6 pcs.	5425 717.008	10.10 £
<b>Adapter</b> , for 1 PCR tube 0.2 mL, max. Ø 6 mm, for all 1.5/2.0 mL rotors, set of 6 pcs.	5425 715.005	10.10 £

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# Centrifuge 5427 R



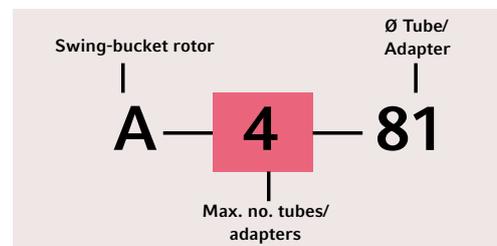
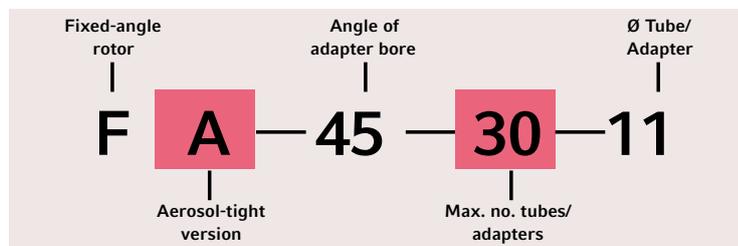


**Description**

Centrifuge 5427 R was designed with high-throughput research applications in mind. With its aerosol-tight 48-place rotor it handles even the toughest challenges in a safe and reliable manner to provide you the efficiency boost you need. All aerosol-tight rotors, including the new rotors for Eppendorf Tubes® 5.0 mL as well as the 24 x 1.5/2.0 mL swing-bucket rotor are equipped with the Eppendorf QuickLock® lids for easy rotor lid opening and closing. Choose the Centrifuge 5427 R if a 24-place microcentrifuge (e.g. our Centrifuge 5424 R) doesn't meet your needs regarding tube capacity and if you don't need the extra versatility our cross-over Centrifuge 5430 R can offer you.

**Product features**

- > Rotor capacity: 48 x 1.5/2.0 mL, 12 x 5.0 mL
- > Max. speed: 25,000 x g (16,220 rpm)
- > High capacity 48-place rotor significantly increases productivity to save you valuable time
- > Whisper quiet operation due to optimized sound design
- > Soft touch one-finger closure for ergonomic operation
- > Temperature range from -10 °C to 40 °C
- > FastTemp function for quick pre-cooling of the centrifuge, e.g., from ~ 23 °C to 4 °C in only 11 minutes
- > ECO shut-off can be programmed to engage after 1,2,4 or 8 hours of non use for maximum energy savings and extended compressor life
- > Built-in condensation drain to eliminate water accumulation
- > Eppendorf QuickLock® rotor allows for fast and ergonomic lid locking



**Rotor code**

All Eppendorf rotors are identified using a simple, alphanumeric format that represents the technical specifications in a uniform series of letters and numbers.

i For more information go to [www.eppendorf.com/centrifugation](http://www.eppendorf.com/centrifugation)

# Centrifuge 5427 R

Technical specifications	
Model	5427 R
Max. RCF	25,000 x g
Max. speed	16,220 rpm
Max. capacity	48 x 1.5/2.0 mL
Rotors available	9
Acceleration time	18 s
Deceleration time	18 s
Timer	10 s to 9:59 h
Noise level	< 46 dB(A) with Rotor F-45-48-11
Max. power consumption	550 W
Dimensions (W x D x H)	31.9 x 54.0 x 25.4 cm
Weight w/o accessories	30 kg
Temperature range	-11 °C to 40 °C

## Ordering information

Description	Order no.	Price
Centrifuge 5427 R, refrigerated, rotary knobs, 230 V/50 – 60 Hz (GB)	5409 000.063	3,982.00 £
Centrifuge 5427 R, refrigerated, with Rotor FA-45-30-11, rotary knobs, 230 V/50 – 60 Hz (GB)	5409 000.560	4,397.00 £
Centrifuge 5427 R, refrigerated, with Rotor FA-45-48-11, rotary knobs, 230 V/50 – 60 Hz (GB)	5409 000.268	4,480.00 £
Centrifuge 5427 R, refrigerated, with Rotor FA-45-12-17, rotary knobs, 230 V/50 – 60 Hz (GB)	5409 000.667	4,554.00 £

✂ Ordering information for other voltage options begins on page 484



Watch video clips of Centrifuges 5427 R on our dedicated mobile website or [www.eppendorf.com/centrifugation](http://www.eppendorf.com/centrifugation)

i For more information go to [www.eppendorf.com/centrifugation](http://www.eppendorf.com/centrifugation)

## Rotors for Centrifuge 5427 R



### Rotor F-45-48-11

- > Max. speed: 18,210 x g (12,700 rpm)
- > Max. capacity: 48 x 1.5/2.0 mL tubes



### Rotor FA-45-48-11

- > Max. speed: 18,210 x g (12,700 rpm)
- > Max. capacity: 48 x 1.5/2.0 mL tubes
- > Aerosol-tight with Eppendorf QuickLock® lid



### Rotor FA-45-30-11

- > Max. speed: 20,800 x g (14,000 rpm)
- > Max. capacity: 30 x 1.5/2.0 mL tubes
- > Aerosol-tight with Eppendorf QuickLock® lid



### Rotor F-45-30-11

- > Max. speed: 20,800 x g (14,000 rpm)
- > Max. capacity: 30 x 1.5/2.0 mL tubes

## Rotors for Centrifuge 5427 R



### Rotor FA-45-24-11

- > Max. speed: 25,000 x g (16,220 rpm)
- > Max. capacity: 24 x 1.5/2.0 mL tubes
- > Aerosol-tight with Eppendorf QuickLock® lid



### Rotor FA-45-24-11-Kit

- > Max. speed: 19,100 x g (13,200 rpm)
- > Rotor with higher edge for safe centrifugation of up to 24 spin columns
- > Aerosol-tight with Eppendorf QuickLock® lid



### Rotor S-24-11-AT

- > Max. speed: 16,049 x g (12,700 rpm)
- > Swing-bucket rotor for 24 x 1.5/2.0 mL tubes
- > Aerosol-tight with Eppendorf QuickLock® lid
- > Perfect for phase-separation applications such as phenol-chloroform extraction



### Rotor FA-45-12-17

- > Max. speed: 20,600 x g (14,000 rpm)
- > Max capacity: 12 x Eppendorf Tubes® 5.0 mL
- > Aerosol-tight with Eppendorf QuickLock® lid



### Rotor F-45-48-5-PCR

- > Max. speed: 11,710 x g (10,500 rpm)
- > PCR strip rotor for up to 48 x 0.2 mL PCR tubes

#### Ordering information

Description	Order no.	Price
<b>Rotor FA-45-48-11</b> , incl. rotor lid	5409 710.001	505.00 £
<b>Rotor F-45-48-11</b> , incl. rotor lid	5409 712.004	366.00 £
<b>Rotor FA-45-30-11</b> , incl. rotor lid	5409 706.004	434.00 £
<b>Rotor F-45-30-11</b> , incl. rotor lid	5409 708.007	314.00 £
<b>Rotor FA-45-24-11</b> , incl. rotor lid	5409 702.009	470.00 £
<b>Rotor FA-45-24-11-Kit</b> , incl. rotor lid	5409 704.001	556.00 £
<b>Rotor S-24-11-AT</b> , incl. wind shield and rotor lid	5409 715.003	747.00 £
<b>Rotor F-45-48-5-PCR</b>	5409 714.007	380.00 £
<b>Rotor FA-45-12-17</b> , incl. rotor lid, for 12 Eppendorf Tubes® 5.0 mL	5409 700.006	580.00 £
<b>Adapter</b> , for 1 vessel 1.5/2.0 mL, for Rotors FA-45-12-17, FA-45-16-17 and FA-45-20-17, set of 4 pcs.	5820 768.002	24.10 £
<b>Adapter</b> , for 1 cryo tube, for Rotors FA-45-12-17, FA-45-16-17 and FA-45-20-17, set of 4 pcs.	5820 769.009	24.10 £
<b>Adapter</b> , for 1 HLPC tube, for Rotors FA-45-12-17, FA-45-16-17 and FA-45-20-17, set of 4 pcs.	5820 770.007	24.10 £
<b>Adapter</b> , for 1 tube 0.5 mL, max. Ø 6 mm or microtainer 0.6 mL, max. Ø 6 mm, for all 1.5/2.0 mL rotors, set of 6 pcs.	5425 716.001	10.10 £
<b>Adapter</b> , for 1 tube 0.4 mL, max. Ø 6 mm, for all 1.5/2.0 mL rotors, set of 6 pcs.	5425 717.008	10.10 £
<b>Adapter</b> , for 1 PCR tube 0.2 mL, max. Ø 6 mm, for all 1.5/2.0 mL rotors, set of 6 pcs.	5425 715.005	10.10 £

✎ Ordering information for other voltage options begins on page 484

i For more information go to [www.eppendorf.com/centrifugation](http://www.eppendorf.com/centrifugation)

## Centrifuges 5430/ 5430 R



### Description

Unique cross-over Centrifuges 5430 and 5430 R combine the best features of a microcentrifuge (small footprint) and multipurpose centrifuge (versatility) in one instrument. These centrifuges spin rotors for Eppendorf tubes and PCR strips as you would expect from any microcentrifuge.

But that's not all. In a compact size, Centrifuges 5430 and 5430 R also accommodate rotors for microplates and 15/50 mL conical tubes. Now, the rotor program has been expanded with additional Eppendorf QuickLock® rotors. This includes 48-place rotors (1.5/2.0 mL), a 16-place rotor for Eppendorf Tubes® 5.0 mL and a swing-bucket rotor (24 x 1.5/2.0 mL). With their unmatched versatility, Centrifuges 5430 and 5430 R are the flagship products among the Eppendorf microcentrifuge portfolio.

### Product features

- > Max. rotor capacity: 48 x 1.5/2.0 mL, 6 x 50 mL, 2 x MTP
- > Max. speed: 30,130 x g (17,500 rpm)
- > Remarkable versatility with 12 different rotors
- > Soft-touch one-finger lid closure for ergonomic operation

- > Menu-driven, multi lingual operation menu (English, German, French, Spanish) with large backlit display
- > 5 program keys for easy access to routine programs
- > Saves up to 50 user-defined programs
- > Automatic imbalance detection
- > Eppendorf QuickLock® – System for quickly opening and closing the rotor lid

### Special features for Centrifuge 5430 R

- > Temperature range: -11 °C to +40 °C
- > The patented compressor technology reduces vibrations and protects your samples
- > Continuous cooling maintains a constant temperature after the run has been completed – your samples stay cool
- > FastTemp pro® function for programmable pre-cooling according to day and time
- > ECO shut-off engages after 8 hours of non use to reduce energy consumption (37 % overnight) and extend compressor life (can be deactivated in menu)
- > Built-in condensation drain to eliminate water accumulation

**i** For more information go to [www.eppendorf.com/centrifugation](http://www.eppendorf.com/centrifugation)



Technical specifications		
<b>Model</b>	<b>5430</b>	<b>5430 R</b>
<b>Max. RCF</b>	30,130 x g	30,130 x g
<b>Max. speed</b>	17,500 rpm	17,500 rpm
<b>Max. capacity</b>	48 x 1.5/2.0 mL, 6 x 50 mL, 2 x MTP	48 x 1.5/2.0 mL, 6 x 50 mL, 2 x MTP
<b>Rotors available</b>	12	12
<b>Acceleration time</b>	14 s	14 s
<b>Deceleration time</b>	15 s	15 s
<b>Timer</b>	30 s to 99:59 h, with continuous run function	30 s to 99:59 h, with continuous run function
<b>SOFT brake function</b>	yes	yes
<b>Noise level</b>	< 58 dB(A) with Rotor F-45-30-11	< 54 dB(A) with Rotor F-45-30-11
<b>Max. power consumption</b>	475 W	1,050 W
<b>Dimensions (W x D x H)</b>	33 x 42 x 25 cm	38 x 64 x 29 cm
<b>Height (with open lid)</b>	56 cm	63 cm
<b>Weight w/o accessories</b>	29 kg	56 kg
<b>Cooling</b>		refrigerated
<b>Temperature range</b>	–	-11 °C to 40 °C

#### Ordering information

Description	Order no.	Price
<b>Centrifuge 5430</b> , with Rotor FA-45-30-11 incl. rotor lid		
keypad, 230 V/50 – 60 Hz (GB)	5427 000.267	2,615.00 £
rotary knobs, 230 V/50 – 60 Hz (GB)	5427 000.461	2,615.00 £
<b>Centrifuge 5430</b> , without rotor		
keypad, 230 V/50 – 60 Hz (GB)	5427 000.062	2,326.00 £
rotary knobs, 230 V/50 – 60 Hz (GB)	5427 000.666	2,326.00 £
<b>Centrifuge 5430 R</b> , refrigerated, with Rotor FA-45-30-11 incl. rotor lid		
keypad, 230 V/50 – 60 Hz (GB)	5428 000.066	5,105.00 £
rotary knobs, 230 V/50 – 60 Hz (GB)	5428 000.465	5,105.00 £
<b>Centrifuge 5430 R</b> , refrigerated, without rotor		
keypad, 230 V/50 – 60 Hz (GB)	5428 000.260	4,732.00 £
rotary knobs, 230 V/50 – 60 Hz (GB)	5428 000.660	4,732.00 £

✎ Ordering information for other voltage options begins on page 484

## Rotors for Centrifuge 5430/ 5430 R



### Rotor FA-45-48-11

- > Max. speed: 18,210 x g (12,700 rpm)
- > Max. capacity: 48 x 1.5/2.0 mL tubes
- > Aerosol-tight for safe centrifugation of hazardous samples
- > Eppendorf QuickLock® lid



### Rotor F-45-48-11

- > Max. speed: 18,210 x g (12,700 rpm)
- > Max. capacity: 48 x 1.5/2.0 mL tubes



### Rotor S-24-11-AT

- > Max. speed: 16,049 x g (12,700 rpm)
- > Swing-bucket rotor for 24 x 1.5/2.0 mL tubes
- > Aerosol-tight with Eppendorf QuickLock® lid
- > Perfect for phase-separation applications such as phenol-chloroform extraction



### Rotor FA-45-16-17

- > Max. speed: 21,191 x g (14,200 rpm)
- > Max. capacity: 16 x Eppendorf Tubes® 5.0 mL
- > Aerosol-tight for safe centrifugation of hazardous samples
- > Eppendorf QuickLock® lid

**Rotor FA-45-30-11**

- > Max. speed: 20,817 x g (14,000 rpm)
- > Max. capacity: 30 x 1.5/2.0 mL tubes
- > Aerosol-tight for safe centrifugation of hazardous samples
- > PTFE coating for increased chemical resistance
- > NEW: Eppendorf QuickLock® lid

**Rotor FA-45-24-11-Kit**

- > Max. speed: 19,090 x g (13,200 rpm)
- > Rotor with higher edge for safe centrifugation of up to 24 spin columns
- > Aerosol-tight for safe centrifugation of hazardous samples
- > NEW: Eppendorf QuickLock® lid

**Rotor F-45-30-11**

- > Max. speed: 20,817 x g (14,000 rpm)
- > Max. capacity: 30 x 1.5/2.0 mL tubes
- > PTFE coating for increased chemical resistance

**Rotor FA-45-24-11-HS**

- > Max. speed: 30,130 x g (17,500 rpm)
- > Max. capacity: 24 x 1.5/2.0 mL tubes
- > Extremely fast separation results
- > Aerosol-tight for safe centrifugation of hazardous samples
- > PTFE coating for increased chemical resistance

## Rotors for Centrifuge 5430/ 5430 R



### Rotor F-35-6-30

- > Max. speed: 7,745 x g (7,830 rpm)
- > Rotor for 6 x 15/50 mL conical or 12 x Vacutainer® tubes



### Rotor A-2-MTP

- > Max. speed: 2,204 x g (4,680 rpm)
- > 2-place swing-bucket rotor for MTP, PCR and deepwell plates
- > Windshield design for whisper quiet operation



### Rotor F-45-64-5-PCR

- > Max. speed: 13,543 x g (11,800 rpm)
- > PCR strip rotor for up to 48 x 0.2 mL PCR tubes



### Rotor F-45-18-17-Cryo

- > Max. speed: 8,324 x g (8,900 rpm)
- > 18-place rotor for Cryovials® and HPLC tubes

i For more information go to [www.eppendorf.com/centrifugation](http://www.eppendorf.com/centrifugation)

## Ordering information

Description	Order no.	Price
<b>Rotor FA-45-16-17</b> , incl. rotor lid	5427 750.002	580.00 £
<b>Rotor FA-45-48-11</b> , incl. rotor lid	5427 754.008	505.00 £
<b>Rotor F-45-48-11</b> , incl. rotor lid	5427 755.004	366.00 £
<b>Rotor S-24-11-AT</b> , incl. rotor lid	5427 757.007	747.00 £
<b>Rotor FA-45-30-11</b> , incl. rotor lid	5427 753.001	434.00 £
<b>Rotor FA-45-24-11-Kit</b> , incl. rotor lid	5427 752.005	556.00 £
<b>Rotor F-45-30-11</b> , incl. rotor lid	5427 712.003	322.00 £
<b>Rotor FA-45-24-11-HS</b> , incl. rotor lid	5427 710.000	448.00 £
<b>Rotor F-35-6-30</b> , incl. rotor lid, with adapter for 15 mL/50 mL conical tubes	5427 716.009	873.00 £
<b>Rotor A-2-MTP</b> , incl. wind shield and rotor lid, with 2 buckets	5427 700.005	873.00 £
<b>Rotor F-45-64-5-PCR</b> , incl. rotor lid and adapters	5427 714.006	531.00 £
<b>Rotor F-45-18-17-Cryo</b> , incl. rotor lid and adapters	5427 705.007	317.00 £
<b>Adapter</b> , for 1 cryo containers (max. Ø 13 mm) or lidded centrifugation tubes (Ø 12.2 mm), max. length 50 mm, for Rotor F-45-18-17-Cryo, set of 6 pcs.	5702 752.002	47.20 £
<b>Adapter</b> , for 1 vessel 1.5/2.0 mL, for Rotors FA-45-12-17, FA-45-16-17 and FA-45-20-17, set of 4 pcs.	5820 768.002	24.10 £
<b>Adapter</b> , for 1 cryo tube, for Rotors FA-45-12-17, FA-45-16-17 and FA-45-20-17, set of 4 pcs.	5820 769.009	24.10 £
<b>Adapter</b> , for 1 HPLC tube, for Rotors FA-45-12-17, FA-45-16-17 and FA-45-20-17, set of 4 pcs.	5820 770.007	24.10 £
<b>Adapter</b> , for 1 tube 0.5 mL, max. Ø 6 mm or microtainer 0.6 mL, max. Ø 6 mm, for all 1.5/2.0 mL rotors, set of 6 pcs.	5425 716.001	10.10 £
<b>Adapter</b> , for 1 tube 0.4 mL, max. Ø 6 mm, for all 1.5/2.0 mL rotors, set of 6 pcs.	5425 717.008	10.10 £
<b>Adapter</b> , for 1 HPLC vessel 1.5 mL, for Rotor F-45-18-17-Cryo	5427 708.006	88.40 £
<b>Adapter</b> , for 1 PCR tube 0.2 mL, max. Ø 6 mm, for all 1.5/2.0 mL rotors, set of 6 pcs.	5425 715.005	10.10 £

## Adapter options 6 x 15/50 mL conical tube rotor

Adapter	Rotor capacity <sup>3)</sup>	Max. tube dimensions Ø x L	Max. RCF	For bore hole	Order no. <sup>4)</sup>	Price
13 mm round	12	13 x 65 – 89 mm	6,443 x g	small	5427 740.007	62.20 £
			6,100 x g	large	5427 742.000	62.20 £
13 mm round	12	13 x 90 – 110 mm	7,471 x g	small	5427 741.003	62.20 £
			7,129 x g	large	5427 743.006	62.20 £
16 mm round	12	16 x 75 – 105 mm	7,005 x g	small	5427 732.004	62.90 £
			7,005 x g	large	5427 734.007	62.90 £
17 mm round	12	17 x 90 – 125 mm	7,745 x g	small	5427 735.003	62.90 £
			7,403 x g	large	5427 738.002	62.90 £
Eppendorf Tubes® 5.0 mL	12	17.5 x 80 mm	6,237 x g	small	5427 746.005	62.20 £
			7,129 x g	large	5427 747.001	62.20 £
15 mL conical	6	17.5 x 100 – 125 mm	7,540 x g	small	5427 726.004	57.50 £
30 mL round	6	26 x 92 – 112 mm	7,087 x g	large	5427 736.000	51.00 £
50 mL round	6	29 x 95 – 125 mm	7,581 x g	large	5427 737.006	51.00 £
50 mL conical	6 <sup>1)2)</sup>	29.5 x 100 – 125 mm	7,197 x g	large	5427 727.000	34.10 £
Centriprep®	6	29.5 x 100 – 125 mm	7,567 x g	large	5427 723.005	94.00 £

<sup>1)</sup> Three sets of 2 included within 6 x 15/50 mL rotor package. <sup>2)</sup> Adapter accommodates skirted 50 mL conical tubes. <sup>3)</sup> Please perform a manual test to determine the actual loading capacity. <sup>4)</sup> Set of 2

## Centrifuges 5702/ 5702 R/ 5702 RH



### Description

The 5702 family of low speed, general purpose centrifuges was especially designed to meet the requirement of low- to mid-throughput clinical research and cell culture labs. They are compact in design so that one can fit comfortably on every lab bench, quiet in operation to benefit your work environment, and provide 6 different rotor options to accommodate any type of tube.

The right model for your application:

- > Centrifuge 5702 for standard applications
- > Refrigerated Centrifuge 5702 R for heat sensitive samples
- > Heated and refrigerated Centrifuge 5702 RH allows centrifugation under biological conditions to improve cell viability for more accurate results in downstream applications (e.g. cell cultivation)

### Product features

- > Max. speed: 3,000 x g (4,400 rpm)
- > Very compact footprint to fit on every lab bench
- > Very quiet operation to benefit your environment
- > Low access height for simple loading and unloading of samples
- > SOFT brake function for slow acceleration and braking  
Optimized for cell separation by gradient centrifugation
- > "At set RPM" function starts the timer when the selected rotational speed is reached for reproducible centrifugation runs
- > Key lock to prevent unintentional adjustments
- > Stainless steel rotor chamber is rust-free and easy to clean
- > Electronic imbalance detection for maximum safety

### Special features for Centrifuge 5702 R and Centrifuge 5702 RH

- > Temperature settings from -9 °C to 40 °C
- > FastTemp function for fast precooling
- > Standby cooling keeps the 5702 R at set temperature when lid is closed
- > ECO shut-off engages after 8 hours of non-use to reduce energy consumption and extend compressor life
- > Integrated condensation drain removes water accumulations and prevents corrosion
- > Two program keys to store routine procedures
- > Active heating guarantees high temperature accuracy during the entire centrifugation cycle (only 5702 RH)



Centrifuge 5702 display



Centrifuges 5702 R and 5702 RH display

Technical specifications			
Model	5702	5702 R	5702 RH
Max. RCF	3,000 x g	3,000 x g	3,000 x g
Speed	100 – 4,400 rpm (100 rpm steps)	100 – 4,400 rpm (100 rpm steps)	100 – 4,400 rpm (100 rpm steps)
Max. capacity	4 x 100 mL	4 x 100 mL	4 x 100 mL
Rotors available	6	6	6
Acceleration time	25 s	25 s	25 s
Deceleration time	25 s	25 s	25 s
Timer	0 – 99 min, with continuous run function	0 – 99 min, with continuous run function	0 – 99 min, with continuous run function
SOFT brake function	yes	yes	yes
Noise level	< 51 dB(A) with Rotor A-4-38	< 45 dB(A) with Rotor A-4-38	< 45 dB(A) with Rotor A-4-38
Max. power consumption	200 W	380 W	380 W
Dimensions (W x D x H)	32 x 40 x 24 cm	38 x 58 x 26 cm	38 x 58 x 26 cm
Height (with open lid)	53 cm	60 cm	60 cm
Weight w/o accessories	20 kg	36 kg	36 kg
Cooling		refrigerated	refrigerated/heated
Temperature range	–	-9 °C to 40 °C	-9 °C to 42 °C

## Ordering information

Description	Order no.	Price
Centrifuge 5702, without rotor, 230 V/50 – 60 Hz (GB)	5702 000.060	1,287.00 £
Centrifuge 5702, with Rotor A-4-38 incl. adapters for 15/50 mL conical tubes, 230 V/50/60 Hz (GB)	5702 000.361	2,108.00 £
Centrifuge 5702 R, refrigerated, without rotor, 230 V/50 – 60 Hz (GB)	5703 000.063	3,052.00 £
Centrifuge 5702 R, refrigerated, with Rotor A-4-38 incl. adapters for 15/50 mL conical tubes, 230 V/50 – 60 Hz (GB)	5703 000.462	3,698.00 £
Centrifuge 5702 R, refrigerated, with Rotor A-4-38 incl. adapters for 13/16 mm blood collection tubes, 230 V/50 – 60 Hz (GB)	5703 000.365	3,791.00 £
Centrifuge 5702 RH, refrigerated/heated, without rotor, 230 V/50 – 60 Hz (GB)	5704 000.067	3,449.00 £

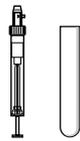
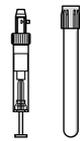
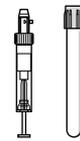
✎ Ordering information for other voltage options begins on page 484

## Rotor A-4-38 with Round Buckets



### Rotor A-4-38 with Round Buckets

- > Maximum speed: 3,000 × g (4,400 rpm)
- > Standard rotor for centrifugation of blood collection tubes or 15/50 mL conical tubes
- > Round buckets for vessels with 1.5 – 100 mL
- > Wide variety of adapters for all blood collection tubes and cell culture tube types
- > Aerosol-tight caps for safe centrifugation of hazardous samples optionally available

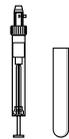
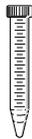
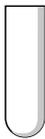
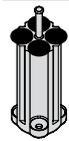
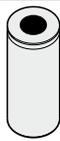
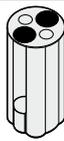
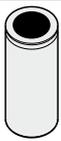
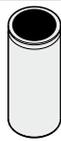
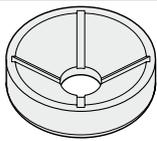
					
<b>Tube volume</b>	1.5 – 2.0 mL	1.1 – 1.4 mL	2 – 7 mL	2.6 – 7 mL	4 – 10 mL
<b>Max. tube diameter</b>	11 mm	8.5 mm	12.5 mm	13.5 mm	16 mm
<b>Max. vessel height</b>	43 mm	100 mm	100 mm	100 mm	100 mm
<b>Max. vessel height for use with cap/lid<sup>1)</sup></b>	43 mm	100 mm	100 mm	100 mm	100 mm
<b>Adapter</b>					
<b>Number of vessels per adapter/rotor</b>	4/16	5/20	5/20	4/16	4/16
<b>Bottom shape</b>	round	flat	flat	flat	flat
<b>Centrifugation radius</b>	134 mm	132 mm	132 mm	132 mm	132 mm
<b>Max. RCF</b>	2,900 × g	2,850 × g	2,850 × g	2,850 × g	2,850 × g
<b>Packing</b>	set of 2 pcs.	set of 2 pcs.			
<b>Order no.</b>	5702 745.006	5702 736.007	5702 737.003	5702 719.005	5702 735.000
<b>CHF</b>	121.00 £	116.00 £	116.00 £	116.00 £	116.00 £

<sup>1)</sup> Exceeding the maximum tube length may reduce the loading capacity of the rotor. Please perform a manual swing-out test before starting the centrifuge run to make sure the tubes do not hit the rotor yoke.

i For more information go to [www.eppendorf.com/centrifugation](http://www.eppendorf.com/centrifugation)

Ordering information

Description	Order no.	Price
<b>Rotor A-4-38</b>		
incl. 4 round buckets 100 mL	5702 720.003	693.00 £
<b>Round bucket 100 mL</b> , for Rotor A-4-38, set of 4	5702 722.006	391.00 £
<b>Aerosol-tight caps for 100 mL round buckets</b> , set of 2	5702 721.000	41.70 £

						
Eppendorf Tubes® 5.0 mL	9 – 15 mL	15 mL conical	15 mL conical	25 mL	50 mL conical	100 mL
17 mm	17.5 mm	17.2 mm	17.2 mm	25 mm	30 mm	38 mm
60 mm	100 mm	121 mm	121 mm	100 mm	115 mm	106 mm
60 mm	100 mm	120 mm		100 mm	115 mm	106 mm
						
1/4	4/16	1/4	2/8	1/4	1/4	1/4
flat	round	conical	conical	round	conical	round
136 mm	130 mm	137 mm	137 mm	135 mm	135 mm	135 mm
2,943 x g	2,800 x g	3,000 x g	3,000 x g	2,900 x g	2,900 x g	2,900 x g
set of 2 pcs.	set of 2 pcs.					
5702 733.008	5702 724.009	5702 732.001	5702 723.002	5702 717.002	5702 734.004	5702 718.009
58.30 £	116.00 £	64.90 £	116.00 £	64.90 £	64.90 £	64.90 £

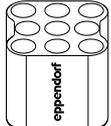
i For more information go to [www.eppendorf.com/centrifugation](http://www.eppendorf.com/centrifugation)

## Rotor A-4-38 with Rectangular Buckets



### Rotor A-4-38 with Rectangular Buckets

- > Maximum speed: 2,750 × g (4,400 rpm)
- > Rectangular buckets for vessels with 5 – 25 mL

						
<b>Tube volume</b>	round-bottom tubes	5 – 7 mL	9 mL	15 mL	25 mL	20 mL
<b>Max. tube diameter</b>	12 mm	13 mm	14.5 mm	17.5 mm	25 mm	22 mm
<b>Max. vessel height</b>	100 mm	100 mm				
<b>Adapter</b>						
<b>Number of vessels per adapter/rotor</b>	9/36	10/40	8/32	6/24	2/8	4/16
<b>Bottom shape</b>	round	flat	flat	flat	flat	flat
<b>Centrifugation radius</b>	119 mm	127 mm	127 mm	127 mm	127 mm	127 mm
<b>Max. RCF</b>	2,577 × g	2,750 × g	2,750 × g	2,750 × g	2,750 × g	2,750 × g
<b>Packing</b>	set of 2 pcs.	set of 2 pcs.				
<b>Order no.</b>	5702 763.004	5702 710.008	5702 711.004	5702 712.000	5702 716.006	5702 713.007
<b>Price</b>	58.30 £	59.30 £	59.30 £	41.70 £	59.30 £	59.30 £

i For more information go to [www.eppendorf.com/centrifugation](http://www.eppendorf.com/centrifugation)



**Ordering information**

Description	Order no.	Price
<b>Rotor A-4-38</b> , without buckets	5702 740.004	378.00 £
<b>Rectangular bucket 90 mL</b> , for Rotor A-4-38, set of 4	5702 709.000	236.00 £

i For more information go to [www.eppendorf.com/centrifugation](http://www.eppendorf.com/centrifugation)

## Rotors 5702/ 5702 R/ 5702 RH



### Rotor A-8-17

- > Maximum speed:  $2,800 \times g$  (4,400 rpm)
- > Low capacity rotor for centrifugation of 15 mL conical tubes or 15 mL glass tubes
- > Adapters for 15 mL conical tubes and rubber mat inserts for glass tubes optionally available



### Rotor F-45-24-11

- > Maximum speed:  $1,770 \times g$  (4,400 rpm)
- > Fixed-angle rotor for  $24 \times 1.5/2.0$  mL tubes
- > Quiet centrifugation even without rotor lid
- > Adapters optionally available for:
  - 0.2 mL PCR tubes (5425 715.005)
  - 0.4 mL centrifuge tubes (5425 717.008)
  - 0.5 mL micro test tubes and Microtainer® tubes (5425 716.001)
- > Rotor and adapters are autoclavable (121 °C, 20 min)



### Rotor F-35-30-17

- > Maximum speed:  $2,750 \times g$  (4,400 rpm)
- > High capacity rotor for  $20 \times 15$  mL conical tubes or  $30 \times 15$  mL glass tubes
- > Inserts for 15 mL conical tubes and rubber mats for use with glass tubes are included

**i** For more information go to [www.eppendorf.com/centrifugation](http://www.eppendorf.com/centrifugation)



### Rotor F-45-18-17-Cryo

- > Maximum speed: 1,840 × g (4,400 rpm)
- > Quiet centrifugation even without rotor lid
- > Centrifugation of 1 – 2 mL Cryo tubes® (max. 13 mm Ø, use with adapter) and tubes with screw cap (max. 17 mm Ø, no adapter required)
- > Rotor and adapters are autoclavable (121 °C, 20 min)

#### Ordering information

Description	Order no.	Price
<b>Rotor A-4-38</b>		
incl. 4 round buckets 100 mL	5702 720.003	693.00 £
<b>Rotor A-4-38</b> , without buckets	5702 740.004	378.00 £
<b>Rotor A-8-17</b> , 8 x 15 mL, without adapter, without rubber mats	5702 700.002	186.00 £
<b>Rotor F-35-30-17</b>		
incl. 30 steel sleeves for 15 mL vessels, with 20 adapters for conical tubes and 30 rubber mats for round-bottom tubes	5702 704.008	396.00 £
incl. 10 steel sleeves for 15 mL vessels, with 10 adapters for conical tubes and 10 rubber mats for round-bottom tubes	5702 705.004	231.00 £
<b>Rotor F-45-24-11</b> , without lid	5702 746.002	279.00 £
<b>Rotor F-45-18-17-Cryo</b> , without rotor lid, without adapters	5702 747.009	319.00 £
<b>Adapter</b> , for 1 cryo containers (max. Ø 13 mm) or lidded centrifugation tubes (Ø 12.2 mm), max. length 50 mm, for Rotor F-45-18-17-Cryo, set of 6 pcs.	5702 752.002	47.20 £
<b>Adapter</b> , for 1 HPLC vessel 1.5 mL, for Rotor F-45-18-17-Cryo	5427 708.006	88.40 £

i For more information go to [www.eppendorf.com/centrifugation](http://www.eppendorf.com/centrifugation)

## Centrifuge 5804/5804 R and 5810/5810 R



### Description

Eppendorf Centrifuges 5804/5804 R and 5810/5810 R with their renowned quality and reliability offer you cost efficient solutions for your medium- to high-throughput applications - now and in the future. Centrifuge 5804/5804 R is a high speed centrifuge for medium capacity needs. It allows for molecular applications in tubes up to 250 mL and offers additional swing-bucket and fixed-angle rotors as well as deepwell plate capacity for increased versatility. Centrifuge 5810/5810 R is a workhorse for medium to high-throughput laboratories. It combines extraordinary versatility and capacity for both tubes and plates with an extraordinary compact footprint.



Watch video clips of Centrifuge 5810 R incl. the new rotor generation on our optimized webpage for mobile devices or [www.eppendorf.com/centrifugation](http://www.eppendorf.com/centrifugation)

**i** For more information go to [www.eppendorf.com/centrifugation](http://www.eppendorf.com/centrifugation)

**Product features**

- > Swing-bucket rotors and adapters accommodate tubes and bottles from 0.2 mL to 750 mL
- > Plate rotor for centrifugation of all types of MTP, PCR, cell culture, or deepwell plates
- > Fixed-angle rotors for high-speed molecular biology applications in tubes from 0.2 mL to 85 mL
- > High centrifugation speed of up to 20,913 × g (14,000 rpm)
- > Aerosol-tight Eppendorf QuickLock® caps and lids for easy, one-hand operation
- > Centrifuge lid with soft-touch lid closure
- > Low access height of 29 cm for easy loading and unloading of samples
- > Quiet operation to improve your work environment
- > Compact footprint saves valuable bench space
- > Automatic rotor recognition and imbalance detection for maximum operational safety

**Additional features of refrigerated Centrifuges 5804 R and 5810 R**

- > Temperature range from -9 °C to 40 °C
- > FastTemp function for fast pre-cooling
- > Standby cooling function holds temperature when centrifuge is not in use
- > ECO shut-off engages after 8 hours of non-use to reduce energy consumption and to extend compressor life
- > Dynamic compressor control (DCC) technology for optimized cooling performance

i For more information go to [www.eppendorf.com/centrifugation](http://www.eppendorf.com/centrifugation)

## Centrifuge 5804/5804 R and 5810/5810 R

Technical specifications				
Model	5804	5804 R	5810	5810 R
Max. RCF with fixed-angle rotor	20,913 x g	20,913 x g	20,913 x g	20,913 x g
Max. RCF with swing-bucket rotor	4,500 x g	4,500 x g	4,500 x g	4,500 x g
Max. RCF with plate rotor	2,250 x g	2,250 x g	3,486 x g	3,486 x g
Speed	200 – 14,000 rpm (10 rpm steps)			
Max. capacity	4 x 250 mL/ 2 x 5 MTP	4 x 250 mL/ 2 x 5 MTP	4 x 750 mL/ 4 x 4 MTP	4 x 750 mL/ 4 x 4 MTP
Rotors available	12	12	18	18
Acceleration/braking ramps	10/10	10/10	10/10	10/10
Number of programs	35 user-defined programs	35 user-defined programs	35 user-defined programs	35 user-defined programs
Timer	1 min to 99 min, with continuous run function, short-spin	1 min to 99 min, with continuous run function, short-spin	1 min to 99 min, with continuous run function, short-spin	1 min to 99 min, with continuous run function, short-spin
Temperature range	–	-9 °C to 40 °C	–	-9 °C to 40 °C
Noise level				
Rotor S-4-104 (4x750 mL)	–	–	<70 dB(A)	<56 dB(A)
Rotor S-4-72 (4x250 mL)	<62 dB(A)	<58 dB(A)	–	–
Rotor FA-45-6-30 (6x50 mL)	<55 dB(A)	<54 dB(A)	<56 dB(A)	<55 dB(A)
Max. power consumption	900 W	1,650 W	900 W	1,650 W
Dimensions (W x D x H)	47 x 55 x 34 cm	64 x 55 x 34 cm	54 x 61 x 35 cm	70 x 61 x 35 cm
Height (with open lid)	74 cm	74 cm	80 cm	80 cm
Weight w/o accessories	55 kg	80 kg	68 kg	99 kg

### Ordering information

Description	Order no.	Price
Centrifuge 5804, without rotor, 230 V/50 – 60 Hz (GB)	5804 000.064	2,712.00 £
Centrifuge 5804 R, refrigerated, without rotor, 230 V/50 – 60 Hz (GB)	5805 000.068	4,820.00 £
Centrifuge 5810, without rotor, 230 V/50 – 60 Hz (GB)	5810 000.068	3,562.00 £
Centrifuge 5810 R, refrigerated, without rotor, 230 V/50 – 60 Hz (GB)	5811 000.061	5,970.00 £

✎ Ordering information for other voltage options begins on page 484

i For more information go to [www.eppendorf.com/centrifugation](http://www.eppendorf.com/centrifugation)

# Rolling Cabinet



## Description

If space is a limited resource in your lab, Eppendorf's rolling cabinet can give you the freedom and flexibility to use your Centrifuge 5804/5804 R or 5810/5810 R wherever you need it. Use the rolling cabinet if there is not enough space on the regular lab bench or to transport and use the centrifuge in other labs. The included drawer provides extra storage space for your rotors and adapters.

## Product features

- > Rolling cabinet with closed centrifuge fits under standard 90 cm lab benches
- > With 4 castors (2 lockable) and drawer
- > Dimensions (W x D x H): 70 x 45 x 62 cm



Watch the video!

## Ordering information

Description	Order no.	Price
<b>Rolling Cabinet</b> , for Centrifuge 5804/5804 R and 5810/5810 R	5821 020.010	1,296.00 £

i For more information go to [www.eppendorf.com/centrifugation](http://www.eppendorf.com/centrifugation)

## Centrifuge Packages



### Description

Whether you need a refrigerated or non-refrigerated centrifuge for low, medium or high-throughput applications, one of these packages will definitely suit your requirements.

#### Cell Culture Centrifuge packages include

- > Centrifuge 5702/5702R, 5804/5804 R or 5810/5810 R
- > Swing-bucket rotor incl. buckets
- > Four adapters for 15 mL conical tubes (two sets of 2)
- > Four adapters for 50 mL conical tubes (two sets of 2)

#### Centrifuge packages for round-bottom tubes include

- > Centrifuge 5810/ 5810 R
- > Swing-bucket rotor S-4-104 incl. buckets
- > Four adapters for 13 mm (5/7 mL) round bottom tubes (two sets of 2)
- > Four adapters for 16 mm (10 mL) round bottom tubes (two sets of 2)

### NEW



#### Eppendorf Conical Tubes 15 mL and 50 mL

The Eppendorf Conical Tubes 15 mL and 50 mL are the optimal solution for cell culture and cell biology applications as well as for sample preparation protocols in microbiology and molecular biology laboratories. Safe design and easy handling ensure best sample processing.

#### Premium USP class 6 raw material ensures

- > highest sample integrity
- > high g-Safe® centrifugation stability
- > optimal sample and pellet visibility

For more information go to chapter "Reaction tubes and plates" on page 148-173

i For more information go to [www.eppendorf.com/centrifugation](http://www.eppendorf.com/centrifugation)

Centrifuge Packages	Number of vessels per adapter/rotor	
	15 mL conical	50 mL conical
5702/5702 R	2/8	1/4
5804/5804 R + Rotor A-4-44	4/16	1/4
5804/5804 R + Rotor S-4-72	8/32	4/16
5810/5810 R + Rotor A-4-62	9/36	4/16
5810/5810 R + Rotor A-4-81	12/48	5/20
5810/5810 R + Rotor S-4-104	14/56	7/28
	13 mm	16 mm
5810/5810R + S-4-104	23/92	20/80

#### Ordering information

Description	Order no.	Price
<b>Centrifuge 5702</b> , with Rotor A-4-38 incl. adapters for 15/50 mL conical tubes, 230 V/50/60 Hz (GB)	5702 000.361	2,108.00 £
<b>Centrifuge 5702 R</b> , refrigerated, with Rotor A-4-38 incl. adapters for 15/50 mL conical tubes, 230 V/50 – 60 Hz (GB)	5703 000.462	3,698.00 £
<b>Centrifuge 5804</b> , with Rotor A-4-44 incl. adapters for 15/50 mL conical tubes, 230 V/50 – 60 Hz (GB)	5804 000.366	3,642.00 £
<b>Centrifuge 5804 R</b> , refrigerated, with Rotor A-4-44 incl. adapters for 15/50 mL conical tubes, 230 V/50 – 60 Hz (GB)	5805 000.360	5,510.00 £
<b>Centrifuge 5804</b> , with Rotor S-4-72 incl. adapters for 15/50 mL conical tubes, 230 V/50 – 60 Hz (GB)	5804 000.560	4,357.00 £
<b>Centrifuge 5804 R</b> , refrigerated, with Rotor S-4-72 incl. adapters for 15/50 mL conical tubes, 230 V/50 – 60 Hz (GB)	5805 000.661	5,978.00 £
<b>Centrifuge 5810</b> , with Rotor A-4-62 incl. adapters for 15/50 mL conical tubes, 230 V/50 – 60 Hz (GB)	5810 000.360	4,738.00 £
<b>Centrifuge 5810 R</b> , refrigerated, with Rotor A-4-62 incl. adapters for 15/50 mL conical tubes, 230 V/50 – 60 Hz (GB)	5811 000.363	6,906.00 £
<b>Centrifuge 5810</b> , with Rotor A-4-81 incl. adapters for 15/50 mL conical tubes, 230 V/50 – 60 Hz (GB)	5810 000.467	5,356.00 £
<b>Centrifuge 5810 R</b> , refrigerated, with Rotor A-4-81 incl. adapters for 15/50 mL conical tubes, 230 V/50 – 60 Hz (GB)	5811 000.460	7,522.00 £
<b>Centrifuge 5810</b> , with Rotor S-4-104 incl. adapters for 15/50 mL conical tubes, 230 V/50 – 60 Hz (GB)	5810 000.564	5,730.00 £
<b>Centrifuge 5810 R</b> , refrigerated, with Rotor S-4-104 incl. adapters for 15/50 mL conical tubes, 230 V/50 – 60 Hz (GB)	5811 000.665	7,898.00 £
<b>Centrifuge 5810</b> , with Rotor S-4-104 incl. adapters for 13/16 mm round-bottom tubes, 230 V/50 – 60 Hz (GB)	5810 000.661	5,730.00 £
<b>Centrifuge 5810 R</b> , refrigerated, with Rotor S-4-104 incl. adapters for 13/16 mm round-bottom tubes, 230 V/50 – 60 Hz (GB)	5811 000.860	7,898.00 £

✎ Ordering information for other voltage options begins on page 484

i For more information go to [www.eppendorf.com/centrifugation](http://www.eppendorf.com/centrifugation)

## Overview of the Main Rotors

				
<b>Model</b>	Rotor S-4-104	Rotor A-4-81	Rotor A-4-62	Rotor S-4-72
<b>Max. capacity</b>	4 x 750 mL	4 x 500 mL	4 x 250 mL	4 x 250 mL
<b>Lock</b>	aerosol-tight QuickLock	aerosol-tight	aerosol-tight	
<b>5804/5804 R</b>				■
<b>5810/5810 R</b>	■	■	■	■
<b>Positioning</b>	High-capacity swing-bucket rotor for blood, bacteria, cell culture and plate centrifugation	Medium to high capacity swing-bucket rotor for blood, bacteria, cell culture and plate centrifugation	Economic swing-bucket rotor for blood, bacteria, cell culture and plate centrifugation	Economic swing-bucket rotor for blood, bacteria, cell culture centrifugation
<b>Aerosol-tightness</b>	yes	yes	yes	
<b>Max. RCF</b>	3,214 x g	3,220 x g	3,220 x g	3,234 x g
<b>Max. speed</b>	3,900 rpm	4,000 rpm	4,000 rpm	4,200 rpm
<b>Eppendorf Tube® 5.0 mL and 15 mL conical</b>	56	48	36	32
<b>50 mL conical</b>	28	20/28 <sup>1)</sup>	16	16
<b>13 mm blood tube</b>	92	100	60	56
<b>16 mm blood tube</b>	80	64	48	52
<b>1.5/2 mL micro tube</b>	200	96	64	104
<b>MTP / DWP</b>	16 / 4	16 / 4	16 / 4	

<sup>1)</sup> Maximum capacity with dedicated 50 mL bucket.<sup>2)</sup> Max. speed in Centrifuge 5810 R, lower speed applies to Centrifuge 5804/5804R/5810.

## Advanced Rotor Design – Swing-Bucket Rotors



Watch the video!



### Improved energy efficiency

The new round buckets have been designed to be especially aerodynamic. The result is a more efficient design that reduces power consumption by up to 48 %.

### Longer rotor lifetime

The new rotor generation of both swing-bucket and fixed-angle rotors has been designed with a longer lifetime in mind.

### Product features

- > New Eppendorf QuickLock® caps for one-hand operation
- > Significantly improved handling, easy operation with one or two hands
- > Handle allows the closed bucket to be carried to the biosafety cabinet where it can be opened in a safe environment.
- > Aerosol-tightness has been tested and verified by Public Health England, Porton Down, UK

					
Rotor A-4-44 4 x 100 mL aerosol-tight	Rotor A-2-DWP-AT 2 x 6 MTP aerosol-tight	Rotor A-2-DWP 2 x 5 MTP	Rotor F-34-6-38 6 x 85 mL	Rotor FA-45-6-30 6 x 50 mL aerosol-tight QuickLock	Rotor FA-45-48-11 48 x 2 mL aerosol-tight QuickLock
■		■	■	■	■
■	■	■	■	■	■
High-speed swing-bucket rotor for platelet poor plasma, blood, bacteria and cell culture	Aerosol-tight deepwell plate rotor for safe centrifugation of hazardous samples.	Economic deepwell plate rotor	High-speed rotor suitable for molecular applications in tubes up to 85 mL	Aerosol-tight high-speed rotor for safe centrifugation of hazardous samples	Aerosol-tight microcentrifuge tube rotor for safe centrifugation of hazardous samples
yes	yes			yes	yes
4,500 x g	3,486 x g	2,250 x g	18,500/15,500 x g <sup>2)</sup>	20,130/16,639 x g <sup>2)</sup>	19,083 x g
5,000 rpm	4,500 rpm	3,700 rpm	12,000/11,000 rpm	12,100/11,000 rpm	13,000 rpm
16			6	6	
4/8 <sup>1)</sup>			6	6	
36			18	6	
28			12	6	
48	48	48	24		48
	12 / 4	10 / 4			

## Advanced Rotor Design – Fixed-Angle Rotors



Watch the video!



### Low rotor weight

Eppendorf's fixed-angle rotors are among the lightest in the industry to improve handling and operational safety. Light-weight rotors cause less wear and tear on the motor and allow for faster acceleration and braking times.

### Eppendorf QuickLock® lids for ergonomic lid locking

Our aerosol-tight QuickLock rotors close with only ¼ of a turn. This not only saves you time during every day use, it also takes repetitive stress off your wrist.

### Superior temperature control

Aluminum, with its high heat conductivity, allows fast pre-cooling and accurate temperature control in refrigerated centrifuges.

### Product features

- > All rotors are anodized for high chemical resistance and to prevent corrosion
- > Optimized design of rotor boreholes and adapters provide optimal support for high-speed centrifugation of tubes
- > Aluminium rotors are recyclable

# Rotor S-4-104

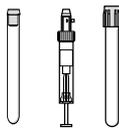
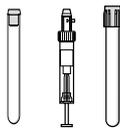
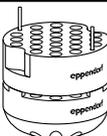
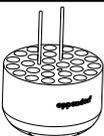
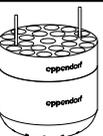
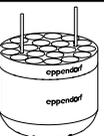
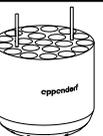


## Rotor S-4-104

- > High capacity swing-bucket rotor with max. speed 3,214 x g (3,900 rpm)\*<sup>1</sup>
- > Broad range of adapters enables high versatility for tubes and bottles from 0.2 mL to 750 mL and plates
- > Aerodynamic round bucket design for up to 36 % energy savings compared to Rotor A-4-81
- > Mixed loading with 2 plate buckets and 2 round tube buckets allows for increased versatility
- > Aerosol-tight QuickLock caps for safe centrifugation of hazardous samples optionally available\*<sup>2</sup>
- > Rotor life time: max. 100,000 cycles
- > Buckets, lids and adapters are autoclavable

<sup>1</sup> Please note that a software upgrade will be necessary for older centrifuges when using this rotor. Please contact your local Eppendorf organization or dealer for further information.

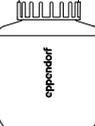
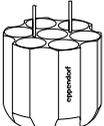
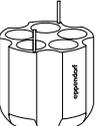
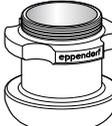
<sup>2</sup> Aerosol-tightness tested by Public Health England, Porton Down, UK.

						
<b>Tube volume</b>	1.5/2.0 mL	12 mm x 75 mm, 5 mL FACS	2.6 – 8 mL	5.5 – 12 mL	9 mL	14 mL
<b>Max. tube diameter</b>	11 mm	12 mm	13 mm	16 mm	17.5 mm	17.5 mm
<b>Max. vessel height</b>	39 mm	111 mm	115 mm	119 mm	111 mm	117 mm
<b>Max. vessel height for use with cap/lid<sup>1)</sup></b>	39 mm	100 mm	108 mm	114 mm	106 mm	112 mm
<b>Adapter</b>						
<b>Number of vessels per adapter/rotor</b>	50/200	27/108	23/92	20/80	20/80	14/56
<b>Bottom shape</b>	flat	round	round	round	round	round
<b>Centrifugation radius</b>	188 mm	175 mm	179 mm	180 mm	179 mm	185 mm
<b>Max. RCF</b>	3,197 x g	2,976 x g	3,044 x g	3,061 x g	3,044 x g	3,146 x g
<b>Packing</b>	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.			
<b>Order no.</b>	5825 740.009	5825 747.003	5825 738.004	5825 736.001	5825 743.008	5825 748.000
<b>Price</b>	194.00 £	194.00 £	194.00 £	194.00 £	194.00 £	194.00 £

<sup>1)</sup> Exceeding the maximum tube length may reduce the loading capacity of the rotor. Please perform a manual swing-out test before starting the centrifuge run to make sure the tubes do not hit the rotor yoke.<sup>2)</sup> Please note that these conical bottles need to be used together with a conical form insert provided by the manufacturer.

Ordering information

Description	Order no.	Price
<b>Rotor S-4-104</b>		
incl. 4 x 750 mL round buckets	5820 740.000	2,030.00 £
incl. 4 plate buckets (aerosol-tight capable)	5820 754.001	2,030.00 £
without buckets	5820 755.008	931.00 £
<b>Plate bucket (aerosol-tight capable)</b> , for Rotor S-4-104, incl. plate carrier, set of 2 pcs.	5820 744.006	575.00 £
<b>Plate bucket (aerosol-tight capable)</b> , for Rotor S-4-104, incl. plate carrier, set of 4 pcs.	5820 743.000	1,099.00 £
<b>Caps for plate buckets (aerosol-tight capable)</b> , for Rotor S-4-104 and Rotor S-4x750, set of 2 pieces	5820 748.001	137.00 £
<b>Caps for 750 mL round buckets</b> , for Rotor S-4-104, Rotor S-4x750 and Rotor S-4x1000, set of 2 pieces	5820 747.005	127.00 £
<b>Wide-neck bottle</b> , 750 mL, set of 2 pieces	5820 708.000	129.00 £

						
Eppendorf Tubes <sup>®</sup> 5.0 mL and 15 mL conical tubes	50 mL conical	50 mL conical, skirted	250 mL flat, 175 – 225 mL conical <sup>2)</sup>	500 mL Corning <sup>®</sup>	750 mL	MTP, DWP, PCR plates
17 mm	31 mm	31 mm	62 mm	98 mm	104 mm	
125 mm	122 mm	120 mm	145 mm	136 mm	150 mm	60 mm
120 mm	116 mm	116 mm	125 mm			45 mm
						
14/56	7/28	5/20	1/4	1/4	1/4	4/16 (MTP) 1/4 (DWP)
conical	conical	flat	flat	conical	flat	flat
188 mm	187 mm	178 mm	183 mm	187 mm	185 mm	151 mm
3,197 x g	3,180 x g	3,027 x g	3,112 x g	3,146 x g	3,146 x g	2,568 x g
set of 2 pcs.	set of 2 pcs.					
5825 734.009	5825 733.002	5825 732.006	5825 741.005	5825 745.000	5825 744.004	5820 744.006
194.00 £	194.00 £	194.00 £	194.00 £	194.00 £	103.00 £	575.00 £

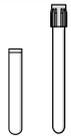
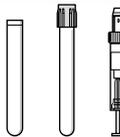
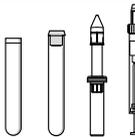
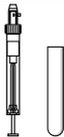
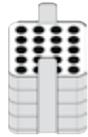
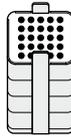
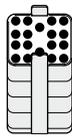
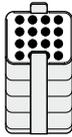
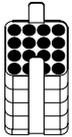
# Rotor A-4-81



## Rotor A-4-81

- > Swing-bucket rotor with max. speed 3,220 x g (4,000 rpm)
- > Rotor A-4-81 accommodates tubes and bottles from 0.2 mL to 500 mL as well as plates
- > Aerosol-tight caps<sup>1</sup> for safe centrifugation of hazardous samples optionally available
- > Mixed loading with 2 plate buckets and 2 rectangular tube buckets allows for increased versatility
- > Rotor life time: max. 100,000 cycles
- > Buckets, caps and adapters are autoclavable

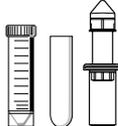
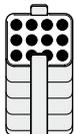
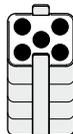
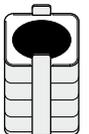
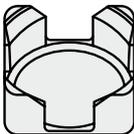
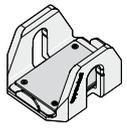
<sup>1</sup> Aerosol-tightness tested by Public Health England, Porton Down, UK.

						
<b>Tube volume</b>	1.5/2.0 mL	1.2-5 mL	2.6-5 mL	2.6-7 mL	3-15 mL	7-17 mL
<b>Max. tube diameter</b>	11 mm	11 mm	13 mm	13 mm	16 mm	17.5 mm
<b>Max. vessel height</b>	43 mm	118 mm	118 mm	118 mm	118 mm	118 mm
<b>Max. vessel height for use with cap/lid<sup>1)</sup></b>	43 mm	108 mm	107 mm	108 mm	108 mm	118 mm
<b>Adapter</b>						
<b>Number of vessels per adapter/rotor</b>	20/80	20/80	25/100	18/72	16/64	16/64
<b>Bottom shape</b>	flat	flat	flat with rubber mat	flat with rubber mat	flat with rubber mat	flat with rubber mat
<b>Centrifugation radius</b>	165 mm	168 mm	168 mm	168 mm	168 mm	168 mm
<b>Max. RCF</b>	2,950 x g	3,000 x g	3,000 x g	3,000 x g	3,000 x g	3,000 x g
<b>Packing</b>	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.			
<b>Order no.</b>	5810 745.004	5810 746.000	5810 720.001	5810 747.007	5810 748.003	5810 721.008
<b>Price</b>	128.00 £	128.00 £	128.00 £	128.00 £	128.00 £	128.00 £

<sup>1)</sup> Exceeding the maximum tube length may reduce the loading capacity of the rotor. Please perform a manual swing-out test before starting the centrifuge run to make sure the tubes do not hit the rotor yoke.<sup>2)</sup> Please note that these conical bottles need to be used together with a conical form insert provided by the manufacturer. <sup>3)</sup> Please order adapter for 50 mL conical tubes skirted 5804 737.008.

Ordering information

Description	Order no.	Price
<b>Rotor A-4-81</b> , incl. 4 x 500 mL rectangular bucket	5810 718.007	1,876.00 £
<b>Rotor A-4-81</b> , with 4 MTP/Flex buckets	5810 725.003	1,876.00 £
<b>Rotor A-4-81</b> , without buckets	5810 743.001	868.00 £
<b>Bucket for 7x50 mL conical tubes</b> , for Rotor A-4-81, set of 4	5825 730.003	1,117.00 £
<b>MTP/Flex bucket</b> , for Rotor A-4-81, set of 4	5810 741.009	1,321.00 £
<b>Bucket 500 mL rectangular</b> , for Rotor A-4-81, set of 4	5810 730.007	1,194.00 £
<b>Cap for 500 mL rectangular buckets</b> , aerosol-tight, for Rotor A-4-81, set of 2 pieces	5810 724.007	116.00 £
<b>Wide-neck bottle</b> , for Rotor A-4-81, 500 mL, square, set of 2 pieces	5820 707.003	131.00 £
<b>Wide-neck bottle</b> , for Rotor A-4-81, 400 mL, set of 2 pieces	5810 729.009	131.00 £
<b>MTP/Flex bucket</b> , for Rotor A-4-81, set of 2	5810 742.005	692.00 £

							
Eppendorf Tubes® 5.0 mL and 15 mL conical tubes	50 mL conical	50 mL conical	30-50 mL and 50 mL Centriprep® 3)	180 – 250 mL flat/ 175 – 225 mL conical 2)	400 mL	500 mL	MTP, DWP
17.5 mm	31 mm	31 mm	31/29 mm	62 mm	81 mm	83 mm	
121 mm	122 mm	122 mm	121 mm	133 mm		135 mm	60 mm
119 mm	116 mm					135 mm	
							
12/48	5/20	7/28	5/20	1/4	1/4	-/4	4/16 (MTP) 1/4 (DWP)
conical	conical	conical	flat with rubber mat	flat with rubber mat	flat, rubber	flat	flat with rubber mat
173 mm	173 mm	180 mm	173 mm	173 mm	180 mm	180 mm	163 mm
3,100 x g	3,100 x g	3,220 x g	3,100 x g	3,100 x g	3,220 x g	3,220 x g	2,900 x g
set of 2 pcs.	set of 2 pcs.	set of 4 pcs.	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.
5810 722.004	5810 723.000	5825 730.003	5810 739.004	5825 722.000	5810 728.002	-	5810 742.005
128.00 £	128.00 £	1,117.00 £	140.00 £	129.00 £	106.00 £		692.00 £

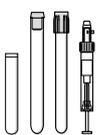
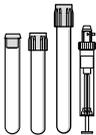
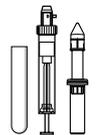
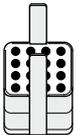
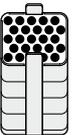
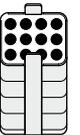
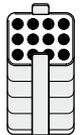
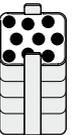
# Rotor A-4-62



## Rotor A-4-62

- > Swing-bucket rotor with max. speed 3,220 x g (4,000 rpm)
- > Rotor A-4-62 accommodates tubes and bottles from 0.2 mL to 250 mL as well as plates
- > Aerosol-tight caps<sup>1</sup> for safe centrifugation of hazardous samples optionally available
- > Rotor life time: max. 40,000 cycles
- > Rotor, buckets, caps and adapters are autoclavable

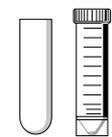
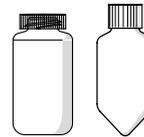
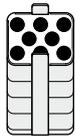
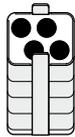
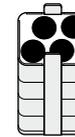
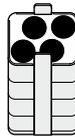
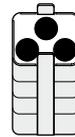
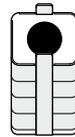
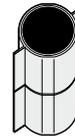
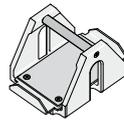
<sup>1</sup> Aerosol-tightness tested by Public Health England, Porton Down, UK.

						
<b>Tube volume</b>	1.5–2.0 mL	1.2–5 mL	2.6–7 mL	3–15 mL	7–17 mL	Eppendorf Tubes® 5.0 mL and 15 mL conical tubes
<b>Max. tube diameter</b>	11 mm	11 mm	13 mm	16 mm	17.5 mm	17.5 mm
<b>Max. vessel height</b>	43 mm	123 mm	121 mm	121 mm	118 mm	127 mm
<b>Max. vessel height for use with cap/lid<sup>1)</sup></b>	43 mm	115 mm	118 mm	116 mm	114 mm	121 mm
<b>Adapter</b>						
<b>Number of vessels per adapter/rotor</b>	16/64	25/100	15/60	12/48	12/48	9/36
<b>Bottom shape</b>	flat	flat with rubber mat	flat with rubber mat	flat with rubber mat	flat with rubber mat	conical
<b>Centrifugation radius</b>	171 mm	173 mm	173 mm	173 mm	173 mm	178 mm
<b>Max. RCF</b>	3,000 x g	3,050 x g	3,050 x g	3,050 x g	3,050 x g	3,150 x g
<b>Packing</b>	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.			
<b>Order no.</b>	5810 751.004	5810 750.008	5810 752.000	5810 753.007	5810 754.003	5810 755.000
<b>Price</b>	105.00 £	105.00 £	111.00 £	111.00 £	111.00 £	120.00 £

<sup>1)</sup> Exceeding the maximum tube length may reduce the loading capacity of the rotor. Please perform a manual swing-out test before starting the centrifuge run to make sure the tubes do not hit the rotor yoke.<sup>2)</sup> Please note that these conical bottles need to be used together with a conical form insert provided by the manufacturer.<sup>3)</sup> Please order adapter for 50 mL conical tubes skirted 5804 737.008.

**Ordering information**

Description	Order no.	Price
<b>Rotor A-4-62</b> , incl. 4 x 250 mL rectangular buckets	5810 709.008	1,255.00 £
<b>Rotor A-4-62</b> , with 4 MTP buckets	5810 711.002	1,202.00 £
<b>Rectangular bucket 250 mL</b> , for Rotor A-4-62, 4 pieces	5810 716.004	656.00 £
<b>MTP bucket</b> , for Rotor A-4-62-MTP, for 4 MTP or 1 DWP, set of 4	5810 702.003	541.00 £
<b>Aerosol-tight cap</b> , for rectangular bucket 250 mL, 2 pieces	5810 710.006	87.60 £

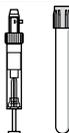
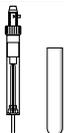
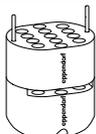
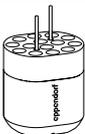
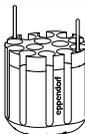
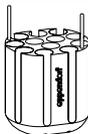
								
7-18 mL	18-30 mL	30 – 50 mL round-bottom/ 50 mL conical, skirted <sup>3)</sup>	50 mL conical	50 mL conical	50-75 mL	80-120 mL	180 – 250 mL flat/ conical <sup>2)</sup>	MTP, DWP, PCR plates
20 mm	26 mm		31 mm	31 mm	35 mm	45 mm	62 mm	
126 mm	119 mm	115 mm	122 mm	122 mm	122 mm	138 mm	136 mm	53 mm
119 mm	116 mm	113 mm		116 mm	118 mm	125 mm	127 mm	
								
8/32	4/16	4/16	4/16	3/12	2/8	1/4	1/4	4/16 (MTP) 1/4 (DWP)
flat with rubber mat	flat with rubber mat	flat with rubber mat	flat with conical inlay	conical	flat with rubber mat	flat with rubber mat	flat with rubber mat	flat with rubber mat
173 mm	173 mm	173 mm	173 mm	178 mm	173 mm	173 mm	180 mm	154 mm
3,050 x g	3,050 x g	3,050 x g	3,050 x g	3,150 x g	3,050 x g	3,050 x g	3,220 x g	2,750 x g
set of 2 pcs.	set of 2 pcs.	set of 4 pcs.						
5810 756.006	5810 757.002	5810 759.005	5810 763.002	5810 758.009	5810 760.003	5810 761.000	5810 770.009	5810 702.003
105.00 £	105.00 £	105.00 £	105.00 £	120.00 £	105.00 £	105.00 £	124.00 £	541.00 £

## Rotor S-4-72



### Rotor S-4-72

- > Medium capacity swing-bucket rotor with speed up to  $3,234 \times g$  (4,200 rpm)
- > Broad range of adapters available to handle all common tube formats from 0.2 mL to 250 mL
- > Aerodynamic round bucket design for up to 48 % energy savings compared to Rotor A-4-62
- > Rotor life time: max. 60,000 cycles
- > Buckets and adapters are autoclavable

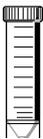
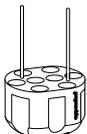
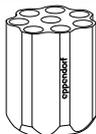
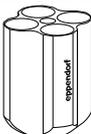
				
<b>Tube volume</b>	1.5/2.0 mL	2.6 – 8 mL	5.5 – 12 mL	9 mL
<b>Max. tube diameter</b>	11 mm	13 mm	16 mm	17.5 mm
<b>Max. vessel height</b>	43 mm	115 mm	112 mm	113 mm
<b>Adapter</b>				
<b>Number of vessels per adapter/rotor</b>	26/104	14/56	13/52	12/48
<b>Bottom shape</b>	flat	round	round	round
<b>Centrifugation radius</b>	159 mm	159 mm	157 mm	158 mm
<b>Max. RCF</b>	$3,136 \times g$	$3,136 \times g$	$3,096 \times g$	$3,116 \times g$
<b>Packing</b>	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.
<b>Order no.</b>	5804 794.001	5804 789.008	5804 791.002	5804 792.009
<b>Price</b>	126.00 £	126.00 £	126.00 £	126.00 £

<sup>1)</sup> Please note that these conical bottles need to be used together with a conical form insert provided by the manufacturer.

i For more information go to [www.eppendorf.com/centrifugation](http://www.eppendorf.com/centrifugation)

**Ordering information**

Description	Order no.	Price
<b>Rotor S-4-72</b> , incl. 4 × 250 mL round buckets	5804 746.007	1,319.00 £

				
Eppendorf Tubes® 5.0 mL	15 mL conical	50 mL conical	50 mL conical, skirted	250 mL flat/175 – 225 mL conical <sup>1)</sup>
17 mm	17 mm	31 mm	31 mm	62 mm
60 mm	120 mm	120 mm	120 mm	130 mm
				
8/32	8/32	4/16	2/8	1/4
conical	conical	conical	flat	flat
163 mm	164 mm	164 mm	153 mm	160 mm
3,215 x g	3,234 x g	3,234 x g	3,017 x g	3,175 x g
set of 2 pcs.	set of 2 pcs.			
5804 793.005	5804 783.000	5804 784.006	5804 785.002	5804 787.005
126.00 £	126.00 £	126.00 £	126.00 £	126.00 £

i For more information go to [www.eppendorf.com/centrifugation](http://www.eppendorf.com/centrifugation)

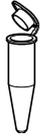
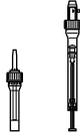
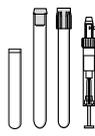
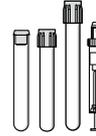
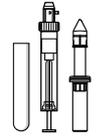
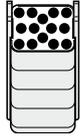
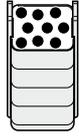
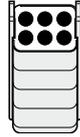
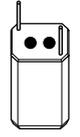
# Rotor A-4-44



## Rotor A-4-44

- > High-speed swing-bucket rotor for applications up to 4,500 x g (5,000 rpm)
- > Rotor A-4-44 accommodates tubes from 0.2 mL to 100 mL
- > Aerosol-tight caps<sup>1</sup> for safe centrifugation of hazardous samples optionally available
- > Rotor life time: max. 34,000 cycles
- > Rotor, buckets, caps and adapters are autoclavable

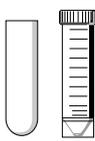
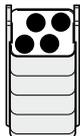
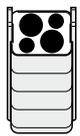
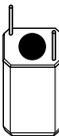
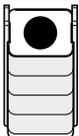
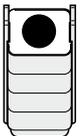
<sup>1</sup> Aerosol-tightness tested by Public Health England, Porton Down, UK.

							
<b>Tube volume</b>	1.5 – 2.0 mL	1.2 – 5 mL	2.6 – 7 mL	3 – 15 mL	7 – 17 mL	Eppendorf Tubes® 5.0 mL and 15 mL conical tubes	15 mL conical
<b>Max. tube diameter</b>	11 mm	11 mm	13 mm	16 mm	17.5 mm	17.5 mm	17.5 mm
<b>Max. vessel height</b>	43 mm	105 mm	108 mm	108 mm	110 mm	121 mm	121 mm
<b>Max. vessel height for use with cap/lid<sup>1)</sup></b>	43 mm	102 mm	106 mm	106 mm	106 mm		121 mm
<b>Adapter</b>							
<b>Number of vessels per adapter/rotor</b>	12/48	14/56	9/36	7/28	6/24	4/16	2/8
<b>Bottom shape</b>	flat	flat with rubber mat	conical	conical			
<b>Centrifugation radius</b>	148 mm	150 mm	150 mm	150 mm	150 mm	155 mm	157 mm
<b>Max. RCF</b>	4,100 x g	4,200 x g	4,200 x g	4,200 x g	4,200 x g	4,300 x g	4,400 x g
<b>Packing</b>	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.				
<b>Order no.</b>	5804 751.000	5804 750.004	5804 752.007	5804 753.003	5804 754.000	5804 755.006	5804 717.007
<b>Price</b>	94.00 £	94.00 £	96.40 £	96.40 £	96.40 £	99.60 £	99.60 £

<sup>1)</sup> Exceeding the maximum tube length may reduce the loading capacity of the rotor. Please perform a manual swing-out test before starting the centrifuge run to make sure the tubes do not hit the rotor yoke.<sup>2)</sup> Reordering of 50 mL form inserts: 5804 728.009.<sup>3)</sup> Please order adapter for 50 mL conical tubes skirted 5804 737.008.

**Ordering information**

Description	Order no.	Price
<b>Rotor A-4-44</b> , incl. 4 rectangular buckets 100 mL	5804 709.004	909.00 £
<b>Rotor A-4-44</b> , incl. 4 buckets for 2 × 50 mL conical tubes	5804 719.000	1,096.00 £
<b>Bucket for 2 × 50 mL conical tubes</b> , for Rotor A-4-44, set of 4	5804 706.005	393.00 £
<b>Rectangular bucket 100 mL</b> , for Rotor A-4-44, set of 4	5804 741.005	561.00 £
<b>Aerosol-tight cap</b> , for rectangular bucket 100 mL, 2 pieces	5804 712.005	76.60 £
<b>Insert</b> , for 1 conical tube 50 mL, set of 8 pieces	5804 728.009	38.80 £
<b>Adapter</b> , for 50 mL conical tubes with skirted bottom, set of 8 pieces	5804 737.008	66.40 £

							
7 – 18 mL	18 – 30 mL	50 mL <sup>2)</sup> conical	50 mL conical	50 mL conical	30 – 50 mL round-bottom/ 50 mL conical, skirted <sup>3)</sup>	50 – 75 mL	80 – 100 mL
20 mm	26 mm		31 mm	31 mm	31 mm	35 mm	45 mm
107 mm	110 mm	120 mm	122 mm	122 mm	122 mm	119 mm	114 mm
104 mm	100 mm			119 mm	108 mm	108 mm	100 mm
							
4/16	2/8	-/8	1/4	1/4	1/4	1/4	1/4
flat with rubber mat	flat with rubber mat	flat with conical inlay	conical	conical	flat with rubber mat	flat with rubber mat	flat with rubber mat
150 mm	150 mm	161 mm	155 mm	157 mm	150 mm	150 mm	150 mm
4,200 x g	4,200 x g	4,500 x g	4,300 x g	4,400 x g	4,200 x g	4,200 x g	4,200 x g
set of 2 pcs.	set of 2 pcs.	set of 4 pcs.	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.
5804 756.002	5804 757.009	5804 706.005	5804 758.005	5804 718.003	5804 759.001	5804 760.000	5804 761.006
94.00 £	94.00 £	393.00 £	99.60 £	99.60 £	94.00 £	94.00 £	94.00 £

## Rotors for 58xx Family



### Rotor A-2-DWP-AT

- > For use in Centrifuge 5810/5810 R only<sup>1</sup>
- > Max. speed: 3,486 × g (4,500 rpm)
- > Rotor can handle up to
  - 2 × 6 MTP
  - 2 × 2 DWP
  - 2 × 1 Filtration plate kits
- > Maximum loading height of 67 mm (89 mm without lid)
- > Rotor comes with aerosol-tight caps<sup>2</sup> for safe centrifugation of hazardous samples
- > Rotor and buckets are autoclavable

<sup>1</sup> Please note that a software upgrade may be necessary for older centrifuges when using Rotor A-2-DWP-AT. Please contact your local Eppendorf organization or dealer for further information

<sup>2</sup> Aerosol-tightness tested by Public Health England, Porton Down, UK.

#### Ordering information

Description	Order no.	Price
Rotor A-2-DWP-AT, incl. 2 buckets, 2 aerosol-tight caps* and 2 plate carriers	5820 710.004	1,578.00 £



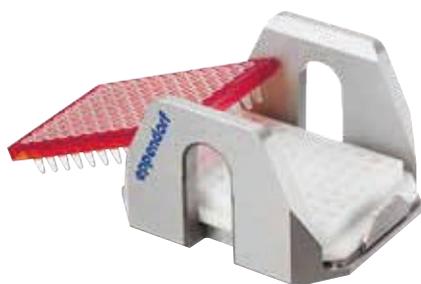
### Rotor A-2-DWP

- > For use in Centrifuge 5804/5804 R and 5810/5810 R
- > Max. speed: 2,250 × g (3,700 rpm)
- > Rotor can handle up to
  - 2 × 5 MTP
  - 2 × 4 Cell culture plates
  - 2 × 2 DWP
  - 2 × 1 Filtration plate kits
- > Maximum loading height of 89 mm
- > Rotor and buckets are autoclavable

#### Ordering information

Description	Order no.	Price
Rotor A-2-DWP, deepwell plate rotor incl. 2 buckets	5804 740.009	1,156.00 £

i For more information go to [www.eppendorf.com/centrifugation](http://www.eppendorf.com/centrifugation)



### PCR adapter

- > PCR plate adapters are designed to support thin-walled PCR plate wells during centrifugation
- > Available for 96-well and 384-well PCR plates
- > Adapters can be used in all Eppendorf plate rotors

#### Ordering information

Description	Order no.	Price
Adapter, for 1 PCR plate (96 wells), for plate rotors	5825 711.009	103.00 £
Adapter, for 1 PCR plate (384 wells), for plate rotors	5825 713.001	81.10 £



### Cell culture flask adapter

- > Adapter to spin down cell cultures directly in a cell culture flask
- > Suitable for 25 cm<sup>2</sup>
- > Adapters can be used in Eppendorf plate rotor A-4-81-MTP/Flex

#### Ordering information

Description	Order no.	Price
Adapter, for 1 cell culture flask, for Rotors A-4-81-MTP/Flex	5825 719.000	125.00 £



### IsoRack adapter

- > IsoRack adapters to support 0.5 mL and 1.5/2 mL IsoRacks during centrifugation
- > Adapters can be used in Eppendorf plate rotors A-2-DWP and A-4-81-MTP/Flex

#### Ordering information

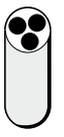
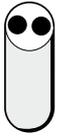
Description	Order no.	Price
Adapter, for 24 vessels in the IsoRack 0.5 mL, for Rotors A-4-81-MTP/Flex, A-2-DWP, set of 2 pcs.	5825 708.008	98.80 £
Adapter, for 24 vessels in the IsoRack 1.5/2.0 mL, for Rotors A-4-81-MTP/Flex, A-2-DWP, set of 2 pcs.	5825 709.004	98.80 £
CombiSlide® Adapter, for 12 slides, for plate rotors, set of 2 pcs.	5825 706.005	205.00 £

## Rotor F-34-6-38



### Rotor F-34-6-38

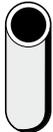
- > High-speed rotor for molecular applications in tubes from 0.2 mL to 85 mL
- > Max. speed: 18,500 × g (12,000 rpm) in Centrifuge 5810 R or 15,500 × g (11,000 rpm) in 5804/5804 R/5810
- > Low rotor weight (3.2 kg) for easy handling
- > 34 ° borehole angle reduces pellet smears along tube wall
- > Anodized aluminum for high chemical resistance
- > Rotor, lid and adapters are autoclavable

					
<b>Tube volume</b>	1.5 – 2.0 mL	2.6 – 7 mL	2.6 – 7 mL	7 – 15 mL	Eppendorf Tubes® 5.0 mL
<b>Max. tube diameter</b>	11 mm	13 mm	13 mm	16 mm	17 mm
<b>Max. vessel height for use with cap/lid</b>	110 mm	90 mm	110 mm	112 mm	104 mm
<b>Adapter</b>					
<b>Number of vessels per adapter/rotor</b>	4/24	3/18	3/18	2/12	1/6
<b>Bottom shape</b>	round	flat	flat	round	conical
<b>Centrifugation radius</b>	113 mm	106 mm	114 mm	112 mm	105 mm
<b>Max. RCF at 12.100 rpm (5810 R)</b>	18,200 × g	17,065 × g	18,353 × g	18,000 × g	16,824 × g
<b>Max. RCF at 11.000 rpm (5804, 5804 R, 5810)</b>	15,300 × g	14,339 × g	15,422 × g	15,150 × g	14,150 × g
<b>Packing</b>	set of 2 pcs.	set of 2 pcs.			
<b>Order no.</b>	5804 770.005	5804 738.004	5804 739.000	5804 771.001	5804 777.000
<b>Price</b>	90.00 £	67.40 £	67.40 £	67.40 £	54.10 £

i For more information go to [www.eppendorf.com/centrifugation](http://www.eppendorf.com/centrifugation)

**Ordering information**

Description	Order no.	Price
<b>Rotor F-34-6-38</b> , for 6 × 85 mL tubes, incl. rotor lid	5804 727.002	979.00 £

					
15 mL conical	15 – 18 mL	20 – 30 mL	50 mL	50 mL conical	85 mL
17 mm	18 mm	26 mm	29 mm	31 mm	38 mm
123 mm	123 mm	123 mm	123 mm	121 mm	121 mm
					
1/6	1/6	1/6	1/6	1/6	-/6
conical	round	round	round	conical	round
107 mm	109 mm	110 mm	112 mm	108 mm	115 mm
17,200 x g	17,550 x g	17,700 x g	18,000 x g	17,400 x g	18,500 x g
14,450 x g	14,750 x g	14,900 x g	15,150 x g	14,600 x g	15,500 x g
set of 2 pcs.					
5804 776.003	5804 772.008	5804 773.004	5804 774.000	5804 775.007	-
57.80 £	67.40 £	54.60 £	54.60 £	57.80 £	

i For more information go to [www.eppendorf.com/centrifugation](http://www.eppendorf.com/centrifugation)

# Rotor FA-45-6-30

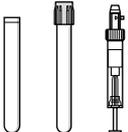
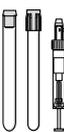


## Rotor FA-45-6-30

- > High-speed rotor for applications in tubes from 5 – 50 mL
- > Max. speed 20,130 × g (12,100 rpm) in Centrifuge 5810 R or 16,639 × g (11,000 rpm) in 5804/5804 R/5810<sup>1</sup>
- > Eppendorf QuickLock rotor lid for fast lid locking
- > Aerosol-tight<sup>1</sup> for safe centrifugation of hazardous samples
- > Low rotor weight (3.2 kg) for easy lifting
- > Anodized aluminum for high chemical resistance
- > 45 ° borehole angle minimizes pellets smear
- > Rotor, lid and adapters are autoclavable

<sup>1</sup> Please note that a software upgrade may be necessary for older centrifuges when using Rotor FA-45-6-30. Please contact your local Eppendorf organization or dealer for further information.

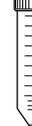
<sup>2</sup> Aerosol-tightness tested by Public Health England, Porton Down, UK.

					
<b>Tube volume</b>	2.6 – 5 mL	4 – 8 mL	5.5 – 10 mL	7.5 – 12 mL	Eppendorf Tubes® 5.0 mL
<b>Max. tube diameter</b>	13 mm	13 mm	16 mm	16 mm	17 mm
<b>Max. vessel height for use with cap/lid</b>	119 mm	119 mm	119 mm	119 mm	121 mm
<b>Adapter</b>					
<b>Number of vessels per adapter/rotor</b>	1/6	1/6	1/6	1/6	1/6
<b>Bottom shape</b>	round	round	round	round	conical
<b>Centrifugation radius</b>	120 mm	120 mm	120 mm	120 mm	121 mm
<b>Max. RCF at 12.100 rpm (5810 R)</b>	19,246 × g	19,246 × g	19,246 × g	19,246 × g	19,806 × g
<b>Max. RCF at 11.000 rpm (5804, 5804 R, 5810)</b>	16,233 × g	16,233 × g	16,233 × g	16,233 × g	16,369 × g
<b>Packing</b>	set of 2 pcs.	set of 2 pcs.			
<b>Order no.</b>	5820 726.008	5820 725.001	5820 728.000	5820 727.004	5820 730.005
<b>Price</b>	54.10 £	54.10 £	54.10 £	54.10 £	54.10 £

i For more information go to [www.eppendorf.com/centrifugation](http://www.eppendorf.com/centrifugation)

**Ordering information**

Description	Order no.	Price
<b>Rotor FA-45-6-30</b> , incl. rotor lid, for 6 x 15/ 50 mL conical tubes	5820 715.006	1,545.00 £

					
7 – 17 mL	15 mL conical	15 – 18 mL	20 – 30 mL	35 mL	50 mL conical
17.5 mm	17 mm	18 mm	26 mm	29 mm	31 mm
122 mm	125 mm	125 mm	125 mm	125 mm	121 mm
					
1/6	1/6	1/6	1/6	1/6	-/6
round	conical	round	round	conical	conical
120 mm	120 mm	120 mm	105 mm	112 mm	123 mm
19,246 x g	19,246 x g	19,246 x g	17,187 x g	18,333 x g	20,130 x g
16,233 x g	16,223 x g	16,223 x g	14,204 x g	16,161 x g	16,639 x g
set of 2 pcs.	-				
5820 729.007	5820 717.009	5820 720.000	5820 721.006	5820 722.002	-
54.10 £	54.90 £	54.90 £	54.90 £	54.90 £	-

i For more information go to [www.eppendorf.com/centrifugation](http://www.eppendorf.com/centrifugation)

## Rotors for 58xx Family



### Rotor F-45-30-11 and Rotor FA-45-30-11

- > 30 places for 1.5/2.0 mL tubes
- > Max. speed: 20,800 × g (max. 14,000 rpm)
- > Rotor FA-45-30-11 comes with aerosol-tight\*<sup>1</sup> lid for safe centrifugation of hazardous samples
- > Rotors, lids and adapters are autoclavable (121 °C, 20 min)
- > Anodized aluminum for high chemical resistance

<sup>1</sup> Aerosol-tightness has been tested by Public Health England, Porton Down, Great Britain.

#### Ordering information

Description	Order no.	Price
Rotor F-45-30-11, incl. rotor lid, for 30 × 1.5/2.0 mL reaction vessels	5804 715.004	300.00 £
Rotor FA-45-30-11, incl. rotor lid, for 30 × 1.5/2.0 mL reaction vessels	5804 726.006	431.00 £



### Rotor FA-45-48-11

- > 48 places for 1.5/2.0 mL tubes
- > Max. speed: 19,083 × g (max. 13,000 rpm)
- > Eppendorf QuickLock® rotor lid for fast lid locking
- > Aerosol-tight for safe centrifugation of hazardous samples <sup>2</sup>
- > Anodized aluminum for high chemical resistance
- > Rotor and lid are autoclavable

<sup>1</sup> Please note that a software upgrade will be necessary for older centrifuges when using this rotor. Please contact your local Eppendorf organization or dealer for further information.

<sup>2</sup> Aerosol-tightness tested by Public Health England, Porton Down, UK.

#### Ordering information

Description	Order no.	Price
Rotor FA-45-48-11, incl. rotor lid, for 48 × 1.5/2.0 mL tubes	5820 760.001	930.00 £



### Rotor FA-45-20-17

- > 20 places for Eppendorf Tube 5.0 mL
- > Max. speed: 20,913 × g (13,100 rpm)
- > Aerosol-tight Eppendorf QuickLock rotor lid<sup>2</sup>
- > Rotor, lid and adapters are autoclavable (121 °C, 20 min)
- > Anodized aluminium for high chemical resistance

<sup>1</sup> Please note that a software upgrade will be necessary for older centrifuges when using this rotor. Please contact your local Eppendorf organization or dealer for further information.

<sup>2</sup> Aerosol-tightness tested by Public Health England, Porton Down, UK.

#### Ordering information

Description	Order no.	Price
Rotor FA-45-20-17, incl. rotor lid, for 20 Eppendorf Tubes® 5.0 mL	5820 765.003	930.00 £
Adapter, for 1 vessel 1.5 – 2.0 mL, for Rotors FA-45-12-17, FA-45-16-17 and FA-45-20-17, set of 4 pcs.	5820 768.002	24.10 £
Adapter, for 1 cryo tube, for Rotors FA-45-12-17, FA-45-16-17 and FA-45-20-17, set of 4 pcs.	5820 769.009	24.10 £
Adapter, for 1 HLPC tube, for Rotors FA-45-12-17, FA-45-16-17 and FA-45-20-17, set of 4 pcs.	5820 770.007	24.10 £

Manufacturer's recommended retail price. All prices excl. VAT.  
Technical specifications subject to change.

**Rotor F-35-48-17**

- > High-capacity fixed-angle rotor for 15 mL conical and glass tubes
- > Maximum speed: 5,005 × g (5,500 rpm)
- > Form inserts for 15 mL conical tubes

**Ordering information**

Description	Order no.	Price
<b>Rotor F-35-48-17</b> , for 24 × 15 mL conical tubes, incl. 24 steel sleeves and adapters	5820 771.003	418.00 £
<b>Rotor F-35-48-17</b> , for 40 × 15 mL conical tubes, incl. 48 steel sleeves and adapters	5820 772.000	641.00 £

**Rotor T-60-11**

- > High capacity for 60 × 1.5/2.0 mL tubes
- > Max. speed: 16,400 × g (14,000 rpm)
- > Horizontal centrifugation for pellet formation at tube bottom – ideal for low sample quantities

**Ordering information**

Description	Order no.	Price
<b>Rotor T-60-11</b> , incl. rotor lid, for 1.5/2.0 mL tubes, without adapter	5804 730.003	1,027.00 £
<b>Adapter</b> , for 10 reaction vessels 1.5/2.0 mL, for Rotor T-60-11, set of 6 pcs.	5804 731.000	141.00 £
<b>Adapter</b> , for 20 reaction vessels 0.4 mL, for Rotor T-60-11, set of 6 pcs.	5804 732.006	141.00 £

**Rotor F-45-48-PCR**

- > Max. RCF: 15,350 × g (12,000 rpm)
- > Accommodates up to 6 × 8-tube PCR strips, 6 × 5-tube PCR strips or 48 × 0.2 mL PCR tubes
- > Safe and easy handling without additional lid

**Ordering information**

Description	Order no.	Price
<b>Rotor F-45-48-PCR</b> , for 6 × 8, 6 × 5 PCR tube strips, 48 × 0.2 mL individual PCR tubes	5804 735.005	423.00 £

NEW

# Centrifuge 5920 R



Watch Centrifuge 5920 R video clip on our optimized webpage for mobile devices or [www.eppendorf.com/centrifugation](http://www.eppendorf.com/centrifugation)



i For more information go to [www.eppendorf.com/centrifugation](http://www.eppendorf.com/centrifugation)

✂ Ordering information for other voltage options begins on page 484

Manufacturer's recommended retail price. All prices excl. VAT.  
Technical specifications subject to change.

**Ergonomic lid operation**

- > Soft-touch lid closure and low opening height for stress-free lid locking
- > Two open lid positions
- > Fully open for easy removal of rotor
- > Half open for easy access to samples and easy reach of centrifuge lid

**Extraordinary high capacity**

- > Max. 4 x 1,000 mL/52 x 50 mL conical/196 x 5/7 mL blood collection/28 x MTP

**Outstanding cooling performance**

- > Dynamic compressor control with ECO shut-off function

**Menu-operated display**

- > Multilingual operation menu with language support for English, German, French and Spanish
- > 5 program keys for easy access to routine programs

**Quiet operation**

- > Designed to operate at low noise levels for a relaxing work environment

**Description**

Centrifuge 5920 R delivers extraordinary high capacity in a very compact and ergonomic product design. It has similar dimensions as competing refrigerated 3 Liter models and yet features a superior capacity of up to 4 x 1,000 mL; thus making it the ideal instrument for high-throughput applications. It features a powerful state-of-the-art refrigeration system with advanced temperature management to keep your samples safe.

**Product features**

- > Swing-bucket rotors and adapters accommodate tubes and bottles from 0.2 mL to 1,000 mL
- > Plate rotor options for centrifugation of all types of MTP, PCR or deepwell plates
- > Fixed-angle rotors for high-speed molecular biology applications in tubes from 0.2 mL to 85 mL
- > High centrifugation speed of up to 22,132 x g (14,000 rpm)
- > Aerosol-tight Eppendorf QuickLock® caps and lids allow fast and ergonomic lid locking
- > Centrifuge lid with soft-touch lid closure
- > Quiet operation to improve your work environment
- > Compact footprint saves valuable bench space
- > Automatic rotor recognition and imbalance detection for maximum operational safety

**Additional features for Centrifuge 5920 R**

- > Temperature range from -11 °C to 40 °C
- > FastTemp function for quick pre-cooling
- > FastTemp pro® function allows for automatic precooling based on pre-programmable time and date
- > Standby cooling function holds temperature when centrifuge is not in use
- > ECO shut-off engages after 8 hours (adjustable) of non-use to reduce energy consumption and to extend compressor life
- > Dynamic compressor control (DCC) technology for optimized cooling performance

**i** For more information go to [www.eppendorf.com/centrifugation](http://www.eppendorf.com/centrifugation)

**✎** Ordering information for other voltage options begins on page 484

NEW

# Centrifuge 5920 R



## 4 Liter capacity

- > Centrifuge 5920 R accommodates standard 1 Liter Nalgene bottles setting a new standard in the table top centrifuge segment.

Your benefit: Process higher volume in fewer runs.



## Plate/tube buckets

- > Not only do the plate/tube buckets of Rotor S-4x1000 provide an exceptional high capacity (40 x 50 mL conical, 140 x 13 mm blood collection), they also allow both tubes and plates to be used at the same time

### Advantages:

- > Time saving: No need to exchange buckets
- > Cost saving: No need for separate plate buckets
- > Space saving: No need to store different buckets

The plate/tube buckets are optionally available with aerosol-tight QuickLock caps for easy handling.



## Advanced operating system

Centrifuge 5920 R comes with a modern operating system with outstanding functionality

- > Menu-driven, multi-lingual operation menu with large backlit display
- > Saves up to 99 user-defined programs
- > 5 program keys for easy access to routine programs
- > Ultra low power consumption in standby (<2 W)
- > FastTemp pro® function for automated pre-cooling based on pre-programmable time and date

**i** For more information go to [www.eppendorf.com/centrifugation](http://www.eppendorf.com/centrifugation)

**⚡** Ordering information for other voltage options begins on page 484

Manufacturer's recommended retail price. All prices excl. VAT.  
Technical specifications subject to change.

Technical specifications	
Max. RCF	22,132 x g
Max. RCF with fixed-angle rotor	22,132 x g
Max. RCF with swing-bucket rotor	4,816 x g
Speed	200 – 14,000 rpm (10 rpm steps)
Max. capacity	4 x 1000 mL/4 x 7 MTP
Acceleration/braking ramps	10/10
Number of programs	99 (5 program keys)
Timer	30 s to 99 min, with continuous run function, short-spin
Noise level	
Rotor FA-6x50	<60 dB(A)
Rotor S-4x750	<55 dB(A)
Power supply	230 V, 50 – 60 Hz
Max. power consumption	1,300 W
Dimensions (W x D x H)	74 x 71 x 40 cm
Height (with open lid)	94 cm
Weight w/o accessories	139 kg
Cooling	refrigerated
Temperature range	-11 °C to 40 °C

#### Ordering information

Description	Order no.	Price
Centrifuge 5920 R, refrigerated, 230 V/50 – 60 Hz (GB)	5948 000.069	7,917.00 £

i For more information go to [www.eppendorf.com/centrifugation](http://www.eppendorf.com/centrifugation)

✂ Ordering information for other voltage options begins on page 484

Your local distributor: [www.eppendorf.com/contact](http://www.eppendorf.com/contact)

Eppendorf UK Limited · Stevenage SG1 2FP · United Kingdom · [sales@eppendorf.co.uk](mailto:sales@eppendorf.co.uk) · [www.eppendorf.co.uk](http://www.eppendorf.co.uk)

## Centrifuge Packages



### Description

Eppendorf provides a range of different centrifuge packages for Centrifuge 5920 R.

#### Cell Culture Centrifuge packages include

- > Centrifuge 5920 R
- > Swing-bucket rotor incl. one bucket type (see adjacent)
- > Four adapters for 15 mL conical tubes (two sets of 2)
- > Four adapters for 50 mL conical tubes (two sets of 2)

#### Centrifuge packages for round-bottom tubes include

- > Centrifuge 5920 R
- > Swing-bucket rotor incl. one bucket type (see adjacent)
- > Four adapters for 13mm (5/7 mL) round bottom tubes (two sets of 2)
- > Four adapters for 16 mm (10 mL) round bottom tubes (two sets of 2)



### NEW

#### Eppendorf Conical Tubes 15 mL and 50 mL

The Eppendorf Conical Tubes 15 mL and 50 mL are the optimal solution for cell culture and cell biology applications as well as for sample preparation protocols in microbiology and molecular biology laboratories. Safe design and easy handling ensure best sample processing.

#### Premium USP class 6 raw material ensures

- > highest sample integrity
- > high g-Safe® centrifugation stability
- > optimal sample and pellet visibility

For more information go to chapter "Reaction tubes and plates" on page 148-173



### Rotor S-4x1000 with high-capacity buckets

- > For extra high throughput
- > Max. 3,153 × g



### Rotor S-4x1000 with plate/tube buckets

- > Accommodates both tubes and plates; no need for separate plate buckets<sup>1)</sup>
- > Max. 3,092 × g

<sup>1)</sup> Plate carrier to lift plates out of plate/tube bucket needs to be ordered separately



### Rotor S-4x1000 with round buckets

- > Accommodates 1L bottle
- > Max. 3,428 × g
- > Aerosol-tight caps optionally available



### Rotor S-4x750 with round buckets

- > Max. 4,816 × g
- > Aerosol-tight caps optionally available

#### Ordering information

Description	Max. capacity of conical tubes per rotor	Order no.	Price
Centrifuge 5920 R, refrigerated, with Rotor S-4x1000, incl. high-capacity buckets and adapters for 15 mL /50 mL conical tubes	108 × 15 mL/52 × 50 mL	5948 000.263	9,799.00 £
Centrifuge 5920 R, refrigerated, with Rotor S-4x1000, incl. plate/tube buckets and adapters for 15 mL /50 mL conical tubes <sup>1)</sup>	88 × 15 mL/40 × 50 mL	5948 000.468	9,643.00 £
Centrifuge 5920 R, refrigerated, with Rotor S-4x1000, incl. round buckets and adapters for 15 mL /50 mL conical tubes	56 × 15 mL/28 × 50 mL	5948 000.360	9,643.00 £
Centrifuge 5920 R, refrigerated, with Rotor S-4x750, incl. round buckets and adapters for 15 mL /50 mL conical tubes	56 × 15 mL/28 × 50 mL	5948 000.565	9,799.00 £

<sup>1)</sup> These 15/50 mL adapters are not compatible with AT caps. Please refer to 5920R brochure for dedicated 15/50 mL adapters for aerosol-tight use.

Description	Max. capacity of round-bottom tubes per rotor	Order no.	Price
Centrifuge 5920 R, refrigerated, with Rotor S-4x1000, incl. high-capacity buckets and adapters for round-bottom tubes with diameter 13/16 mm	196 × 13 mm/144 × 16 mm	5948 000.760	9,799.00 £
Centrifuge 5920 R, refrigerated, with Rotor S-4x1000, incl. plate/tube buckets and adapters for round-bottom tubes with diameter 13/16 mm <sup>2)</sup>	140 × 13 mm/132 × 16 mm	5948 000.662	9,643.00 £

<sup>2)</sup> Aerosol-tight caps reduce capacity to 100 × 13 mm / 92 × 16 mm per rotor

## Overview of Main Rotors for 5920 R

				
<b>Model</b>	Rotor S-4x1000 with High-Capacity Buckets	Rotor S-4x1000 with Plate/Tube Bucket	Rotor S-4x1000 with Round Bucket	Rotor S-4x750 with round buckets
<b>Positioning</b>	Extra high capacity	High capacity, universal bucket design accommodates both tubes and plates	Medium capacity, compatible with 1 Liter bottle	Medium capacity, high speed
<b>Aerosol-tightness</b>	no	yes	yes	yes
<b>Max. capacity</b>	8 x 250 mL	40 x 50 mL	4 x 1,000 mL	4 x 750 mL
<b>Max. RCF</b>	3,153 x g	3,092 x g	3,214 x g	4,816 x g
<b>Max. speed</b>	3,700 rpm	3,700 rpm	3,700 rpm	4,700 rpm
<b>1.5/2 mL micro tube</b>			200	200
<b>Eppendorf Tube® 5.0 mL and 15 mL conical</b>	108	88	56	56
<b>50 mL conical</b>	52	40	28	28
<b>13 mm blood tube</b>	196	140	92	92
<b>16 mm blood tube</b>	144	132	80	80
<b>750 mL bottle</b>			4	4
<b>1,000 mL bottle</b>			4	
<b>MTP / DWP</b>	28 / 8	28 / 8	28 / 8	16 / 4

## Advanced Rotor Design – Swing-Bucket Rotors



Watch the video!



### Plate/tube buckets (selected rotors only)

- > Accommodate both tubes and plates
- > Advantages:
  - Time saving: No need to exchange buckets
  - Cost saving: No need for separate plate buckets
  - Space saving: No need to store different buckets

### Aerosol-tight QuickLock caps

- > Significantly improved handling, easy operation with one or two hands
- > Handle allows the closed bucket to be carried to the biosafety cabinet where it can be opened in a safe environment.
- > Aerosol-tightness has been tested and verified by Public Health England, Porton Down, UK

			
Rotor F-6x85	Rotor FA-6x50	Rotor FA-20x5	Rotor FA-48x2
High-speed rotor suitable for molecular applications in tubes up to 85 mL	Aerosol-tight high-speed rotor for safe centrifugation of hazardous samples	Aerosol-tight fixed-angle rotor for 20 x Eppendorf Tubes® 5.0 mL	Aerosol-tight microcentrifuge tube rotor for safe centrifugation of hazardous samples
no	yes	yes	yes
6 x 85 mL	6 x 50 mL	20 x 5 mL	48 x 2 mL
18,500 x g	20,130 x g	20,913 x g	22,132 x g
12,000 rpm	12,100 rpm	13,100 rpm	14,000 rpm
24		20	48
6	6	20	
6	6		
18	6		
12	6		
/	/	/	/

## Advanced Rotor Design – Fixed-Angle Rotors



Watch the video!



### Low rotor weight

Eppendorf's fixed-angle rotors are among the lightest in the industry to improve handling and operational safety. Lightweight rotors cause less wear and tear on the motor and allow for faster acceleration and braking times.

### Eppendorf QuickLock® lids for ergonomic lid locking

Our aerosol-tight QuickLock rotors close with only ¼ of a turn. This not only saves you time during every day use, it also takes repetitive stress off your wrist.

### Superior temperature control

Aluminum, with its high heat conductivity, allows fast pre-cooling and accurate temperature control in refrigerated centrifuges.

### Product features

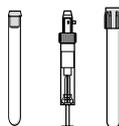
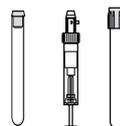
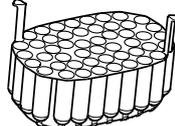
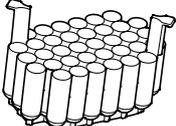
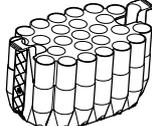
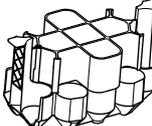
- > All rotors are anodized for high chemical resistance and to prevent corrosion
- > Optimized design of rotor boreholes and adapters provide optimal support for high-speed centrifugation of tubes
- > Aluminum rotors are recyclable

## Rotor S-4x1000 with High-Capacity Buckets



### Rotor S-4x1000 with High-Capacity Buckets

- > Extra High capacity swing-bucket rotor with max. speed 3,153 x g (3,700 rpm)
- > Mixed loading with 2 plate/tube buckets or 2 round tube buckets allows for increased versatility
- > Buckets, caps and adapters are autoclavable

					
<b>Tube volume</b>	2.6 - 8 mL	5.5 - 12 mL	15 mL conical	50 mL conical	250 mL flat, 175 - 225 mL flat
<b>Max. tube diameter</b>	13 mm	16 mm	17 mm	31 mm	62 mm
<b>Max. vessel height</b>	112 mm	113 mm	120 mm	120 mm	145 mm
<b>Adapter</b>					
<b>Number of vessels per adapter/rotor</b>	49/196	36/144	27/108	13/52	2/8
<b>Bottom shape</b>	round	round	conical	conical	flat
<b>Centrifugation radius</b>	204 mm	199 mm	205 mm	206 mm	200 mm
<b>Max. RCF</b>	2,794 x g	2,725 x g	3,138 x g	3,163 x g	3,061 x g
<b>Packing</b>	set of 2 pcs.	set of 2 pcs.			
<b>Order no.</b>	5920 718.002	5920 720.007	5920 716.000	5920 715.003	5920 717.006
<b>Price</b>	194.00 £	194.00 £	194.00 £	194.00 £	194.00 £

i For more information go to [www.eppendorf.com/centrifugation](http://www.eppendorf.com/centrifugation)

**Ordering information**

Description	Order no.	Price
<b>Rotor S-4x1000</b> , incl. high-capacity buckets	5895 118.003	2,030.00 £
<b>Rotor S-4x1000</b> , without buckets	5895 101.003	763.00 £
<b>Buckets for Rotor S-4x1000</b> , Plate/tube bucket for Rotor S-4x1000, set of 2	5895 105.009	570.00 £
<b>Buckets for Rotor S-4x1000</b> , Plate/tube bucket for Rotor S-4x1000, set of 4	5895 104.002	1,103.00 £
<b>Buckets for Rotor S-4x1000</b> , High-Capacity bucket for Rotor S-4x1000, set of 2	5895 107.001	643.00 £
<b>Buckets for Rotor S-4x1000</b> , High-Capacity bucket for Rotor S-4x1000, set of 4	5895 106.005	1,277.00 £
<b>Plate carrier for plate/tube bucket</b> , for MTP, DWP, PCR plates, Rotor S-4x1000, set of 2	5920 705.008	194.00 £
<b>Aerosol-tight caps</b> , for plate/tube bucket, set of 2	5895 111.009	137.00 £

i For more information go to [www.eppendorf.com/centrifugation](http://www.eppendorf.com/centrifugation)

## Rotor S-4x1000 with Plate/Tube Bucket

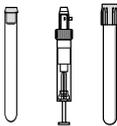
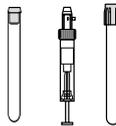
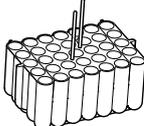
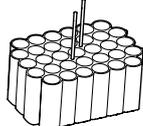
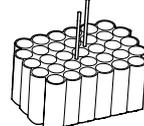


### Rotor S-4x1000 with Plate/Tube Bucket

- > High capacity swing-bucket rotor with max. speed 3,092 x g (3,700 rpm)
- > Bucket accommodates both plates and tubes
- > Saves money – no separate plate buckets needed<sup>1)</sup>
- > Comfort – no need to exchange between plate and tube buckets
- > Aerosol-tight QuickLock caps for safe centrifugation of hazardous samples optionally available<sup>2)</sup>
- > Buckets, caps and adapters are autoclavable

<sup>1)</sup> Plate carrier to lift plates out of plate/tube bucket needs to be ordered separately

<sup>2)</sup> Aerosol-tightness tested by Public Health England, Porton Down, UK.

				
<b>Tube volume</b>	2.6 - 8 mL	5.5 - 12 mL	9 mL	Eppendorf Tubes® 5.0 mL and 15 mL
<b>Max. tube diameter</b>	13 mm	16 mm	17.5 mm	17 mm
<b>Max. vessel height</b>	109 mm	109 mm	109 mm	121 mm
<b>Max. vessel height for use with aerosol-tight lid</b>	108 mm <sup>1)</sup>	108 mm <sup>2)</sup>	109 mm <sup>3)</sup>	-
<b>Adapter</b>				
<b>Number of vessels per adapter/rotor</b>	35/140	33/132	28/112	22/88
<b>Bottom shape</b>	round	round	round	conical
<b>Centrifugation radius</b>	201 mm	200 mm	200 mm	201 mm
<b>Max. RCF</b>	3,076 x g	3,061 x g	3,061 x g	3,076 x g
<b>Packing</b>	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.
<b>Order no.</b>	5920 706.004	5920 707.000	5920 708.007	5920 710.001
<b>Price</b>	194.00 £	194.00 £	194.00 £	194.00 £

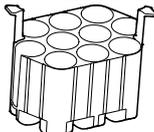
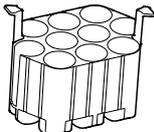
<sup>1)</sup> in 25 center pos. <sup>2)</sup> in 23 center pos. <sup>3)</sup> in 22 center pos.

i For more information go to [www.eppendorf.com/centrifugation](http://www.eppendorf.com/centrifugation)



**Ordering information**

Description	Order no.	Price
<b>Rotor S-4x1000</b> , incl.plate/tube bucket	5895 117.007	1,866.00 £
<b>Rotor S-4x1000</b> , without buckets	5895 101.003	763.00 £
<b>Buckets for Rotor S-4x1000</b> , Plate/tube bucket for Rotor S-4x1000, set of 2	5895 105.009	570.00 £
<b>Buckets for Rotor S-4x1000</b> , Plate/tube bucket for Rotor S-4x1000, set of 4	5895 104.002	1,103.00 £
<b>Plate carrier for plate/tube bucket</b> , for MTP, DWP, PCR plates, Rotor S-4x1000, set of 2	5920 705.008	194.00 £
<b>Aerosol-tight caps</b> , for plate/tube bucket, set of 2	5895 111.009	137.00 £

			
Eppendorf Tubes® 5.0 mL and 15 mL	50 mL conical	50 mL conical	MTP, DWP, PCR plates
17 mm	31 mm	31 mm	
121 mm	122 mm	121 mm	104 mm
121 mm	-	121 mm	91 mm
			
16/64	10/40	7/28	7/28 (MTP) 2/8 (DWP)
conical	conical	conical	flat
202 mm	201 mm	201 mm	198 mm
3,092 x g	3,076 x g	3,076 x g	3,030 x g
set of 2 pcs.			
5920 712.004	5920 709.003	5920 711.008	5920 705.008
194.00 £	194.00 £	194.00 £	194.00 £

i For more information go to [www.eppendorf.com/centrifugation](http://www.eppendorf.com/centrifugation)

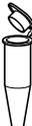
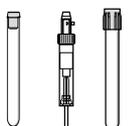
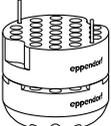
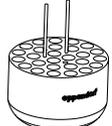
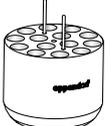
## Rotor S-4x1000 with Round Bucket



### Rotor S-4x1000 with Round Bucket

- > Medium capacity swing-bucket rotor with max. speed 3,428 × g (3,700 rpm)
- > Broad range of adapters enables high versatility for tubes and flasks from 0.2 mL to 1,000 mL and plates
- > Mixed loading with 2 plate buckets and 2 round tube buckets allows for increased versatility
- > Aerosol-tight QuickLock caps for safe centrifugation of hazardous samples optionally available<sup>1</sup>
- > Buckets, caps and adapters are autoclavable

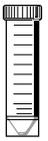
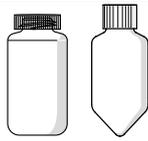
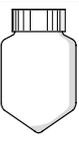
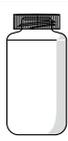
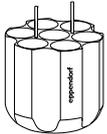
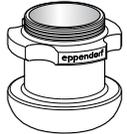
<sup>1</sup> Aerosol-tightness tested by Public Health England, Porton Down, UK.

							
<b>Tube volume</b>	1.5/2.0 mL	5 mL FACS, 12 x 75 mm	2.6 – 8 mL	5.5 – 12 mL	9 mL	14 mL	Eppendorf Tubes® 5.0 mL and 15 mL conical tubes
<b>Max. tube diameter</b>	11 mm	12 mm	13 mm	16 mm	17.5 mm	17.5 mm	17 mm
<b>Max. vessel height</b>	39 mm	115 mm	121 mm	125 mm	117 mm	117 mm	161 mm
<b>Max. vessel height for use with cap/lid<sup>1)</sup></b>	39 mm	108 mm	113 mm	120 mm	112 mm	112 mm	150 mm
<b>Adapter</b>							
<b>Number of vessels per adapter/rotor</b>	50/200	27/108	23/92	20/80	20/80	14/56	14/56
<b>Bottom shape</b>	flat	round	round	round	round	round	conical
<b>Centrifugation radius</b>	219 mm	211 mm	210 mm	211 mm	210 mm	210 mm	224 mm
<b>Max. RCF</b>	2,648 × g	3,229 × g	3,214 × g	3,229 × g	3,214 × g	3,214 × g	3,428 × g
<b>Packing</b>	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.				
<b>Order no.</b>	5825 740.009	5825 747.003	5825 738.004	5825 736.001	5825 743.008	5825 748.000	5825 734.009
<b>Price</b>	194.00 £	194.00 £	194.00 £	194.00 £	194.00 £	194.00 £	194.00 £

<sup>1)</sup> Exceeding the maximum tube length may reduce the loading capacity of the rotor. Please perform a manual swing-out test before starting the centrifuge run to make sure the tubes do not hit the rotor yoke.<sup>2)</sup> Please note that these conical bottles need to be used together with a conical form insert provided by the manufacturer.

Ordering information

Description	Order no.	Price
<b>Rotor S-4x1000</b> , incl. 4 x 1,000 mL round buckets	5895 100.007	1,866.00 £
<b>Rotor S-4x1000</b> , without buckets	5895 101.003	763.00 £
<b>Buckets for Rotor S-4x1000</b> , Round bucket for Rotor S-4x1000, set of 2	5895 103.006	570.00 £
<b>Buckets for Rotor S-4x1000</b> , Round bucket for Rotor S-4x1000, set of 4	5895 102.000	1,103.00 £
<b>Buckets for Rotor S-4x1000</b> , Plate/tube bucket for Rotor S-4x1000, set of 2	5895 105.009	570.00 £
<b>Buckets for Rotor S-4x1000</b> , Plate/tube bucket for Rotor S-4x1000, set of 4	5895 104.002	1,103.00 £
<b>Plate carrier for plate/tube bucket</b> , for MTP, DWP, PCR plates, Rotor S-4x1000, set of 2	5920 705.008	194.00 £
<b>Aerosol-tight caps</b> , for plate/tube bucket, set of 2	5895 111.009	137.00 £
<b>Caps for 750 mL round buckets</b> , for Rotor S-4-104, Rotor S-4x750 and Rotor S-4x1000, set of 2 pieces	5820 747.005	127.00 £

						
50 mL conical	50 mL conical, skirted	250 mL flat, 175 – 250 mL conical <sup>2)</sup>	500 mL Corning <sup>®</sup>	750 mL	1 Liter Nalgene	MTP, DWP, PCR plates
31 mm	31 mm	62 mm	98 mm	104 mm	98 mm	
156 mm	151 mm	176 mm	167 mm	150 mm	185 mm	104 mm
150 mm	147 mm	156 mm	-	-	-	91 mm
						
7/28	5/20	1/4	1/4	1/4	1/4	7/28 (MTP) 2/8 (DWP)
conical	flat	flat	conical	flat	flat	flat
223 mm	209 mm	214 mm	218 mm	216 mm	218 mm	198 mm
3,413 x g	3,199 x g	3,275 x g	3,336 x g	3,306 x g	3,336 x g	3,030 x g
set of 2 pcs.	set of 2 pcs.	set of 2 pcs.				
5825 733.002	5825 732.006	5825 741.005	5825 745.000	5825 744.004	5920 700.006	5895 105.009
194.00 £	194.00 £	194.00 £	194.00 £	103.00 £	194.00 £	570.00 £

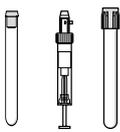
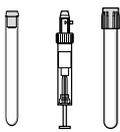
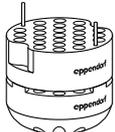
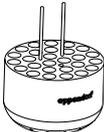
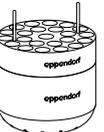
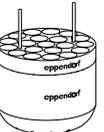
# Rotor S-4x750



## Rotor S-4x750

- > Medium capacity swing-bucket rotor with max. speed 4,816 x g (4,700 rpm)
- > Broad range of adapters enables high versatility for tubes and flasks from 0.2 mL to 750 mL and plates
- > Mixed loading with 2 plate buckets and 2 round tube buckets allows for increased versatility
- > Aerosol-tight QuickLock caps for safe centrifugation of hazardous samples optionally available<sup>1</sup>
- > Buckets, caps and adapters are autoclavable

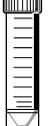
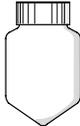
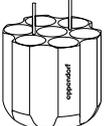
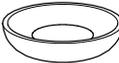
<sup>1</sup> Aerosol-tightness tested by Public Health England, Porton Down, UK.

						
<b>Tube volume</b>	1.5/2.0 mL	5 mL FACS, 12 x 75 mm	2.6 – 8 mL	5.5 – 12 mL	9 mL	14 mL
<b>Max. tube diameter</b>	11 mm	12 mm	13 mm	16 mm	17.5 mm	17.5 mm
<b>Max. vessel height</b>	39 mm	120 mm	121 mm	125 mm	117 mm	106 mm
<b>Max. vessel height for use with cap/lid<sup>1)</sup></b>	39 mm	113 mm	113 mm	120 mm	112 mm	106 mm
<b>Adapter</b>						
<b>Number of vessels per adapter/rotor</b>	50/200	27/108	23/92	20/80	20/80	14/56
<b>Bottom shape</b>	flat	round	round	round	round	round
<b>Centrifugation radius</b>	194 mm	186 mm	185 mm	186 mm	185 mm	185 mm
<b>Max. RCF</b>	4,791 x g	4,593 x g	4,569 x g	4,594 x g	4,569 x g	4,569 x g
<b>Packing</b>	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.			
<b>Order no.</b>	5825 740.009	5825 747.003	5825 738.004	5825 736.001	5825 743.008	5825 748.000
<b>Price</b>	194.00 £	194.00 £	194.00 £	194.00 £	194.00 £	194.00 £

<sup>1)</sup> Exceeding the maximum tube length may reduce the loading capacity of the rotor. Please perform a manual swing-out test before starting the centrifuge run to make sure the tubes do not hit the rotor yoke.<sup>2)</sup> Please note that these conical bottles need to be used together with a conical form insert provided by the manufacturer.

**Ordering information**

Description	Order no.	Price
<b>Rotor S-4x750</b>		
incl. 4 x 750 mL round buckets	5895 120.008	2,030.00 £
without buckets	5895 121.004	931.00 £
<b>Buckets for Rotor S-4x750</b> , Plate bucket (aerosol-tight capable), incl. plate carrier, set of 2	5895 125.000	570.00 £
<b>Buckets for Rotor S-4x750</b> , Plate bucket (aerosol-tight capable), incl. plate carrier, set of 4	5895 124.003	1,103.00 £
<b>Buckets for Rotor S-4x750</b> , Round buckets for Rotor S-4x750, set of 2	5895 123.007	570.00 £
<b>Buckets for Rotor S-4x750</b> , Round buckets for Rotor S-4x750, set of 4	5895 122.000	1,103.00 £
<b>Caps for plate buckets (aerosol-tight capable)</b> , for Rotor S-4-104 and Rotor S-4x750, set of 2 pieces	5820 748.001	137.00 £
<b>Caps for 750 mL round buckets</b> , for Rotor S-4-104, Rotor S-4x750 and Rotor S-4x1000, set of 2 pieces	5820 747.005	127.00 £
<b>Wide-neck bottle</b> , 750 mL, set of 2 pieces	5820 708.000	129.00 £

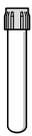
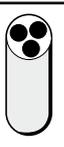
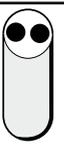
						
Eppendorf Tubes® 5.0 mL and 15 mL conical tubes	50 mL conical	50 mL conical, skirted	250 mL flat, 175 – 225 mL conical <sup>2)</sup>	500 mL Corning®	750 mL	MTP, DWP, PCR plates
17 mm	31 mm	31 mm	62 mm	98 mm	104 mm	
125 mm	122 mm	122 mm	145 mm	150 mm	133 mm	60 mm
120 mm	116 mm	116 mm	125 mm	-	133 mm	45 mm
						
14/56	7/28	5/20	1/4	1/4	1/4	4/16 (MTP) 1/4 (DWP)
conical	conical	flat	flat	conical	flat	flat
188 mm	187 mm	177 mm	183 mm	186 mm	185 mm	161 mm
4,643 x g	4,618 x g	4,371 x g	4,519 x g	4,594 x g	4,569 x g	3,976 x g
set of 2 pcs.	set of 2 pcs.	set of 2 pcs.				
5825 734.009	5825 733.002	5825 732.006	5825 741.005	5825 745.000	5825 744.004	5895 125.000
194.00 £	194.00 £	194.00 £	194.00 £	194.00 £	103.00 £	570.00 £

## Rotor F-6x85



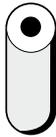
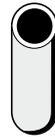
### Rotor F-6x85

- > High-speed rotor for molecular applications in tubes from 0.2 mL to 85 mL
- > Max. speed 18,500 × g
- > Low rotor weight (3.2 kg) for easy handling
- > 34° borehole angle reduces pellet smears along tube wall
- > Anodized aluminum for high chemical resistance
- > Rotor, lid and adapters are autoclavable

					
<b>Tube volume</b>	1.5 – 2.0 mL	2.6 – 7 mL	2.6 – 7 mL	7 – 15 mL	Eppendorf Tubes® 5.0 mL
<b>Max. tube diameter</b>	11 mm	13 mm	13 mm	16 mm	17 mm
<b>Max. vessel height for use with cap/lid</b>	110 mm	90 mm	110 mm	112 mm	104 mm
<b>Adapter</b>					
<b>Number of vessels per adapter/rotor</b>	4/24	3/18	3/18	2/12	1/6
<b>Bottom shape</b>	round	flat	flat	round	conical
<b>Centrifugation radius</b>	113 mm	106 mm	114 mm	112 mm	105 mm
<b>Max. RCF</b>	18,200 × g	17,070 × g	18,350 × g	18,000 × g	16,824 × g
<b>Packing</b>	set of 2 pcs.	set of 2 pcs.			
<b>Order no.</b>	5804 770.005	5804 738.004	5804 739.000	5804 771.001	5804 777.000
<b>Price</b>	90.00 £	67.40 £	67.40 £	67.40 £	54.10 £

Ordering information

Description	Order no.	Price
<b>Rotor F-6x85</b> , incl. rotor lid	5895 140.009	979.00 £

					
15 mL conical	15 – 18 mL	20 – 30 mL	50 mL	50 mL conical	85 mL
17 mm	18 mm	26 mm	29 mm	31 mm	38 mm
123 mm	123 mm	123 mm	123 mm	121 mm	121 mm
					
1/6	1/6	1/6	1/6	1/6	-/6
conical	round	round	round	conical	round
107 mm	109 mm	110 mm	112 mm	108 mm	115 mm
17,200 x g	17,550 x g	17,700 x g	18,000 x g	17,400 x g	18,500 x g
set of 2 pcs.					
5804 776.003	5804 772.008	5804 773.004	5804 774.000	5804 775.007	-
57.80 £	67.40 £	54.60 £	54.60 £	57.80 £	

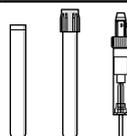
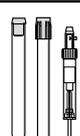
# Rotor FA-6x50



## Rotor FA-6x50

- > High-speed rotor for applications in tubes from 5 - 50 mL
- > Max. speed 20,130 × g (12,100 rpm)
- > Eppendorf QuickLock rotor lid for fast lid locking
- > Aerosol-tight<sup>1</sup> for safe centrifugation of hazardous samples
- > Low rotor weight (3.2 kg) for easy handling
- > Anodized aluminum for high chemical resistance
- > 45° borehole angle minimizes pellets smear
- > Rotor, lid and adapters are autoclavable

<sup>1</sup> Aerosol-tightness tested by Public Health England, Porton Down, UK.

					
<b>Tube volume</b>	2.6 – 5 mL	4 – 8 mL	5.5 – 10 mL	7.5 – 12 mL	Eppendorf Tubes® 5.0 mL
<b>Max. tube diameter</b>	13 mm	13 mm	16 mm	16 mm	17 mm
<b>Max. vessel height for use with cap/lid</b>	119 mm	119 mm	119 mm	119 mm	121 mm
<b>Adapter</b>					
<b>Number of vessels per adapter/rotor</b>	1/6	1/6	1/6	1/6	1/6
<b>Bottom shape</b>	round	round	round	round	conical
<b>Centrifugation radius</b>	120 mm	120 mm	120 mm	120 mm	121 mm
<b>Max. RCF</b>	19,246 × g	19,246 × g	19,246 × g	19,246 × g	19,806 × g
<b>Packing</b>	set of 2 pcs.	set of 2 pcs.			
<b>Order no.</b>	5820 726.008	5820 725.001	5820 728.000	5820 727.004	5820 730.005
<b>Price</b>	54.10 £	54.10 £	54.10 £	54.10 £	54.10 £

**Ordering information**

Description	Order no.	Price
<b>Rotor FA-6x50, incl.rotor lid</b>	5895 150.004	1,545.00 £

					
7 – 17 mL	15 mL conical	15 – 18 mL	20 – 30 mL	35 mL	50 mL conical
17.5 mm	17 mm	18 mm	26 mm	29 mm	31 mm
122 mm	125 mm	125 mm	125 mm	125 mm	121 mm
					
1/6	1/6	1/6	1/6	1/6	-/6
round	conical	round	round	conical	conical
120 mm	120 mm	120 mm	105 mm	112 mm	123 mm
19,246 x g	19,246 x g	19,246 x g	17,187 x g	18,333 x g	
set of 2 pcs.	-				
5820 729.007	5820 717.009	5820 720.000	5820 721.006	5820 722.002	-
54.10 £	54.90 £	54.90 £	54.90 £	54.90 £	

## Overview of Main Rotors for 5920 R



### Rotor FA-20x5

- > 20 places for Eppendorf Tube 5.0 mL
- > Max. speed: 20,913 × g (13,100 rpm)
- > Aerosol-tight Eppendorf QuickLock rotor lid
- > Rotor, lid and adapters are autoclavable (121 °C, 20 min)
- > Anodized aluminium for high chemical resistance

<sup>1</sup> Aerosol-tightness tested by Public Health England, Porton Down, UK.



### Rotor FA-48x2

- > 48 places for 1.5/2.0 mL tubes
- > Max. speed: 22,132 × g (14,000 rpm)
- > Eppendorf QuickLock rotor lid for fast lid locking
- > Aerosol-tight<sup>1</sup> for safe centrifugation of hazardous samples
- > Anodized aluminium for high chemical resistance
- > Rotor and lid are autoclavable (121 °C, 20 min)

<sup>1</sup> Aerosol-tightness tested by Public Health England, Porton Down, UK.

### Ordering information

Description	Order no.	Price
<b>Rotor FA-20x5</b> , for 20 Eppendorf Tubes® 5.0 mL, incl. aerosol-tight Eppendorf QuickLock® rotor lid	5895 130.003	930.00 £
<b>Rotor FA-48x2</b> , incl. aerosol-tight Eppendorf QuickLock® rotor lid	5895 135.005	930.00 £
<b>Adapter</b> , for 1 vessel 1.5/2.0 mL, for Rotors FA-45-12-17, FA-45-16-17 and FA-45-20-17, set of 4 pcs.	5820 768.002	24.10 £
<b>Adapter</b> , for 1 cryo tube, for Rotors FA-45-12-17, FA-45-16-17 and FA-45-20-17, set of 4 pcs.	5820 769.009	24.10 £
<b>Adapter</b> , for 1 HLPC tube, for Rotors FA-45-12-17, FA-45-16-17 and FA-45-20-17, set of 4 pcs.	5820 770.007	24.10 £
<b>Adapter</b> , for 1 tube 0.5 mL, max. Ø 6 mm or microtainer 0.6 mL, max. Ø 6 mm, for all 1.5/2.0 mL rotors, set of 6 pcs.	5425 716.001	10.10 £
<b>Adapter</b> , for 1 tube 0.4 mL, max. Ø 6 mm, for all 1.5/2.0 mL rotors, set of 6 pcs.	5425 717.008	10.10 £
<b>Adapter</b> , for 1 PCR tube 0.2 mL, max. Ø 6 mm, for all 1.5/2.0 mL rotors, set of 6 pcs.	5425 715.005	10.10 £

i For more information go to [www.eppendorf.com/centrifugation](http://www.eppendorf.com/centrifugation)

# Eppendorf epGreen® Initiative

## Eppendorf epGreen Initiative

Eppendorf centrifuges offer the following epGreen features.

### Centrifuges in general:

- > All Centrifuges are designed with a brushless induction motor to provide maintenance-free operation, eliminating carbon particle emissions
- > Rotors are made of recyclable aluminum
- > All Centrifuges are designed for low noise emission. Some of the new microcentrifuges can even be operated without the rotor lid, without any significant increase in sound volume

### Refrigerated models feature:

- > Patented, dynamic compressor control\*<sup>2</sup> for optimized cooling performance, extended compressor life and reduced energy consumption

> CFC-free refrigerant with an ozone depletion potential (ODP) of zero

> ECO shut-off deactivates the compressor after 8 hours of inactivity to reduce energy consumption and extend compressor life

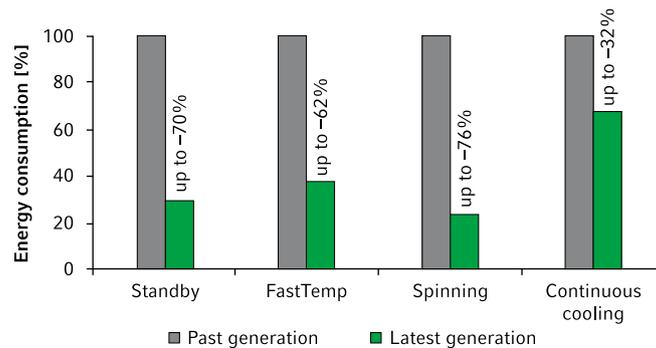
### Centrifuge packaging:

> The inner and outer centrifuge packaging are made of 100 % recyclable materials

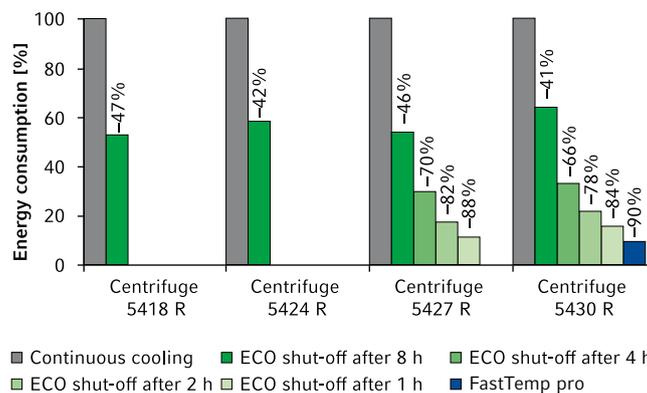
\*<sup>2</sup> US Patent 6,866,621



## Save energy with every new generation of Eppendorf centrifuges



## Energy savings overnight with ECO shut-off and FastTemp pro



# Concentrator plus



reddot design award  
winner 2011

## Description

The Concentrator plus with its new design was designed with the customer in mind to deliver an ergonomic, intuitive and durable solution that fits comfortably right on the lab bench. An advanced heating technology provides best treatment for your sample which assures quick, efficient and gentle vacuum concentration of DNA/RNA, nucleotides, proteins and other liquid or wet samples. Our new coated lid provides superior chemical resistance against aggressive acids and organic solvents (e.g. TFA, DMSO).

The Concentrator plus is available with three configurations to meet the customers' lab specific needs: 1) Basic concentrator for connecting to an existing vacuum pump 2) Complete system with an integrated solvent-resistant, maintenance and oil-free PTFE pump, and condensation trap 3) Complete system with vacuum port adds extra capability. It allows for using the integrated vacuum pump separately - without having to disconnect it from the system

## Product features

- > Comes in 3 system configurations
- > Extremely quiet operation <50 dB(A)
- > Chemical-resistant, maintenance-free PTFE diaphragm pump eliminates the need for changing up pump oil
- > Small footprint saves valuable bench space
- > Wide variety of 15 different rotor options to accommodate tubes from 0.2 mL to 50 mL, microplates and PCR plates
- > Motorless induction drive and chemical-resistant, stainless steel chamber for trouble-free operation
- > Can be connected with most commercially available cold traps for use with vapors
- > **New:** Coated lid with superior chemical resistance
- > **New:** Rotor for Eppendorf Tubes® 5.0 mL

i For more information go to [www.eppendorf.com/centrifugation](http://www.eppendorf.com/centrifugation)



### Concentrator junction system

The complete “junction” system adds extra capability/flexibility. It allows you to use the integrated vacuum pump separately – without having to disconnect it from the system; simply connect the port to any external device that requires vacuum (e.g. gel dryer).

### Key function

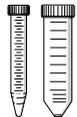
- > Timer selection between 1 min and 9:59 as well as Brake function
- > Temperature preselection: room temperature, 30 °C, 45 °C and 60 °C
- > Mode/vent function: choose between three solvent modes
- > Start/Stop of concentration process

Technical specifications			
Model	Concentrator plus basic	Concentrator plus system	Concentrator plus system w/port
Vacuum	–	20 hPa (20 mbar)	20 hPa (20 mbar)
Fixed speed	1,400 rpm	1,400 rpm	1,400 rpm
Tube volume	0.2 – 50 mL	0.2 – 50 mL	0.2 – 50 mL
Sample capacity	Max. 144 vessels/ 2 microplates	Max. 144 vessels/ 2 microplates	Max. 144 vessels/ 2 microplates
Port to connect external devices to vacuum pump	no	no	yes
Max. power consumption	150 W	350 W	350 W
Dimensions (W × D × H)	33 × 37 × 23 cm	33 × 58 × 29 cm	33 × 58 × 29 cm
Weight w/o accessories	16.5 kg	31.5 kg	31.5 kg

i For more information go to [www.eppendorf.com/centrifugation](http://www.eppendorf.com/centrifugation)

# Rotors for Concentrator plus

## Ordering information

	Description	Max. tube dimensions Ø x L	Sample capacity	Order no.	Price
	Rotor F-45-72-8	8 x 31 mm <sup>1)</sup>	72 x 0.5 mL	5490 034.007	266.00 £
	Rotor F-45-70-11	11 x 41/47 mm	70 x 1.5 mL, 70 x 2.0 mL	5490 032.004	266.00 £
	Rotor F-45-48-11	11 x 41/47 mm <sup>1)</sup>	48 x 1.5 mL/2.0 mL	5490 030.001	266.00 £
	Rotor F-45-22-17	17 x 60 mm	22 x 5.0 mL	5490 048.008	281.00 £
	Rotor F-40-36-12	12 x 32 mm	36 x 1.5 mL	5490 040.007	337.00 £
	Rotor F-45-36-15	15 x 45 – 48 mm <sup>2)</sup>	36 x 3.0/5.0 mL	5490 035.003	266.00 £
	Rotor F-45-16-20	20 x 42 – 55 mm <sup>2)</sup>	16 x 6.5/10 mL	5490 043.006	337.00 £
	Rotor F-40-18-19	19 x 66 mm	18 x 10 mL	5490 037.006	337.00 £
	Rotor F-45-12-31	31 x 55 mm	12 x 20 mL	5490 044.002	337.00 £
	Rotor F-35-8-24	24 x 86 – 105 mm <sup>2)</sup>	8 x 25 mL	5490 039.009	337.00 £
	Rotor F-45-24-12	12 x 67 – 100 mm <sup>2)3)</sup>	24 x 5 – 7 mL	5490 036.000	266.00 £
	Rotor F-50-8-16	16 x 105 – 120 mm <sup>2)</sup>	8 x 8 – 12 mL	5490 041.003	337.00 £
	Rotor F-50-8-18	18 x 105 – 128 mm <sup>2)</sup>	8 x 10 – 18 mL	5490 042.000	337.00 £
	Rotor F-45-8-17	17 x 116 – 123 mm <sup>2)</sup>	8 x 15 mL conical tubes	5490 038.002	337.00 £
	Rotor F-35-6-30	17 x 116 – 123 mm or 30 x 116 – 123 mm <sup>2)</sup>	6 x 15 mL conical tubes or 6 x 50 mL conical tubes	5490 047.001	337.00 £
	Rotor A-2-VC	128 x 86 x 27 mm	2 x MTP or skirted PCR plates 2 x Deepwell plates (DWP) (max. height = 27 mm)	5490 045.009	712.00 £

<sup>1)</sup> Rotor is stackable for double capacity using spacer 5301 316.005.<sup>2)</sup> Min/max. tube length.<sup>3)</sup> Tube length = 75 mm: max capacity 24 tubes, tube length > 75 mm: max capacity 12 tubes.



### Rotor F-45-48-11

- > Rotor for 48 x 1.5/2.0 mL microcentrifuge tubes
- > A spacer enables additional stacking (double capacity)



### Rotor F-45-8-17

- > Rotor for 8 x 15 mL conical tubes



### Rotor F-35-6-30

- > Rotor for 6 x 50 mL conical tubes
- > Also accommodates 6 x 15 mL conical tubes



### Rotor A-2-VC

- > For use with MTP, PCR and Deepwell plates up to 27 mm high
- > A work tray with frame is available for PCR test plates and microplates without frames
- > Rotor can be autoclaved for 20 min. at 121°
- > Suitable for the CombiSlide Adapter

### Ordering information

Description	Order no.	Price
<b>Concentrator plus basic device</b>		
230 V/50 – 60 Hz (GB), with Rotor F-45-48-11	5305 000.169	2,973.00 £
<b>Concentrator plus complete system</b>		
230 V/50 – 60 Hz (GB), with integrated diaphragm vacuum pump, with Rotor F-45-48-11	5305 000.363	5,298.00 £
230 V/50 – 60 Hz (GB), with integrated diaphragm vacuum pump, without rotor	5305 000.568	5,163.00 £
230 V/50 – 60 Hz (GB), with integrated diaphragm vacuum pump; with connection, e.g., for a gel dryer; without rotor	5305 000.762	6,147.00 £
<b>Adapter</b> , for 1 PCR tube 0.2 mL, for Rotor F-45-72-8, set of 6 pcs.	5425 723.008	10.10 £
<b>CombiSlide® Adapter</b> , for 12 slides, for plate rotors, set of 2 pcs.	5825 706.005	205.00 £
<b>Rotor spacer</b> , required for stacking rotors F-45-72-8 and F-45-48-11	5301 316.005	19.00 £
<b>Work tray</b> , for semi-/unskirted PCR plates, PCR strips and 0.2 mL PCR tubes, for Rotor A-2-VC, set of 10 pcs.	0030 124.235	40.70 £
<b>Frame for work tray</b> , for Rotor A-2-VC, set of 5 pcs.	0030 124.243	35.10 £
<b>Adapter</b> , for 1 tube 0.5 mL, max. Ø 6 mm or microtainer 0.6 mL, max. Ø 6 mm, for all 1.5/2.0 mL rotors, set of 6 pcs.	5425 716.001	10.10 £
<b>Adapter</b> , for 1 PCR tube 0.2 mL, max. Ø 6 mm, for all 1.5/2.0 mL rotors, set of 6 pcs.	5425 715.005	10.10 £

✎ Ordering information for other voltage options begins on page 484

# Centrifuge & Rotor Performance Plans

## Preventive Maintenance

Quality Management systems increasingly ask for regular inspection of centrifuges and rotors in an operational or disassembled state. To ensure a safe working environment an annual inspection for centrifuges and rotors by an Eppendorf certified service technician is highly recommended. Performance checks ensure that all technical specifications like temperature accuracy, rotational speed verification and operating time meet the manufacturer's specifications. Rotors withstand extreme strains. Improper usage may lead to a reduced lifetime of the rotor due to corrosion through moisture and chemicals, scratches or even cracks.

## Certification Service

Operational Qualification (OQ) is designed to safeguard your results as well as to satisfy legal, governmental and internal laboratory requirements with the necessary certification documents.



Performance Plans	Recommended service period	non-refrigerated w/o imbalance system MiniSpin®, MiniSpin® plus, 5418, 5424, 5415 D
<b>Centrifuge Maintenance Service:</b>		<b>Order no.</b>
Preventive Maintenance – incl. cleaning and lubricating	once per year	5424 860.010
Replacement of lid springs/gas spring	every second year	5424 860.052
Replacement of drive unit suspension/shock mounts for motor – Imbalance compensation check	every second year	5424 860.060
Replacement of rotor chamber seal	every second year	
Software upgrade		
<b>Rotor Inspection Service:</b>		
Visual Rotor Check Fixed-angle	once per year	5424 860.109
Visual Rotor Check Swing-bucket	once per year	
<b>Certification Service:</b>		
Operational Qualification (OQ) incl. electrical testing	once per year	5424 860.028
Electrical testing according to country-specific regulations	once per year	5424 860.087
Obligatory check of centrifuge according to country-specific regulations (e.g. applicable for 5804/5804 R and 5810/5810 R in Germany BGR 500)	once per year	
Obligatory check of rotor according to country-specific regulations (e.g. applicable for 5804/5804 R und 5810/5810 R in Germany: BGR 500)	once per year	

**epServices**  
for premium performance

**Service features**

- > Highest safety in your laboratory
- > GLP compliant audited system
- > Longer lifetime of system

**Long-term benefits**

- > Eppendorf service quality and integrity
- > Manufacturer-specific testing procedure and equipment
- > Certified service reports



For more information go to [www.eppendorf.com/epServices](http://www.eppendorf.com/epServices).  
In selected countries only.

SERVICE PRODUCTS

**refrigerated w/o imbalance system**  
5415 R, 5418 R, 5424 R

**Order no.**

5426 860.017  
5424 860.052  
5424 860.060

5426 860.041

5424 860.109

5426 860.025

5424 860.087

**non-refrigerated imbalance system**  
5702, 5417 C, 5430, 5804, 5810

**Order no.**

5702 860.018  
5424 860.052  
5702 860.069

5426 860.041

5426 860.076

5424 860.109

5810 860.113

5702 860.026

5424 860.087

5702 860.093

5424 860.150

**refrigerated imbalance system**  
5702 R, 5702 RH, 5417 R, 5430 R,  
5804 R, 5810 R, 5427 R, 5920 R

**Order no.**

5811 860.010  
5424 860.052  
5811 860.060

5426 860.041

5426 860.076

5424 860.109

5810 860.113

5811 860.028

5424 860.087

5811 860.109

5424 860.150

# Rotor Assurance Plans

## Inspection Services

Rotors and buckets are subject to normal wear and tear during regular operation and may be damaged as a result. Surface scratches, among others, can affect the chemical resistance and accelerate the corrosion process. The stress of high number of cycles increases the likelihood of microscopic cracks. These microcracks can be detected early on during a qualified inspection, which will allow the rotor to be exchanged before serious damage has occurred.

Our certified, qualified service technicians use sophisticated borescope devices to detect invisible, yet critical, cracks and scratches. If none or very few surface changes are identified, the rotor can be used according to instructions - or for an additional year if the inspection was performed at the end of the recommended service life.




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### Inspection service for rotors

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Visual rotor check\*

Advanced rotor check

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\*For all Eppendorf rotors and accessories

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### Recommended service periods

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Annually

From twice per service life to annually

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**epServices**  
for premium performance

**Service features**

- > Confidence for safest operation
- > Rotor care/use instructions
- > Detailed test report
- > Discount on new rotor

**Long-term benefits**

- > Depend on safe operation
- > Sample integrity and consistent performance
- > Maximizing rotor service life



More information available at:  
[www.eppendorf.com/epServices](http://www.eppendorf.com/epServices). In selected countries only.

Group 1	Group 2	Group 3
<b>Fixed-angle rotors</b>	<b>Fixed-angle rotors</b>	<b>Swing-bucket rotors &amp; buckets</b>
F-45-12-11, F-45-24-11, F-45-30-11, FA-45-18-11, FA-45-24-11 series, FA-45-30-11, F-45-18-17-Cryo	F-35-6-30, F-34-6-38, FA-45-6-30	A-2-MTP, A-2-DWP, A-4-44, A-4-62, A-4-81
5424 860.109	5424 860.109	5810 860.113
5424 860.206	5810 860.237	5810 860.245



Model	MC pro	MC pro S	MC pro 384
Page(s)	262	263	263
Dimensions (W × D × H)	26 × 41.5 × 37 cm	26 × 41.5 × 37 cm	26 × 41.5 × 37 cm
Gradient block	Over 12 rows	Over 12 rows	Over 24 rows
Heating rate	4 °C/s <sup>1)</sup>	6 °C/s <sup>1)</sup>	4 °C/s <sup>1)</sup>
Cooling rate	3 °C/s <sup>1)</sup>	4.5 °C/s <sup>1)</sup>	3 °C/s <sup>1)</sup>
Interfaces	1 × Centronics, 1 × RS-232, USB at Control Panel, one each of CAN_in/CAN_out	1 × Centronics, 1 × RS-232, USB at Control Panel, one each of CAN_in/CAN_out	1 × Centronics, 1 × RS-232, USB at Control Panel, one each of CAN_in/CAN_out
Lid descent and closing pressure	<i>vapo.protect</i> <sup>®</sup> technology, with TSP	<i>vapo.protect</i> <sup>®</sup> technology, with TSP	<i>vapo.protect</i> <sup>®</sup> technology, with TSP
Lid temperature range	37 – 110 °C	37 – 110 °C	37 – 110 °C
Sample capacity	96 × 0.2 mL PCR tubes or 1 PCR plate 8 × 12	96 × 0.2 mL PCR tubes or 1 PCR plate 8 × 12	1 PCR plate 384
Gradient temperature range	30 – 99 °C	30 – 99 °C	30 – 99 °C
Temperature control range of the block	4 – 99 °C	4 – 99 °C	4 – 99 °C
Thermoblock	Aluminum	Silver	Aluminum

<sup>1)</sup> measured at the block

**i** For more information go to [www.eppendorf.com](http://www.eppendorf.com)



MC nexus GX2	MC nexus GSX1	MC nexus SX1	MC nexus gradient	MC nexus
<b>266</b>	<b>270</b>	<b>270</b>	<b>270</b>	<b>270</b>
<b>25 x 41.2 x 32.1 cm</b>	<b>25 x 41.2 x 32.1 cm</b>	<b>25 x 41.2 x 32.1 cm</b>	<b>25 x 41.2 x 32.1 cm</b>	<b>25 x 41.2 x 32.1 cm</b>
Over 8 rows	Over 12 rows (0.2 mL)		Over 12 rows	–
3 °C/s <sup>1)</sup>	5 °C/s <sup>1)</sup>	5 °C/s <sup>1)</sup>	3 °C/s <sup>1)</sup>	3 °C/s <sup>1)</sup>
2 °C/s <sup>1)</sup>	3.5 °C/s <sup>1)</sup>	3.5 °C/s <sup>1)</sup>	2 °C/s <sup>1)</sup>	2 °C/s <sup>1)</sup>
CAN_in, CAN_out, Ethernet, USB	CAN_in, CAN_out, Ethernet, USB	CAN_in, CAN_out, Ethernet, USB	CAN_in, CAN_out, Ethernet, USB	CAN_in, CAN_out, Ethernet, USB
flexlid® technology, with TSP	flexlid® technology, with TSP	flexlid® technology, with TSP	flexlid® technology, with TSP	flexlid® technology, with TSP
37 – 110 °C	37 – 110 °C	37 – 110 °C	37 – 110 °C	37 – 110 °C
64/32 x 0.2 mL PCR tubes or up to 71 x 0.5 mL PCR tubes	96 x 0.2 mL PCR vessels, 1 PCR plate 8 x 12	96 x 0.2 mL PCR vessels, 1 PCR plate 8 x 12	96 x 0.2 mL PCR tubes, 1 PCR plate 8 x 12 or up to 71 x 0.5 mL PCR tubes	96 x 0.2 mL PCR tubes, 1 PCR plate 8 x 12 or up to 71 x 0.5 mL PCR tubes
30 – 99 °C	30 – 99 °C	–	30 – 99 °C	–
4 – 99 °C	4 – 99 °C	4 – 99 °C	4 – 99 °C	4 – 99 °C
Aluminum	Silver	Silver	Aluminum	Aluminum

**i** For more information go to [www.eppendorf.com](http://www.eppendorf.com)

# Mastercycler® pro



## Description

Fast speeds, high precision, easy usage and absolute reliability united in a flexible concept – that is the Mastercycler pro. Today's requirements for PCR in your lab are defined by today's research project. Tomorrow, new questions are arising and new experiments have to give the answers. That is why only an open and flexible system fit into today's lab.

Eppendorf's Mastercycler pro offers ultimate flexibility:

- > choose from three block formats
- > operate the Mastercycler pro in three different configurations
- > use any plate, tube or strip you want
- > Unsurpassed speed can be achieved with Eppendorf's Impulse PCR, a device driven hot-start function that increases heating rates to 8 °C/s.

## Applications

- > Standard PCR
- > Optimizing a PCR
- > Fast PCR
- > Cycle sequencing

## Product features

- > Extremely fast heating and cooling rates
- > Ultimate reduction of evaporation
- > Gradient blocks with SteadySlope® technology
- > Intuitive graphic programming
- > Display to indicate cyler number in a network
- > 2 years warranty
- > Optional self-test dongle available

i For more information go to [www.eppendorf.com/pcr](http://www.eppendorf.com/pcr)



The control panel enables flexible and intuitive operation of all versions of the Mastercycler pro.

Technical specifications			
Model	MC pro	MC pro S	MC pro 384
Sample capacity	96 × 0.2 mL PCR tubes or 1 PCR plate 8 × 12	96 × 0.2 mL PCR tubes or 1 PCR plate 8 × 12	1 PCR plate 384
Temperature control range of the block	4 – 99 °C	4 – 99 °C	4 – 99 °C
Temperature control mode	Fast, Standard, Safe	Fast, Standard, Safe	Fast, Standard, Safe
Heating technology of the block	Peltier elements, Triple Circuit technology	Peltier elements, Triple Circuit technology	Peltier elements, Triple Circuit technology
Silver block		■	
Gradient range	1 – 20 °C	1 – 24 °C	1 – 20 °C
Gradient temperature range	30 – 99 °C	30 – 99 °C	30 – 99 °C
Lid temperature range	37 – 110 °C	37 – 110 °C	37 – 110 °C
Lid descent and closing pressure	<i>vapo.protect</i> ® technology, with TSP	<i>vapo.protect</i> ® technology, with TSP	<i>vapo.protect</i> ® technology, with TSP
USB port	■	■	■
Block homogeneity 20–72 °C	± 0.3 °C	± 0.3 °C	± 0.3 °C
Block temperature accuracy	± 0.2 °C	± 0.2 °C	± 0.2 °C
Block homogeneity 90 °C	± 0.4 °C	± 0.4 °C	± 0.4 °C
Heating rate	4 °C/s <sup>1)</sup>	6 °C/s <sup>1)</sup>	4 °C/s <sup>1)</sup>
Cooling rate	3 °C/s <sup>1)</sup>	4.5 °C/s <sup>1)</sup>	3 °C/s <sup>1)</sup>
Gradient block	Over 12 rows	Over 12 rows	Over 24 rows
Interfaces	1 × Centronics, 1 × RS-232, USB at Control Panel, one each of CAN_in/CAN_out	1 × Centronics, 1 × RS-232, USB at Control Panel, one each of CAN_in/CAN_out	1 × Centronics, 1 × RS-232, USB at Control Panel, one each of CAN_in/CAN_out
Total weight	18.5 kg	18.5 kg	18.5 kg
Max. power consumption	950 W		
Dimensions (W × D × H)	26 × 41.5 × 37 cm	26 × 41.5 × 37 cm	26 × 41.5 × 37 cm
Thermoblock	Aluminum	Silver	Aluminum

<sup>1)</sup> measured at the block

# Mastercycler® pro



Up to 5 individual Mastercycler pro modules can be controlled using the control panel.

## Ordering information

Description	Order no.	Price
<b>Mastercycler® pro</b> , 230 V/50 – 60 Hz (GB)	6321 000.043	6,337.00 £
<b>Mastercycler® pro</b> , with Control Panel, 230 V/50 – 60 Hz (GB)	6321 000.540	7,635.00 £
<b>Mastercycler® pro S</b> , 230 V/50 – 60 Hz (GB)	6325 000.048	7,299.00 £
<b>Mastercycler® pro S</b> , with Control Panel, 230 V/50 – 60 Hz (GB)	6325 000.544	8,585.00 £
<b>Mastercycler® pro 384</b> , 230 V/50 – 60 Hz (GB)	6324 000.044	6,675.00 £
<b>Mastercycler® pro 384</b> , with Control Panel, 230 V/50 – 60 Hz (GB)	6324 000.540	7,971.00 £
<b>CAN bus connecting cable</b> , 150 cm	5341 611.000	48.80 £
<b>CAN bus connecting cable</b> , 50 cm	5341 612.006	38.00 £
<b>Control Panel</b> , incl. connecting cable (A Control Panel or CycleManager pro software (both sold separately) is required for operation; CAN_Bus connection cables are required to link cyclers together as a network)	6320 000.007	1,464.00 £
<b>MultiMediaCard</b> , for archiving parameters and transporting data between the control panel and PC, not for Eppendorf EasyCon™ control panel	5075 780.003	82.70 £
<b>Self-Test Dongle</b>	6320 071.001	224.00 £

✂ Ordering information for other voltage options begins on page 484

i For more information go to [www.eppendorf.com/pcr](http://www.eppendorf.com/pcr)

## CycleManager pro



### Description

The Mastercycler pro is optimized for high throughput capabilities. Up to 30 units of any block format combination can be controlled with one computer. The advanced CycleManager pro software offers a client/server architecture, that enables one to check the status of the PCR from any computer in your local network. Administrator functions, password protection, individual user folders, intuitive software including the running information of the cyclers and an import/ export functionality complete the set of convenient features. All collected data is archived in a database. If you are working in a GLP environment, your documentation needs will be strongly supported by the software. All 30 units can run different protocols at the same time – extreme flexibility!

### Ordering information

Description	Order no.	Price
CycleManager pro, incl. installation instructions, comprehensive online help, connecting cable	5349 810.001	POA
CycleManager pro, incl. installation instructions, comprehensive online help	5349 820.007	POA

## Temperature Verification System - USB - Single Channel



### Temperature Verification System - USB - Single Channel

- > Measuring device without temperature sensor
- > Sensor for 96 well and 384 well blocks, sold separately
- > Simple, rapid verification and adjustment
- > Automatic adjustment with Mastercycler software, version 2.10 or higher
- > Can be third-party adjusted

### Ordering information

Description	Order no.	Price
Temperature Verification System - USB - Single Channel	0056 000.003	POA
Temperature sensor for 96 Well	0056 001.000	POA
Temperature sensor for 384 Well	0056 002.006	POA

NEW

# Mastercycler® nexus X2



**i** For more information go to [www.eppendorf.com/Mastercycler](http://www.eppendorf.com/Mastercycler)

Manufacturer's recommended retail price. All prices excl. VAT.  
Technical specifications subject to change.

**flexlid® concept allows use of all types of consumables with automatic height adjustment of the lid**

**Available with gradient**

**Universal block for ultimate flexibility**

**Connect up to 2 Mastercycler nexus eco to your existing unit**

**intuitive graphic programming**

**E-mail notification**

**power saving stand-by mode**

**small footprint**

### Description

The Mastercycler nexus X2 gives you the ability to run two totally independent protocols at the same time. Smaller assays fit nicely on the 32-well-block — larger assays can exceed 48 samples and run on the 64-well-block. The larger block is available with a gradient function.

As every member of the Mastercycler nexus family, the Mastercycler nexus X2 can be combined with all other family members in a network of up to 3 units. In combination with Eppendorf's PCR Tubes, PCR Strips or divisible plates, the Mastercycler nexus X2 will give you consistent and publishable results — every day!

### Applications

- > Standard PCR
- > Cycle sequencing
- > Optimizing a PCR

### Combine, Connect, Control

- > Combine up to 3 units for ultimate throughput!
- > Connect your Mastercycler nexus to your computer network and get a status e-mail to your desk!
- > Control all the relevant parameters of your PCR through the intuitive software

### Product features

- > Large block for large assays — small block for small assays
- > Intuitive graphic programming
- > Universal block for strips, 0.1 mL, 0.2 mL and 0.5 mL PCR tubes
- > Small footprint
- > Optional gradient for PCR optimization
- > E-mail notification
- > flexlid concept allows use of all types of consumables with automatic height adjustment of the lid

**i** For more information go to [www.eppendorf.com/Mastercycler](http://www.eppendorf.com/Mastercycler)

NEW

# Mastercycler® nexus X2



Technical specifications				
Model	MC nexus GX2	MC nexus GX2e	MC nexus X2	MC nexus X2e
Sample capacity	64/32 × 0.2 mL PCR tubes or up to 64 × 0.5 mL PCR tubes	64/32 × 0.2 mL PCR tubes or up to 64 × 0.5 mL PCR tubes	64/32 × 0.2 mL PCR tubes or up to 64 × 0.5 mL PCR tubes	64/32 × 0.2 mL PCR tubes or up to 64 × 0.5 mL PCR tubes
Temperature control range of the block	4 – 99 °C			
Temperature control mode	Fast, Standard, Safe	Fast, Standard, Safe	Fast, Standard, Safe	Fast, Standard, Safe
Heating technology of the block	Peltier elements, Triple Circuit Technology			
Gradient range	1 – 12 °C	1 – 12 °C	–	–
Gradient block			–	–
Gradient temperature range	30 – 99 °C	30 – 99 °C	–	–
Lid temperature range	37 – 110 °C			
Lid descent and closing pressure	flexlid® technology, with TSP			
Block homogeneity 20–72 °C	≤ ± 0.3 °C	≤ ± 0.3 °C	≤ ± 0.3 °C	≤ ± 0.3 °C
Block temperature accuracy	± 0.2 °C	± 0.2 °C	± 0.2 °C	± 0.2 °C
Block homogeneity 90 °C	≤ ± 0.4 °C	≤ ± 0.4 °C	≤ ± 0.4 °C	≤ ± 0.4 °C
Heating rate	3 °C/s <sup>1)</sup>	3 °C/s <sup>1)</sup>	3 °C/s <sup>1)</sup>	3 °C/s <sup>1)</sup>
Cooling rate	2 °C/s <sup>1)</sup>	2 °C/s <sup>1)</sup>	2 °C/s <sup>1)</sup>	2 °C/s <sup>1)</sup>
Gradient block	Over 8 rows	Over 8 rows		-
Interfaces	CAN_in, CAN_out, Ethernet, USB	CAN_in, CAN_out, Ethernet	CAN_in, CAN_out, Ethernet, USB	CAN_in, CAN_out, Ethernet
Total weight	11 kg	11 kg	11 kg	11 kg
Dimensions (W × D × H)	25 × 41.2 × 32.1 cm			
Thermoblock	Aluminum	Aluminum	Aluminum	Aluminum
Number of programs on device	> 700	> 700	> 700	> 700

<sup>1)</sup> measured at the block

i For more information go to [www.eppendorf.com/Mastercycler](http://www.eppendorf.com/Mastercycler)



Large block for large assays, small block for small assays. You have the choice.

#### Ordering information

Description	Order no.	Price
Mastercycler® nexus GX2, 230 V/50 – 60 Hz (GB)	6336 000.040	7,310.00 £
Mastercycler® nexus GX2e, 230 V/50 – 60 Hz (GB)	6338 000.047	5,542.00 £
Mastercycler® nexus X2, 230 V/50 – 60 Hz (GB)	6337 000.043	6,105.00 £
Mastercycler® nexus X2e, 230 V/50 – 60 Hz (GB)	6339 000.040	4,659.00 £

✎ Ordering information for other voltage options begins on page 484

i For more information go to [www.eppendorf.com/Mastercycler](http://www.eppendorf.com/Mastercycler)

# Mastercycler® nexus

flexlid® concept allows use of all types of consumables with automatic height adjustment of the lid

power saving stand-by mode

intuitive graphic programming

E-mail notification



Available with gradient

Universal block for ultimate flexibility

Connect up to 2 Mastercycler nexus eco to your existing unit

small footprint

## Description

In the age of networking, the new **Mastercycler nexus** is your reliable companion when it comes to the daily routine of PCR. It is easy to use, does not need much space or energy and sends you an e-mail when it is done – what else do you need from a PCR cycler?

## Product features

- > Intuitive graphic programming
- > Small footprint
- > Universal block for ultimate flexibility
- > Connect up to 2 Mastercycler nexus eco to your existing unit
- > Available with gradient
- > E-mail notification
- > flexlid concept allows use of all types of consumables with automatic height adjustment of the lid

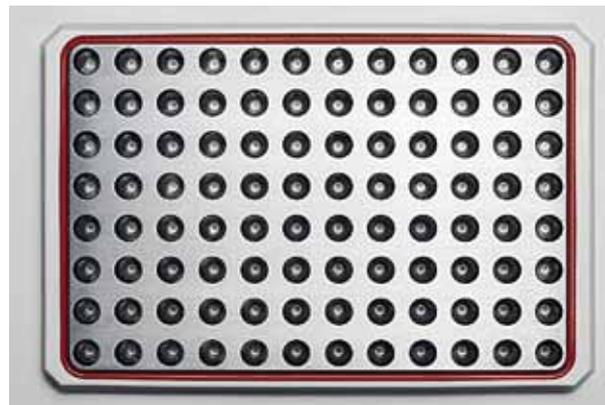


**Applications**

- > Standard PCR
- > Cycle sequencing
- > Fast PCR
- > Optimizing a PCR
- > *In situ* PCR

**Combine, Connect, Control**

- > Combine up to 3 units for ultimate throughput!
- > Connect your Mastercycler nexus to your computer network and get a status e-mail to your desk!
- > Control all the relevant parameters of your PCR through the intuitive software



**Ordering information**

Description	Order no.	Price
Mastercycler® nexus GSX1, 230 V/50 – 60 Hz (GB)	6345 000.044	6,828.00 £
Mastercycler® nexus SX1, 230 V/50 – 60 Hz (GB)	6346 000.048	5,864.00 £
Mastercycler® nexus GSX1e, 230 V/50 – 60 Hz (GB)	6347 000.041	5,542.00 £
Mastercycler® nexus SX1e, 230 V/50 – 60 Hz (GB)	6348 000.045	4,579.00 £
Mastercycler® nexus gradient, 230 V/50 – 60 Hz (GB)	6331 000.041	6,346.00 £
Mastercycler® nexus, 230 V/50 – 60 Hz (GB)	6333 000.049	5,301.00 £
Mastercycler® nexus gradient eco, 230 V/50 – 60 Hz (GB)	6334 000.042	5,060.00 £
Mastercycler® nexus eco, 230 V/50 – 60 Hz (GB)	6332 000.045	4,012.00 £
Mastercycler® nexus flat, 230 V/50 – 60 Hz (GB)	6335 000.046	5,783.00 £
Mastercycler® nexus flat eco, 230 V/50 – 60 Hz (GB)	6330 000.048	4,498.00 £
CAN bus connecting cable, 150 cm	5341 611.000	48.80 £
CAN bus connecting cable, 50 cm	5341 612.006	38.00 £
Self-Test Dongle	6320 071.001	224.00 £

Ordering information for other voltage options begins on page 484

Technical specifications					
Model	MC nexus GSX1	MC nexus SX1	MC nexus GSX1e	MC nexus SX1e	MC nexus gradient
Intuitive graphic programming	■	■			■
E-mail Notification	■	■	■	■	■
Sample capacity	96 x 0.2 mL PCR vessels, 1 PCR plate 8 x 12	96 x 0.2 mL PCR vessels, 1 PCR plate 8 x 12	96 x 0.2 mL PCR vessels, 1 PCR plate 8 x 12	96 x 0.2 mL PCR vessels, 1 PCR plate 8 x 12	96 x 0.2 mL PCR tubes, 1 PCR plate 8 x 12 or up to 71 x 0.5 mL PCR tubes
Flexlid™ concept	■	■	■	■	■
Temperature control range of the block	4 – 99 °C				
2 years warranty	■	■	■	■	■
Temperature control mode	Fast, standard, safe				
Heating technology of the block	Peltier elements, triple circuit technology				
Silver block	■	■	■	■	
Gradient range	1 – 20 °C	–	1 – 20 °C	–	1 – 20 °C
Gradient block	■		■		■
Gradient temperature range	30 – 99 °C	–	30 – 99 °C	–	30 – 99 °C
Lid temperature range	37 – 110 °C				
Unit can control 2 other units in network	■	■			■
Unit can only be controlled <sup>1)</sup>			■	■	
Lid descent and closing pressure	flexlid® technology, with TSP				
USB port	■	■			■
Block homogeneity 20–72 °C	≤ ± 0.3 °C	≤ ± 0.3 °C	≤ ± 0.3 °C	≤ ± 0.3 °C	≤ ± 0.3 °C
Block temperature accuracy	± 0.2 °C				
Block homogeneity 90 °C	≤ ± 0.4 °C	≤ ± 0.4 °C	≤ ± 0.4 °C	≤ ± 0.4 °C	≤ ± 0.4 °C
Heating rate	5 °C/s <sup>2)</sup>	5 °C/s <sup>2)</sup>	5 °C/s <sup>2)</sup>	5 °C/s <sup>2)</sup>	3 °C/s <sup>2)</sup>
Cooling rate	3.5 °C/s <sup>2)</sup>	3.5 °C/s <sup>2)</sup>	3.5 °C/s <sup>2)</sup>	3.5 °C/s <sup>2)</sup>	2 °C/s <sup>2)</sup>
Gradient block	Over 12 rows (0.2 mL)		Over 12 rows (0.2 mL)		Over 12 rows
Interfaces	CAN in, CAN out, Ethernet, USB	CAN in, CAN out, Ethernet, USB	CAN in, CAN out, Ethernet	CAN in, CAN out, Ethernet	CAN in, CAN out, Ethernet, USB
Total weight	10.9 kg	10.9 kg	10.4 kg	10.4 kg	10.9 kg
Power supply	230 V, 50 – 60 Hz				
Max. power consumption	540 W	540 W	540 W	540 W	700 W
Dimensions (W x D x H)	25 x 41.2 x 32.1 cm				
Thermoblock	Silver	Silver	Silver	Silver	Aluminum
Number of programs on device	> 700	> 700	> 700	> 700	> 700

<sup>1)</sup> Control through a Mastercycler® nexus, Mastercycler® nexus gradient, Mastercycler® nexus X1g, Mastercycler® nexus X1 or Mastercycler® nexus flat<sup>2)</sup> measured at the block

i For more information go to [www.eppendorf.com/Mastercycler](http://www.eppendorf.com/Mastercycler)

Technical specifications					
Model	MC nexus	MC nexus gradient eco	MC nexus eco	MC nexus flat	MC nexus flat eco
Intuitive graphic programming	■			■	
E-mail Notification	■	■	■	■	■
Sample capacity	96 × 0.2 mL PCR tubes, 1 PCR plate 8 × 12 or up to 71 × 0.5 mL PCR tubes	96 × 0.2 mL PCR tubes, 1 PCR plate 278 × 12 or up to 71 × 0.5 mL PCR tubes	96 × 0.2 mL PCR tubes, 1 PCR plate 8 × 12 or up to 71 × 0.5 mL PCR tubes	4 slides or other matching consumables	4 slides or other matching consumables
Flexlid™ concept	■	■	■	■	■
Temperature control range of the block	4 – 99 °C	4 – 99 °C	4 – 99 °C	4 – 99 °C	4 – 99 °C
2 years warranty	■	■	■	■	■
Temperature control mode	Fast, standard, safe	Fast, standard, safe	Fast, standard, safe	Fast, standard, safe	Fast, standard, safe
Heating technology of the block	Peltier elements, triple circuit technology	Peltier elements, triple circuit technology	Peltier elements, triple circuit technology	Peltier elements, triple circuit technology	Peltier elements, triple circuit technology
Silver block					
Gradient range	–	1 – 20 °C	–	–	–
Gradient block	–	■	–	■	■
Gradient temperature range	–	30 – 99 °C	–	–	–
Lid temperature range	37 – 110 °C	37 – 110 °C	37 – 110 °C	37 – 110 °C	37 – 110 °C
Unit can control 2 other units in network	■			■	
Unit can only be controlled <sup>1)</sup>		■	■		■
Lid descent and closing pressure	flexlid® technology, with TSP	flexlid® technology, with TSP	flexlid® technology, with TSP	flexlid® technology, with TSP	flexlid® technology, with TSP
USB port	■			■	
Block homogeneity 20–72 °C	≤ ± 0.3 °C	≤ ± 0.3 °C	≤ ± 0.3 °C	≤ ± 0.3 °C	≤ ± 0.3 °C
Block temperature accuracy	± 0.2 °C	± 0.2 °C	± 0.2 °C	± 0.2 °C	± 0.2 °C
Block homogeneity 90 °C	≤ ± 0.4 °C	≤ ± 0.4 °C	≤ ± 0.4 °C	≤ ± 0.4 °C	≤ ± 0.4 °C
Heating rate	3 °C/s <sup>2)</sup>	3 °C/s <sup>2)</sup>	3 °C/s <sup>2)</sup>	3 °C/s <sup>2)</sup>	3 °C/s <sup>2)</sup>
Cooling rate	2 °C/s <sup>2)</sup>	2 °C/s <sup>2)</sup>	2 °C/s <sup>2)</sup>	2 °C/s <sup>2)</sup>	2 °C/s <sup>2)</sup>
Gradient block	–	Over 12 rows (0.2 mL)	–		
Interfaces	CAN in, CAN out, Ethernet, USB	CAN in, CAN out, Ethernet	CAN in, CAN out, Ethernet	CAN in, CAN out, Ethernet, USB	CAN in, CAN out, Ethernet
Total weight	10.9 kg	10.4 kg	10.9 kg	10.4 kg	10.4 kg
Power supply	230 V, 50 – 60 Hz	230 V, 50 – 60 Hz	230 V, 50 – 60 Hz	230 V, 50 – 60 Hz	230 V, 50 – 60 Hz
Max. power consumption	700 W	700 W	700 W	700 W	700 W
Dimensions (W × D × H)	25 × 41.2 × 32.1 cm	25 × 41.2 × 32.1 cm	25 × 41.2 × 32.1 cm	25 × 41.2 × 32.1 cm	25 × 41.2 × 32.1 cm
Thermoblock	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
Number of programs on device	> 700	> 700	> 700	> 700	> 700

<sup>1)</sup> Control through a Mastercycler® nexus, Mastercycler® nexus gradient, Mastercycler® nexus X1g, Mastercycler® nexus X1 or Mastercycler® nexus flat<sup>2)</sup> measured at the block

i For more information go to [www.eppendorf.com/Mastercycler](http://www.eppendorf.com/Mastercycler)

# HeatSealer



## Description

The Eppendorf HeatSealer Family offers you reliable and effective sealing of a variety of plates. You can choose from a more compact and a more flexible instrument according to your sealing needs.

## Product features

- > Hermetic sealing of multiwell plates
- > Eliminates evaporation in PCR, reducing cross contamination
- > Seals 96- and 384-well plates
- > Integrated thermostat prevents overheating
- > Improved mechanics for even easier sealing
- > PCR Plate Adapter included

## Applications

- > Sealing of multiwell plates

## Ordering information

Description	Order no.	Price
HeatSealer S100, 110 - 230 V	5391 000.036	1,955.00 £
HeatSealer S200, 110 - 230 V	5392 000.030	2,805.00 £
Plate Adapter low profile, for HeatSealer S100	5391 070.018	238.00 £
Plate Adapter high profile, for HeatSealer S100	5391 070.034	238.00 £
96-well-PCR Plate Adapter, for HeatSealer S100	5391 070.026	238.00 £
Plate Adapter high profile, for HeatSealer S200	5392 070.011	238.00 £
Plate Adapter low profile, for HeatSealer S200	5392 070.020	238.00 £
96-well Plate Adapter, for HeatSealer S200	5392 070.038	238.00 £

**i** For more information go to [www.eppendorf.com/pcr](http://www.eppendorf.com/pcr)

# Eppendorf twin.tec® PCR Plates

## Product features

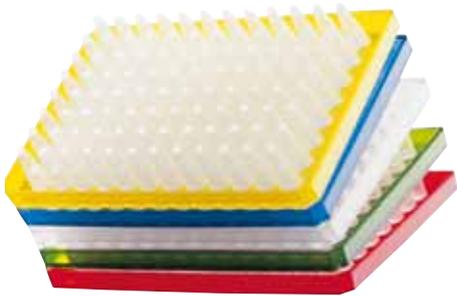
- > One-piece design: combining a polycarbonate frame and polypropylene wells for optimum performance
- > Extremely thin-walled polypropylene wells guarantee optimum heat transfer to the sample
- > Exceptionally solid and torque-resistant polycarbonate frame
- > Improved well-to-well tolerance
- > Cut-away corner and alphanumeric grid-referencing
- > Raised well rims for effective sealing, also reduces risk of cross-contamination
- > Certified free of any detectable human DNA, DNase, RNase and PCR inhibitors\*<sup>1</sup>
- > Available with barcode (upon request)
- > Ideal for quantitative real-time PCR as well

\*<sup>1</sup> Certificate, test procedures and detailed information on request.



### twin.tec PCR Plate 96, skirted

- > Optimized rim for barcodes and automated work processes
- > Within SBS footprint recommendations (127.76 × 85.47 mm ± 0.25 mm)
- > Stackable
- > Eight holes in the skirt aid plate positioning and removal from the thermal cycler block
- > Low profile design enhances efficiency of PCR and enables the highest efficiency for small sample volumes
- > 150 µL max. well volume (when used with cap strips)
- > Available with barcode (upon request)
- > Ideal for quantitative real-time PCR as well



### twin.tec PCR Plate 96, semi-skirted

- > Semi-skirted for label and barcode
- > Fits most thermal cyclers
- > 250 µL max. well volume (when used with cap strips)
- > Improved well-to-well tolerance
- > Available with barcode (upon request)
- > Ideal for quantitative real-time PCR as well

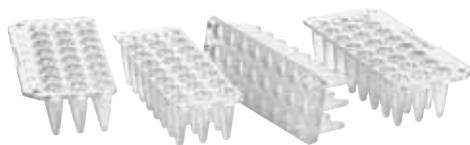


### twin.tec PCR Plate 96, unskirted, low profile

- > Fits even more thermal cyclers
- > OptiTrack® matrix: high contrast labelling of alphanumeric grid
- > Available with regular (250 µL) or low profile (150 µL) wells
- > Available with barcode (upon request)
- > Ideal for quantitative real-time PCR as well

i For more information go to [www.eppendorf.com/Twintec](http://www.eppendorf.com/Twintec)

# Eppendorf twin.tec® PCR Plates



## twin.tec PCR Plate 96, unskirted, divisible

- > Can be divided in 4 segments of 24 wells each
- > Fits most common thermal cyclers
- > OptiTrack® matrix: high contrast labelling of alphanumeric grid
- > Available with regular (250 µL) or low profile (150 µL) wells
- > Can be divided into 4 segments of 24 wells each to prevent waste and save moneytransfer
- > Available with barcode (upon request)
- > Ideal for quantitative real-time PCR as well



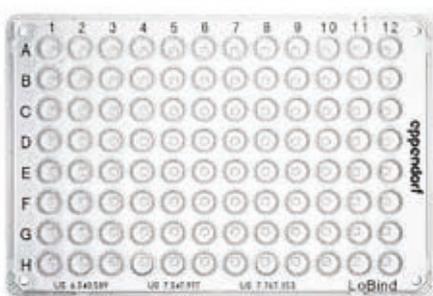
## twin.tec microbiology PCR Plate 96

- > Sterile, individually blistered
- > Certified PCR clean
- > Additionally free of bacterial DNA
- > For all applications that need ultimate purity or certified absence of bacterial DNA
- > Available with barcode (upon request)
- > Ideal for quantitative real-time PCR as well



## twin.tec PCR Plate 384

- > Optimized rim for barcodes and automated work processes
- > Stackable
- > Within SBS footprint recommendations
- > Ideal for most common 384-well thermocyclers, particularly for Eppendorf Mastercycler pro 384
- > 40 µL max. well volume
- > Available with barcode (upon request)
- > Ideal for quantitative real-time PCR as well



## twin.tec PCR Plates 96 LoBind

- > Maximum recovery rates for improved assay results
- > Available with barcode (upon request)
- > Ideal for quantitative real-time PCR as well
- > Exceptionally solid and torque-resistant polycarbonate frame
- > OptiTrack® matrix for faster sample identification and fewer pipetting errors
- > Raised well rims for effective sealing, also reduces risk of cross-contamination
- > Batch-tested and certified free of DNA, DNAase, RNase and PCR inhibitors (PCR clean)
- > Available with barcode (upon request)
- > Ideal for quantitative real-time PCR as well

**Ordering information**

Description	Order no.	Price
<b>twin.tec PCR Plate 96, skirted</b>		
colorless, 25 pcs.	0030 128.648	98.00 £
yellow, 25 pcs.	0030 128.656	98.00 £
green, 25 pcs.	0030 128.664	98.00 £
blue, 25 pcs.	0030 128.672	98.00 £
red, 25 pcs.	0030 128.680	98.00 £
<b>twin.tec PCR Plate 96, semi-skirted</b>		
colorless, 25 pcs.	0030 128.575	98.00 £
yellow, 25 pcs.	0030 128.583	98.00 £
green, 25 pcs.	0030 128.591	98.00 £
blue, 25 pcs.	0030 128.605	98.00 £
red, 25 pcs.	0030 128.613	98.00 £
<b>twin.tec PCR Plate 96, unskirted, low profile</b>		
colorless, 20 pcs.	0030 133.307	62.40 £
yellow, 20 pcs.	0030 133.315	62.40 £
green, 20 pcs.	0030 133.323	62.40 £
blue, 20 pcs.	0030 133.331	62.40 £
red, 20 pcs.	0030 133.340	62.40 £
<b>twin.tec PCR Plate 96, unskirted, low profile, 250 µL</b>		
colorless, 20 pcs.	0030 133.366	62.40 £
blue, 20 pcs.	0030 133.390	62.40 £
<b>twin.tec PCR Plate 96, unskirted, divisible, low profile</b>		
colorless, 20 pcs.	0030 133.358	113.00 £
blue, 20 pcs.	0030 133.382	113.00 £
<b>twin.tec PCR Plate 96, unskirted, divisible, 250 µL</b>		
colorless, 20 pcs.	0030 133.374	113.00 £
blue, 20 pcs.	0030 133.404	113.00 £
<b>twin.tec microbiology PCR Plate 96, skirted</b>		
colorless, 10 pcs.	0030 129.300	56.30 £
blue, 10 pcs.	0030 129.318	56.30 £
<b>twin.tec microbiology PCR Plate 96, semi-skirted</b>		
colorless, 10 pcs.	0030 129.326	56.30 £
blue, 10 pcs.	0030 129.334	56.30 £
<b>twin.tec microbiology PCR plate 384</b>		
colorless, 10 pcs.	0030 129.342	82.70 £
blue, 10 pcs.	0030 129.350	82.70 £
<b>twin.tec PCR Plate 384</b>		
colorless, 25 pcs.	0030 128.508	152.00 £
yellow, 25 pcs.	0030 128.516	152.00 £
green, 25 pcs.	0030 128.524	152.00 £
blue, 25 pcs.	0030 128.532	152.00 £
red, 25 pcs.	0030 128.540	152.00 £
<b>twin.tec PCR Plates 96 LoBind, semi-skirted, colorless, 25 pcs.</b>		
	0030 129.504	108.00 £
<b>twin.tec PCR Plates 96 LoBind, skirted, colorless, 25 pcs.</b>		
	0030 129.512	108.00 £

i For more information go to [www.eppendorf.com/Twintec](http://www.eppendorf.com/Twintec)

## twin.tec *real-time* PCR Plates



### twin.tec 96 *real-time* PCR Plates

- > White wells for better reflection
- > High mechanical stability
- > Raised rims for effective sealing
- > Skirted and semi-skirted frames
- > Optimal heat transfer due to reduced wall thickness
- > Autoclavable (121 °C, 20 min)
- > Available with barcode (upon request)

#### Ordering information

Description	Order no.	Price
<b>twin.tec 96 <i>real-time</i> PCR Plate, skirted</b>		
blue, 25 pcs.	0030 132.505	117.00 £
white, 25 pcs.	0030 132.513	117.00 £
black, 25 pcs.	0030 132.521	117.00 £
<b>twin.tec 96 <i>real-time</i> PCR Plate, semi-skirted</b>		
blue, 25 pcs.	0030 132.530	117.00 £
white, 25 pcs.	0030 132.548	117.00 £
black, 25 pcs.	0030 132.556	117.00 £
<b>twin.tec 96 <i>real-time</i> PCR Plate, unskirted low profile</b>		
white, 20 pcs.	0030 132.700	74.80 £
blue, 20 pcs.	0030 132.718	74.80 £
black, 20 pcs.	0030 132.726	74.80 £



### twin.tec 384 *real-time* PCR Plates

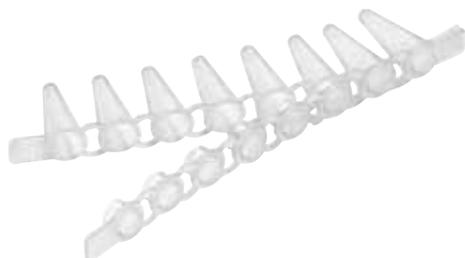
- > White wells for better reflection
- > High mechanical stability
- > Raised rims for effective sealing
- > Skirted and semi-skirted frames
- > Optimal heat transfer due to reduced wall thickness
- > Autoclavable (121 °C, 20 min)
- > Available with barcode (upon request)

#### Ordering information

Description	Order no.	Price
<b>twin.tec 384 <i>real-time</i> PCR Plate, skirted</b>		
white, 25 pcs.	0030 132.734	164.00 £
blue, 25 pcs.	0030 132.742	164.00 £
black, 25 pcs.	0030 132.750	164.00 £

i For more information go to [www.eppendorf.com/Realtime](http://www.eppendorf.com/Realtime)

## Eppendorf PCR Tube Strips



### Eppendorf PCR Tube Strips

- > 8 reaction tubes in strip-format – ideal for small sample volumes
- > Easily adaptable for automation
- > Sealable using flat or domed strip-lids
- > Certified free from human DNA, DNase, RNase and PCR inhibitors<sup>1</sup>

<sup>1</sup> Certificate, test procedures and detailed information on request.

#### Ordering information

Description	Order no.	Price
<b>Eppendorf PCR Tube Strips, 0.1 mL</b>		
without lids (10 x 12 strips)	0030 124.804	92.40 £
with Cap Strips, domed (10 x 12 strips)	0030 124.812	125.00 £
with Cap Strips, flat (10 x 12 strips)	0030 124.820	134.00 £

## Eppendorf PCR Tubes



### Eppendorf PCR Tubes

- > Contamination shield on hinged lid
- > Defined lid position due to special hinge
- > High transparency even on the tube base
- > Etched lid for labeling
- > Tight sealing
- > Easy to open
- > For use with all thermal cyclers with 0.2 mL block format
- > Also available in 8-tube strip format
- > Certified free from human DNA, DNase, RNase and PCR inhibitors<sup>1</sup>

<sup>1</sup> Certificate, test procedures and detailed information on request.

#### Ordering information

Description	Order no.	Price
<b>Eppendorf PCR Tubes, 0.2 mL</b>		
colorless, 1,000 pcs.	0030 124.332	98.00 £
8-tube strips, 120 pcs. (960 tubes)	0030 124.359	121.00 £

i For more information go to [www.eppendorf.com/pcr](http://www.eppendorf.com/pcr)

## Eppendorf® PCR Tubes, 0.5 mL



### Eppendorf® PCR Tubes, 0.5 mL

- > Etched lid for labeling
- > Tight sealing
- > Easy to open
- > For use with all thermal cyclers with 0.5 mL block format
- > Certified free from human DNA, DNase, RNase and PCR inhibitors<sup>\*1</sup>

<sup>\*1</sup> Certificate, test procedures and detailed information on request.

#### Ordering information

Description	Order no.	Price
Eppendorf PCR Tubes, 0.5 mL, with hinged lid, clear, 500 pcs.	0030 124.537	33.90 £

## Cap Strips



### Cap Strips

- > Strips with eight microcaps for 0.1 and 0.2 mL wells
- > Easy and rapid sealing of Eppendorf twin.tec PCR Plates, PCR strips and other standard multiwell plates
- > Flat Cap Strips are suitable for real-time PCR
- > Autoclavable (121 °C, 20 min)

#### Ordering information

Description	Order no.	Price
<b>Cap Strips, 8-strips</b>		
domed, 120 pcs. (10 x 12 pcs.)	0030 124.839	40.10 £
flat, 120 pcs. (10 x 12 pcs.)	0030 124.847	50.80 £

i For more information go to [www.eppendorf.com/pcr](http://www.eppendorf.com/pcr)

# Masterclear® Cap Strips and *real-time* PCR Tube Strips



## Masterclear® Cap Strips and *real-time* PCR Tube Strips

### *real-time* PCR Tube Strips

- > White wells for better reflection
- > High mechanical stability
- > Extremely thin walls for optimal heat transfer

### Masterclear Cap Strips

- > Inverted dome to avoid scratching of the optic surface
- > Inverted dome to reduce volume of the tubes
- > Optimized for maximum light transmission

### Ordering information

Description	Order no.	Price
<b><i>real-time</i> PCR Tube Strips, without caps</b>		
120 pcs. (10 x 12 pcs.)	0030 132.882	112.00 £
<b>Masterclear Cap Strips and <i>real-time</i> PCR Tube Strips</b>		
120 pcs. (10 x 12 pcs.)	0030 132.890	178.00 £
<b>Masterclear Cap Strips</b>		
120 pcs. (10 x 12 pcs.)	0030 132.874	68.20 £

# Heat Sealing Film and Heat Sealing Foil



## Heat Sealing Film and Heat Sealing Foil

- > Hermetic sealing of multiwell plates, especially recommended for low reaction volumes
- > Best protection against evaporation during PCR
- > Maximum adhesiveness at high temperatures during PCR

### Ordering information

Description	Order no.	Price
<b>Eppendorf Heat Sealing Film, PCR clean, 100 pcs.</b>	0030 127.838	126.00 £
<b>Eppendorf Heat Sealing Foil, PCR clean, 100 pcs.</b>	0030 127.854	88.40 £

## PCR Film (self-adhesive) and PCR Foil (self-adhesive)



### PCR Film (self-adhesive) and PCR Foil (self-adhesive)

- > Effective adhesive sealing prevents evaporation loss during PCR
- > Removal from the plate with no residue
- > Autoclavable (121 °C, 20 min)
- > PCR Film: Sample can be visually monitored through the transparent film
- > PCR Foil: Easily pierced
- > PCR Foil: No sticking of the pipette tip (ideal for automated systems)

#### Ordering information

Description	Order no.	Price
Eppendorf PCR Film, self-adhesive, PCR clean, 100 pcs.	0030 127.781	103.00 £
Eppendorf PCR Foil, self-adhesive, PCR clean, 100 pcs.	0030 127.790	103.00 £

## Masterclear® *real-time* PCR Film



### Masterclear® *real-time* PCR Film

- > Optimized for maximum light transmission
- > Optimized for tight sealing
- > Optimized packaging for your convenience

#### Ordering information

Description	Order no.	Price
Masterclear® <i>real-time</i> PCR Film, self-adhesive, PCR clean, 100 pcs.	0030 132.947	187.00 £

i For more information go to [www.eppendorf.com/pcr](http://www.eppendorf.com/pcr)

## Capping Aid



### Capping Aid

- > Tool for easy and fast sealing of 0.1 and 0.2 mL PCR test tubes and twin.tec PCR Plates with Cap Strips
- > Several wells and tubes can be sealed simultaneously
- > Minimal force required for an effective seal
- > Minimizes losses due to evaporation

#### Ordering information

Description	Order no.	Price
Capping Aid, 1 piece	0030 127.153	13.90 £

## PCR Rack



### PCR Rack

- > Rack for handling and storing tubes and plates
- > For 0.1 mL, 0.2 mL and 0.5 mL tubes, as well as 96-well plates
- > Stackable
- > Can be stored down to -90°C
- > Autoclavable (121 °C, 20 min)

#### Ordering information

Description	Order no.	Price
PCR Rack, 10 pcs.	0030 124.545	102.00 £

i For more information go to [www.eppendorf.com/pcr](http://www.eppendorf.com/pcr)

# Mastercycler® – Performance Plans

## Preventive Maintenance

Preventive maintenance provides cleaning of the surface and thermoblock with special brushes and/or compressed air. It also includes a check of following parts and features: display, key pad, thermoblock, lid, stability, instrument statistics (e.g. error codes) and if applicable a software update. This maintenance service in accordance to manufacturer's SOPs ensures that your thermal cycler is performing to the specifications.

## Temperature verification

Temperature verification of selected well positions and adjustment of the cycler block temperature if necessary is highly recommended to assure instrument consistency and accuracy. The temperature verification is a very accurate and precise method and meets all documentation and detection requirements in the laboratory according to all national and international standards, e.g.: NIST (USA), DKD/PTB (Germany), UKAS/NPL (UK), COFRAC/LNE (France), NMIA



(Australia), MSL (New Zealand). The applicable standards for all other countries apply as well. A full reference list can be found at [www.bipm.org/en/cipm-mra/](http://www.bipm.org/en/cipm-mra/).

Performance Plans	Mastercycler® gradient, personal, 384
<b>Recommended service period</b>	once per year
<b>Preventive Maintenance:</b>	<b>Order no.</b>
Maintenance* <sup>1</sup>	5331 877.001
Maintenance* <sup>1</sup> BASIC 1 x (once per year)	
Maintenance* <sup>1</sup> BASIC 2 x (twice per year)	
<b>Certification Service:</b>	
Temperature Verification: Testing with single-channel tool (incl. Adjustment)	5331 878.008
Temperature Verification: Testing with multi-channel tool (incl. Adjustment)	
Operational Qualification (OQ) includes internal and external cleaning, inspection of all parts, electrical testing and a subsequent temperature verification	5331 879.004
Maintenance* <sup>1</sup> , Color Calibration: STANDARD 1 x (maintenance and color calibration once per year)	
Maintenance* <sup>1</sup> , Color Calibration: STANDARD 2 x (maintenance twice, color calibration once per year)	
Maintenance* <sup>1</sup> , Color Calibration, PCR Validation: PREMIUM 1 x (maintenance and color calibration once per year)	
Maintenance* <sup>1</sup> , Color Calibration, PCR Validation: PREMIUM 2 x (maintenance twice, color calibration and PCR validation once per year)	
Electrical testing according to country-specific regulations	5331 880.002
<b>Additional Service:</b>	
Readjustment of Temperature Verification system - single-channel/ multi-channel	please inquire* <sup>2</sup>
Verification of optical system	

\*<sup>1</sup> Spare parts that may be required are not included and will be invoiced additionally. For cycler services on instruments of other manufacturers please inquire at your local Eppendorf office.

\*\*<sup>2</sup> Please inquire about service option for your specific system.



**Operational Qualification**

Operational Qualification (OQ) includes in addition to the complete preventive maintenance program also a professional cleaning and inspection of all internal sensitive parts (e.g. printed circuit, fans), and an electrical testing according to country-specific regulations. A subsequent temperature verification will be performed.

**Color Calibration**

Depending on parameters such as frequency of usage of your Mastercycler ep realplex or environmental conditions of the laboratory, a color calibration should be performed every 12 months.

**PCR Validation**

Assay to validate the overall performance of your Mastercycler ep realplex is often recommended or even required in GLP-compliant environments.

**Service features:**

- > Eppendorf service quality and integrity
- > Certified reports
- > Customized service options

**Long-term benefits**

- > High confidence in results
- > Permanently reliable and reproducible results
- > GLP compliant audited systems

For more information go to [www.eppendorf.com/epServices](http://www.eppendorf.com/epServices).  
In selected countries only.

<b>Mastercycler® ep</b> , gradient, 384, gradient S <b>Mastercycler® pro (PC and Control Panel versions)</b> , 384, S <b>Mastercycler® nexus</b> , eco, gradient, gradient eco, flat, flat eco, GSX1, GSX1e, SX1, SX1e, GX2
once per year
<b>Order no.</b> 6321 896.004
6321 897.000
6321 897.507
6321 898.007
6321 899.003

<b>Mastercycler® ep realplex</b> ep realplex <sup>2</sup> , ep realplex <sup>2</sup> S, ep realplex <sup>4</sup> , ep realplex <sup>4</sup> S
once per year
<b>Order no.</b> 6302 000.120 6302 070.022
6321 897.000
6321 897.507
6302 000.138
6302 070.057
6302 000.146
6302 070.065
6321 899.003
6302 875.306

<b>Eppendorf upright and chest Freezers</b>				
	<b>Upright Freezers</b>		<b>Chest Freezers</b>	
<b>Model</b>	<b>CryoCube F570</b>	<b>CryoCube F570h</b>	<b>CryoCube FC660</b>	<b>CryoCube FC660h</b>
				
<b>Page(s)</b>	<b>293</b>	<b>294</b>	<b>295</b>	<b>296</b>
<b>Power supply</b>	230 V, 50 Hz	230 V, 50 Hz	230 V, 50 Hz	230 V, 50 Hz
<b>Power consumption New Brunswick freezer<sup>1</sup></b>	11.7 kWh/day	8.2 kWh/day	11.2 kWh/day	9.3 kWh/day
<b>Amp draw full load</b>	7.0 A	6.9 A	6.0 A	6.0 A
<b>Capacity</b>	570 L	570 L	660 L	660 L
<b>Number of internal doors</b>	5	5		
<b>Max. racks per shelf</b>	5	5	N/A	N/A
<b>Max. racks per freezer</b>	25	25	40	40
<b>Boxes per rack</b>				
<b>5 cm (2 in) tall boxes</b>	16	16	13	13
<b>7.5 cm (3 in) tall boxes</b>	12	12	9	9
<b>10 cm (4 in) tall boxes</b>	8	8	6	6
<b>Boxes per freezer</b>				
<b>5 cm (2 in) tall boxes</b>	400	400	520	520
<b>7.5 cm (3 in) tall boxes</b>	300	300	360	360
<b>10 cm (4 in) tall boxes</b>	200	200	240	240
<b>Sample capacity</b>				
<b>5 cm (2 in) tall boxes</b>	40,000	40,000	52,000	52,000
<b>7.5 cm (3 in) tall boxes</b>	30,000	30,000	36,000	36,000
<b>10 cm (4 in) tall boxes</b>	20,000	20,000	24,000	24,000
<b>Reducing the ambient temperature to -85 °C<sup>2</sup></b>	5.2 h	4.7 h	5.8 h	5.0 h
<b>Noise level</b>	56 dB	58 dB	57 dB	58.5 dB
<b>Heat output</b>	700 W	520 W	650 W	580 W
<b>Dimensions (W x D x H)<sup>3</sup> *<sup>4</sup> *<sup>5</sup></b>	102.5 x 85.2 x 192.5 cm	102.5 x 85.2 x 192.5 cm	207 x 84 x 107.5 cm	207 x 84 x 107.5 cm
<b>Dimensions internal (W x D x H)</b>	76.5 x 57.5 x 126.5 cm	76.5 x 57.5 x 126.5 cm	147 x 59 x 76 cm	147 x 59 x 76 cm
<b>Weight w/o accessories</b>	265 kg	265 kg	280 kg	304 kg
<b>Shipping weight</b>	346 kg	346 kg	350 kg	350 kg

<sup>1</sup> Empty freezer with shelves fitted, upright freezers only, set point -80 °C, 22 – 26 °C ambient conditions. <sup>2</sup> Empty freezer with shelves fitted, upright freezers only, pulldown from 22 – 26 °C ambient conditions. <sup>3</sup> Optional CO<sub>2</sub>/LN<sub>2</sub> back-up systems add 8.65 cm/3.5 in to height. <sup>4</sup> To allow for handles and hinges, add 80 mm to width of upright freezers and 110 mm to the depth <sup>5</sup> Door open adds up to 15 cm.

i For more information go to [www.eppendorf.com](http://www.eppendorf.com)

**Innova® upright and chest freezers**

**Upright Freezers**

**Chest Freezers**

U101	U360	U535	U725	C585	C760
					
<b>298</b>	<b>299</b>	<b>300</b>	<b>301</b>	<b>302</b>	<b>303</b>
230 V, 50 Hz	230 V, 50 Hz				
8.8 kWh/day	10.7 kWh/day	13.2 kWh/day	15.8 kWh/day	13.6 kWh/day	16.0 kWh/day
5.0 A	6.5 A	5.0 A	9.5 A	5.5 A	9.5 A
101 L	360 L	535 L	725 L	585 L	760 L
2	3	3	3	N/A	N/A
3	3	4	6	N/A	N/A
6	9	12	18	32	44
10	28	28	28	13	13
6	20	20	20	9	9
4	12	12	12	6	6
60	252	336	504	416	572
36	180	240	360	288	396
24	108	144	216	192	264
6,000	25,200	33,600	50,400	41,600	57,200
3,600	18,000	24,000	36,000	28,800	39,600
2,400	10,800	14,400	21,600	19,200	26,400
3.7 h	5.6 h	5.3 h	5.6 h	4.5 h	5.8 h
54 dB	56 dB	56 dB	59 dB	56 dB	58 dB
440 W	590 W	720 W	750 W	700 W	750 W
90 × 56.6 × 83 cm	60 × 86.7 × 195 cm	80 × 86.7 × 195 cm	102.5 × 86.7 × 195 cm	169 × 78.5 × 109.2 cm	205 × 78.5 × 109.2 cm
48 × 33 × 64 cm	44 × 61.5 × 136.5 cm	64 × 61.5 × 136.5 cm	86.5 × 61.5 × 136.5 cm	120 × 62.5 × 78 cm	156 × 62.5 × 78 cm
116 kg	230 kg	250 kg	315 kg	240 kg	285 kg
148 kg	264 kg	295 kg	342 kg	310 kg	350 kg

Premium upright and chest freezers				
	Upright Freezers			Chest Freezers
Model	U410	U570	U700	C660
				
Page(s)	305	306	307	308
Power supply	230 V, 50 Hz	230 V, 50 Hz	230 V, 50 Hz	230 V, 50 Hz
Power consumption New Brunswick freezer <sup>1</sup>	10.8 kWh/day	11.8 kWh/day	15.9 kWh/day	14.3 kWh/day
Amp draw full load	5.0 A	6.0 A	7.0 A	6.0 A
Capacity	410 L	570 L	700 L	660 L
Number of internal doors	5	5	5	
Max. racks per shelf	3	5	6	N/A
Max. racks per freezer	15	25	30	40
Boxes per rack				
5 cm (2 in) tall boxes	16	16	16	13
7.5 cm (3 in) tall boxes	12	12	12	9
10 cm (4 in) tall boxes	8	8	8	6
Boxes per freezer				
5 cm (2 in) tall boxes	240	400	480	520
7.5 cm (3 in) tall boxes	180	300	360	360
10 cm (4 in) tall boxes	120	200	240	240
Sample capacity				
5 cm (2 in) tall boxes	24,000	40,000	48,000	52,000
7.5 cm (3 in) tall boxes	18,000	30,000	36,000	36,000
10 cm (4 in) tall boxes	12,000	20,000	24,000	24,000
Reducing the ambient temperature to -85 °C <sup>2</sup>	5.3 h	5.2 h	6.0 h	5.8 h
Noise level	55 dB	56 dB	59 dB	57 dB
Heat output	650 W	700 W	755 W	650 W
Dimensions (W x D x H) <sup>3</sup> * <sup>4</sup> * <sup>5</sup>	80 x 85.2 x 191.5 cm	102.5 x 85.2 x 192.5 cm	112.1 x 87 x 195.9 cm	205 x 84 x 107.5 cm
Dimensions internal (W x D x H)	55 x 57.5 x 126.5 cm	76.5 x 57.5 x 126.5 cm	86.7 x 61.3 x 131.6 cm	147 x 59 x 76 cm
Weight w/o accessories	235 kg	265 kg	279 kg	280 kg
Shipping weight	302 kg	346 kg	372 kg	350 kg

<sup>1</sup> Empty freezer with shelves fitted, upright freezers only, set point -80 °C, 22 – 26 °C ambient conditions. <sup>2</sup> Empty freezer with shelves fitted, upright freezers only, pulldown from 22 – 26 °C ambient conditions. <sup>3</sup> Optional CO<sub>2</sub>/LN<sub>2</sub> back-up systems add 8.65 cm/3.5 in to height. <sup>4</sup> To allow for handles and hinges, add 80 mm to width of upright freezers and 110 mm to the depth <sup>5</sup> Door open adds up to 15 cm.

**i** For more information go to [www.eppendorf.com](http://www.eppendorf.com)

Green and HEF® high-efficiency freezers

Upright Freezers

Chest Freezers

U725-G

HEF U410

HEF U570

HEF C660



**310**

230 V, 50 Hz  
12.2 kWh/day

9.5 A  
725 L  
3  
6  
18

28  
20  
12

504  
360  
216

50,400  
36,000  
21,600  
4.8 h

59 dB  
730 W  
102.5 x 86.7 x 195 cm

86.5 x 61.5 x 136.5 cm

315 kg  
365 kg

**311**

230 V, 50 Hz  
8.4 kWh/day

5.0 A  
410 L  
5  
3  
15

16  
12  
8

240  
180  
120

24,000  
18,000  
12,000  
4.7 h

53 dB  
505 W  
80 x 85.2 x 191.5 cm

55 x 57.5 x 126.5 cm

262 kg  
302 kg

**312**

230 V, 50 Hz  
8.9 kWh/day

6.0 A  
570 L  
5  
5  
25

16  
12  
8

400  
300  
200

40,000  
30,000  
20,000  
4.7 h

58 dB  
520 W  
102.5 x 85.2 x 192.5 cm

76.5 x 57.5 x 126.5 cm

296 kg  
346 kg

**313**

230 V, 50 Hz  
11.4 kWh/day

6.0 A  
660 L  
N/A  
40

13  
9  
6

520  
360  
240

52,000  
36,000  
24,000  
5.0 h

58.5 dB  
580 W  
205 x 84 x 107.5 cm

147 x 59 x 76 cm

304 kg  
350 kg

## >> Go green and save operating costs and the environment with New Brunswick ultra-low temperature freezers <<

New Brunswick freezers are one of the most energy efficient in the industry, reducing energy consumption by thousands of kilowatt hours over. Additionally, New Brunswick freezers are 95 % recyclable by weight, so they can be disposed of in an environmentally friendly manner with very little impact to the environment.

And, with models in ten sizes, 101 – 725 L, you'll never have to buy a freezer larger than you actually need, further reducing energy usage, operating costs, and the carbon footprint.

### What is a carbon footprint?

One way to measure the amount of pollution produced is by calculating your carbon footprint – the amount of carbon dioxide (CO<sub>2</sub>) produced through burning fossil fuels for electricity. For simplicity, CO<sub>2</sub> is expressed in tons emitted per year.

### Less Power Consumption. Smaller Carbon Footprint. Save using New Brunswick Freezers.

	Capacity	Power consumption New Brunswick freezer	Power consumption competitor's freezer	Power saving with New Brunswick freezer
New Brunswick™ Innova® U360, 50 Hz	360 L	10.7 kWh/day	19.1 kWh/day	8.4 kWh/day
New Brunswick™ Innova® U725, 50 Hz	725 L	15.8 kWh/day	28.6 kWh/day	12.8 kWh/day
New Brunswick™ Premium U410, 50 Hz	410 L	10.8 kWh/day	19.2 kWh/day	8.4 kWh/day
New Brunswick™ Premium U570, 50 Hz	570 L	11.8 kWh/day	21.0 kWh/day	9.2 kWh/day
New Brunswick™ Premium U700, 50 Hz	700 L	15.9 kWh/day	28.6 kWh/day	12.7 kWh/day
New Brunswick™ Innova® U725-G, 50 Hz <sup>1)</sup>	725 L	12.2 kWh/day	22.4 kWh/day	9.6 kWh/day
New Brunswick™ HEF® U410, 50 Hz	410 L	8.4 kWh/day	19.2 kWh/day	10.8 kWh/day
New Brunswick™ HEF® U570, 50 Hz	570 L	8.9 kWh/day	21.0 kWh/day	12.1 kWh/day

<sup>1)</sup> Hydrocarbon based models<sup>2)</sup> According to the European Commission eurostat.<sup>3)</sup> Electricity sources in Europe emit 350.9 g CO<sub>2</sub> per kWh, according to the International Energy Agency, IEA.

i For more information go to [www.eppendorf.com/freezers](http://www.eppendorf.com/freezers)

**Offset with New Brunswick freezers**

The standard rule of thumb is you produce 351 g of carbon dioxide with each kilowatt hour of electricity you use. In other words, for every kilowatt hour of electricity you DO NOT use, you save 351 g of carbon dioxide from entering the atmosphere.

On average, by selecting a New Brunswick freezer you can save up 10 metric tons of CO<sub>2</sub> from entering the atmosphere over the lifetime of the unit. In comparison, when you switch from halogen light bulbs to compact fluorescent bulbs, you save 45 kg of CO<sub>2</sub> per bulb per year. The average vehicle traveling 15,000 km each year consuming 5.5 L gasoline per 100 km emits more than 2,310 kg of carbon dioxide per year. Not only do you help save the environment, but also substantially reduce your operating costs. To see how much you can save, see the worksheet below.



Average cost per kWh <sup>2)</sup>	New Brunswick energy savings over 10 years	Energy savings for every 25 units over 10 years	Reduction in CO <sub>2</sub> emission tons over 10 years <sup>3)</sup>
0.120 £	3,679.20 £	91,980.00 £	10.7 t
0.120 £	5,606.40 £	140,160.00 £	16.4 t
0.120 £	3,679.20 £	91,980.00 £	10.7 t
0.120 £	4,029.60 £	100,740.00 £	11.8 t
0.120 £	5,562.60 £	139,065.00 £	16.3 t
0.120 £	4,204.80 £	105,120.00 £	12.3 t
0.120 £	4,730.40 £	118,260.00 £	13.8 t
0.120 £	5,299.80 £	132,495.00 £	15.5 t

i For more information go to [www.eppendorf.com/freezers](http://www.eppendorf.com/freezers)

NEW

# Eppendorf Freezers

New automatic vent port on front door improves energy consumption and uniformity while providing easier access inside

New ergonomic handle requires less force and provides easier access



Premium seals for optimal uniformity

Magnetic closures on inner doors provide easier access

New high-efficiency fan, compressor, and condenser

## Description

The new CryoCube Ultra-low Temperature Freezers from Eppendorf combine maximum sample security with increased energy efficiency. New vent, compressor, condenser, and fan technology decrease power consumption. A more ergonomic handle makes CryoCube freezers easier to use. Eppendorf quality means years of trouble free operation, trusted sample security, and excellent energy efficiency.

**i** For more information go to [www.eppendorf.com](http://www.eppendorf.com)

NEW

## CryoCube™ F570



Technical specifications	
Insulation	Polyurethane foam
Capacity	570 L
Number of internal doors	5
Max. racks per freezer	25
Boxes per freezer	
5 cm (2 in) tall boxes	400
7.5 cm (3 in) tall boxes	300
10 cm (4 in) tall boxes	200
Dimensions internal (W x D x H)	76.5 x 57.5 x 126.5 cm
Noise level	56 dB
Dimensions (W x D x H)	102.5 x 85.2 x 192.5 cm <sup>1)2)3)</sup>
Number of shelves	5

<sup>1)</sup> Optional CO<sub>2</sub>/LN<sub>2</sub> back-up systems add 8.65 cm/3.5 in to height.<sup>2)</sup> To allow for handles and hinges, add 80 mm to width of upright freezers and 110 mm to the depth of chest freezers.<sup>3)</sup> Door open adds up to 15 cm.

**Description**

The CryoCube F570 is designed for increased energy efficiency and ease of use. New high efficiency fan, compressor, and condenser decrease power consumption. The new ergonomic handle and magnetic closures provide easier access to samples.

**Product features**

- > Capacity: 570 L
- > Occupies 102.5 x 85.2 cm of floor space
- > Holds up to 40,000 samples

**Ordering information**

Description	Order no.	Price
<b>CryoCube F570</b> , 570 L, 230 V/50 Hz, European	F570300001	10,390.00 £
<b>Upright freezer rack</b> , Premium U410, U570 and U700		
50 mm (2 in) tall box, 16 boxes per rack	K0641-1900	159.00 £
75 mm (3 in) tall box, 12 boxes per rack	K0641-1890	145.00 £
100 mm (4 in) tall box, 8 boxes per rack	K0641-1880	129.00 £
<b>New Brunswick™ Innova and Green "G" CO<sub>2</sub> back-up system</b> , 230 V/50 Hz	U9043-0004	1,451.00 £
<b>New Brunswick™ Innova and Green "G" LN<sub>2</sub> back-up system</b> , 230 V/50 Hz	U9044-0004	1,451.00 £

⚡ Ordering information for other voltage options begins on page 484

i For more information go to [www.eppendorf.com](http://www.eppendorf.com)

NEW

# CryoCube™ F570h



Technical specifications	
Insulation	Vacuum insulation paneling/ polyurethane foam
Capacity	570 L
Number of internal doors	5
Max. racks per freezer	25
Boxes per freezer	
5 cm (2 in) tall boxes	400
7.5 cm (3 in) tall boxes	300
10 cm (4 in) tall boxes	200
Dimensions internal (W x D x H)	76.5 x 57.5 x 126.5 cm
Dimensions (W x D x H)	102.5 x 85.2 x 192.5 cm <sup>1)2)3)</sup>
Number of shelves	5

<sup>1)</sup> Optional CO<sub>2</sub>/LN<sub>2</sub> back-up systems add 8.65 cm/3.5 in to height.<sup>2)</sup> To allow for handles and hinges, add 80 mm to width of upright freezers and 110 mm to the depth of chest freezers.<sup>3)</sup> Door open adds up to 15 cm.

## Description

The CryoCube F570h further improves energy efficiency. It combines all the power-saving technology of the F570 with additional vacuum insulated panels. It provides the same sample security and ease of use with even less power consumption. The CryoCube F570h is more environmentally friendly, but built with the same dependable Eppendorf quality. A watercooled option is also available for the CryoCube F570h.

## Product features

- > Capacity: 570 L
- > Occupies 102.5 x 85.2 cm of floor space
- > Holds up to 40,000 samples

## Ordering information

Description	Order no.	Price
<b>CryoCube F570h</b> , 570 L, 230 V/50 Hz, European	F570320001	11,720.00 £
<b>Upright freezer rack</b> , Premium U410, U570 and U700		
50 mm (2 in) tall box, 16 boxes per rack	K0641-1900	159.00 £
75 mm (3 in) tall box, 12 boxes per rack	K0641-1890	145.00 £
100 mm (4 in) tall box, 8 boxes per rack	K0641-1880	129.00 £
<b>New Brunswick™ Innova and Green "G" CO<sub>2</sub> back-up system</b> , 230 V/50 Hz	U9043-0004	1,451.00 £
<b>New Brunswick™ Innova and Green "G" LN<sub>2</sub> back-up system</b> , 230 V/50 Hz	U9044-0004	1,451.00 £

✎ Ordering information for other voltage options begins on page 484

i For more information go to [www.eppendorf.com](http://www.eppendorf.com)

NEW

## CryoCube™ FC660



Technical specifications	
Insulation	Polyurethane foam
Capacity	660 L
Max. racks per freezer	40
Boxes per freezer	
5 cm (2 in) tall boxes	520
7.5 cm (3 in) tall boxes	360
10 cm (4 in) tall boxes	240
Dimensions internal (W x D x H)	147 x 59 x 76 cm
Dimensions (W x D x H)	207 x 84 x 107.5 cm <sup>1)2)</sup>
Number of shelves	N/A

<sup>1)</sup> Optional CO<sub>2</sub>/LN<sub>2</sub> back-up systems add 8.65 cm/3.5 in to height.<sup>2)</sup> To allow for handles and hinges, add 80 mm to width of upright freezers and 110 mm to the depth of chest freezers.

**Description**

The CryoCube FC660 provides increased energy efficiency and ease of use in a large capacity chest freezer. The new high efficiency fan and compressor decrease both power consumption and noise. Premium Eppendorf manufacturing means long-term reliability and dependability.

**Product features**

- > Capacity: 660 L
- > Occupies 207 x 84 cm of floor space
- > Holds up to 52,000 samples
- > 10 mm thick insulated inner lid helps to maintain temperature stability

**Ordering information**

Description	Order no.	Price
<b>CryoCube FC660</b> , 660 L, 230 V/50 Hz, European	F660300001	11,170.00 £
<b>Chest freezer rack</b> , Innova® C585 and C760, Premium C340 and C660		
50 mm (2 in) tall box, 13 boxes per rack	K0641-1690	129.00 £
75 mm (3 in) tall box, 9 boxes per rack	K0641-1700	124.00 £
100 mm (4 in) tall box, 6 boxes per rack	K0641-1750	120.00 £
<b>New Brunswick™ Innova and Green "G" CO<sub>2</sub> back-up system</b> , 230 V/50 Hz	U9043-0004	1,451.00 £
<b>New Brunswick™ Innova and Green "G" LN<sub>2</sub> back-up system</b> , 230 V/50 Hz	U9044-0004	1,451.00 £

✎ Ordering information for other voltage options begins on page 484

i For more information go to [www.eppendorf.com](http://www.eppendorf.com)

NEW

# CryoCube™ FC660h



## Technical specifications

<b>Insulation</b>	Vacuum insulation paneling/ polyurethane foam
<b>Capacity</b>	660 L
<b>Max. racks per freezer</b>	40
<b>Boxes per freezer</b>	
<b>5 cm (2 in) tall boxes</b>	520
<b>7.5 cm (3 in) tall boxes</b>	360
<b>10 cm (4 in) tall boxes</b>	240
<b>Dimensions internal (W x D x H)</b>	147 x 59 x 76 cm
<b>Dimensions (W x D x H)</b>	207 x 84 x 107.5 cm <sup>1)2)</sup>
<b>Number of shelves</b>	N/A

<sup>1)</sup> Optional CO<sub>2</sub>/LN<sub>2</sub> back-up systems add 8.65 cm/3.5 in to height.<sup>2)</sup> To allow for handles and hinges, add 80 mm to width of upright freezers and 110 mm to the depth of chest freezers.

## Description

The CryoCube FC660h delivers the high-capacity of the FC660 with further increased energy efficiency. The CryoCube FC660h is the eco-friendly solution in chest freezer technology.

## Product features

- > Capacity: 660 L
- > Occupies 207 x 84 cm of floor space
- > Holds up to 52,000 samples
- > 10 mm thick insulated inner lid helps to maintain temperature stability

## Ordering information

Description	Order no.	Price
<b>CryoCube FC660h</b> , 660 L, 230 V/50 Hz, European	F660320001	12,500.00 £
<b>Chest freezer rack</b> , Innova® C585 and C760, Premium C340 and C660		
50 mm (2 in) tall box, 13 boxes per rack	K0641-1690	129.00 £
75 mm (3 in) tall box, 9 boxes per rack	K0641-1700	124.00 £
100 mm (4 in) tall box, 6 boxes per rack	K0641-1750	120.00 £
<b>New Brunswick™ Innova and Green "G" CO<sub>2</sub> back-up system</b> , 230 V/50 Hz	U9043-0004	1,451.00 £
<b>New Brunswick™ Innova and Green "G" LN<sub>2</sub> back-up system</b> , 230 V/50 Hz	U9044-0004	1,451.00 £

✎ Ordering information for other voltage options begins on page 484

i For more information go to [www.eppendorf.com](http://www.eppendorf.com)

# New Brunswick™ Innova® Freezers



## Description

Innova® Freezers set the standard for maximizing sample storage capacity. The Vacuum Insulation Panels are extremely efficient and very compact. When used in combination with traditional insulation, the freezer wall thickness is reduced from 130 mm to 80 mm. These models are ideal for labs short on space.

i For more information go to [www.eppendorf.com](http://www.eppendorf.com)

# New Brunswick™ Innova® U101



## Technical specifications

<b>Insulation</b>	Vacuum insulation paneling/polyurethane foam
<b>Capacity</b>	101 L
<b>Number of internal doors</b>	2
<b>Max. racks per freezer</b>	6
<b>Boxes per freezer</b>	
<b>5 cm (2 in) tall boxes</b>	60
<b>7.5 cm (3 in) tall boxes</b>	36
<b>10 cm (4 in) tall boxes</b>	24
<b>Dimensions internal (W x D x H)</b>	48 x 33 x 64 cm
<b>Noise level</b>	54 dB
<b>Dimensions (W x D x H)</b>	90 x 56.6 x 83 cm <sup>1)2)3)</sup>
<b>Number of shelves</b>	2

<sup>1)</sup> Optional CO<sub>2</sub>/LN<sub>2</sub> back-up systems add 8.65 cm/3.5 in to height.<sup>2)</sup> To allow for handles and hinges, add 80 mm to width of upright freezers and 110 mm to the depth of chest freezers.<sup>3)</sup> Door open adds up to 15 cm.

## Description

Keep your samples safe, secure and easily accessible with the space saving Innova U101. This unique, personal sized upright freezer packs all the features of our full uprights into one small package. The U101 fits easily on or under your lab bench. For added storage space, an additional U101 can be stacked on top, doubling the capacity while utilizing the same floor space. Engineered with optimal air flow in mind, this unit can be placed flush up against the wall without risk of overheating.

## Product features

- > Capacity: 101 L
- > Occupies only 90 x 56.6 cm of floor space
- > Consumes only 8.8 kWh/day (Freezer set to -80 °C)
- > Ambient to -85 °C pull down is 3.7 hours
- > Holds up to 6,000 samples
- > Under the counter design for immediate access to personal samples and for labs tight on floor space (stackable)

## Ordering information

Description	Order no.	Price
<b>New Brunswick™ Innova® U101</b> , 101 L, 230 V/50 Hz	U9420-0001	7,232.00 £
<b>Upright freezer rack</b> , Innova® U101		
50 mm (2 in) tall box, 10 boxes per rack	K0641-3003	180.00 £
75 mm (3 in) tall box, 6 boxes per rack	K0641-3004	140.00 £
100 mm (4 in) tall box, 4 boxes per rack	K0641-3005	99.20 £
<b>New Brunswick™ Innova and Green "G" CO<sub>2</sub> back-up system</b> , 230 V/50 Hz	U9043-0004	1,451.00 £
<b>New Brunswick™ Innova and Green "G" LN<sub>2</sub> back-up system</b> , 230 V/50 Hz	U9044-0004	1,451.00 £
<b>Inner shelf</b> , U101	P0625-0180	51.80 £
<b>Stacking kit</b> , U101	P0625-0020	239.00 £

✂ Ordering information for other voltage options begins on page 484

i For more information go to [www.eppendorf.com](http://www.eppendorf.com)

# New Brunswick™ Innova® U360



Technical specifications	
Insulation	Vacuum insulation paneling/polyurethane foam
Capacity	360 L
Number of internal doors	3
Max. racks per freezer	9
Boxes per freezer	
5 cm (2 in) tall boxes	252
7.5 cm (3 in) tall boxes	180
10 cm (4 in) tall boxes	108
Dimensions internal (W x D x H)	44 x 61.5 x 136.5 cm
Noise level	56 dB
Dimensions (W x D x H)	67 x 86.7 x 195 cm <sup>1)2)3)</sup>
Number of shelves	3

<sup>1)</sup> Optional CO<sub>2</sub>/LN<sub>2</sub> back-up systems add 8.65 cm/3.5 in to height.<sup>2)</sup> To allow for handles and hinges, add 80 mm to width of upright freezers and 110 mm to the depth of chest freezers.<sup>3)</sup> Door open adds up to 15 cm.

## Description

The Innova U360 provides an advanced design with sophisticated controls for labs tight on space. It is ultra-slim at 67 cm (26.4 in) wide. The U360 is the first of the Innova line to feature our advanced controller with extra-large display and graphing capability. It offers all the quality construction and system advantages as our original Innova models in a slimmer package.

## Product features

- > Capacity: 360 L
- > Occupies only 60 x 86.7 cm of floor space
- > Consumes only 10.7 kWh/day (Freezer set to -80 °C)
- > Ambient to -85 °C pull down is 5.6 hours
- > Holds up to 25,200 samples

## Ordering information

Description	Order no.	Price
<b>New Brunswick™ Innova® U360, 360 L, 230 V/50 Hz</b>	U9425-0001	10,890.00 £
<b>Upright freezer rack, Innova® U360, U535 and U725</b>		
50 mm (2 in) tall box, 28 boxes per rack	K0641-3000	268.00 £
75 mm (3 in) tall box, 20 boxes per rack	K0641-3001	209.00 £
100 mm (4 in) tall box, 12 boxes per rack	K0641-3002	148.00 £
<b>New Brunswick™ Innova and Green "G" CO<sub>2</sub> back-up system, 230 V/50 Hz</b>	U9043-0004	1,451.00 £
<b>New Brunswick™ Innova and Green "G" LN<sub>2</sub> back-up system, 230 V/50 Hz</b>	U9044-0004	1,451.00 £

✎ Ordering information for other voltage options begins on page 484

i For more information go to [www.eppendorf.com](http://www.eppendorf.com)

# New Brunswick™ Innova® U535



Technical specifications	
Insulation	Vacuum insulation paneling/polyurethane foam
Capacity	535 L
Number of internal doors	3
Max. racks per freezer	12
Boxes per freezer	
5 cm (2 in) tall boxes	336
7.5 cm (3 in) tall boxes	240
10 cm (4 in) tall boxes	144
Dimensions internal (W x D x H)	64 x 61.5 x 136.5 cm
Noise level	56 dB
Dimensions (W x D x H)	80 x 86.7 x 195 cm <sup>1)2)3)</sup>
Number of shelves	3

<sup>1)</sup> Optional CO<sub>2</sub>/LN<sub>2</sub> back-up systems add 8.65 cm/3.5 in to height.<sup>2)</sup> To allow for handles and hinges, add 80 mm to width of upright freezers and 110 mm to the depth of chest freezers.<sup>3)</sup> Door open adds up to 15 cm.

## Description

The Innova U535 is a versatile energy-efficient upright. It occupies approximately the same footprint as the traditionally foamed Premium 410 L freezer, but holds over 25 % more samples.

## Product features

- > Capacity: 535 L
- > Occupies 80 x 86.7 cm of floor space
- > Consumes only 13.2 kWh/day (Freezer set to -80 °C)
- > Ambient to -85 °C pull down is 5.3 hours
- > Holds up to 33,600 samples

## Ordering information

Description	Order no.	Price
<b>New Brunswick™ Innova® U535</b> , 535 L, 230 V/50 Hz	U9430-0001	11,210.00 £
<b>Upright freezer rack</b> , Innova® U360, U535 and U725		
50 mm (2 in) tall box, 28 boxes per rack	K0641-3000	268.00 £
75 mm (3 in) tall box, 20 boxes per rack	K0641-3001	209.00 £
100 mm (4 in) tall box, 12 boxes per rack	K0641-3002	148.00 £
<b>New Brunswick™ Innova and Green "G" CO<sub>2</sub> back-up system</b> , 230 V/50 Hz	U9043-0004	1,451.00 £
<b>New Brunswick™ Innova and Green "G" LN<sub>2</sub> back-up system</b> , 230 V/50 Hz	U9044-0004	1,451.00 £

✎ Ordering information for other voltage options begins on page 484

i For more information go to [www.eppendorf.com](http://www.eppendorf.com)

# New Brunswick™ Innova® U725



Technical specifications	
Insulation	Vacuum insulation paneling/ polyurethane foam
Capacity	725 L
Number of internal doors	3
Max. racks per freezer	18
Boxes per freezer	
5 cm (2 in) tall boxes	504
7.5 cm (3 in) tall boxes	360
10 cm (4 in) tall boxes	216
Dimensions internal (W x D x H)	86.5 x 61.5 x 136.5 cm
Noise level	59 dB
Dimensions (W x D x H)	102.5 x 86.7 x 195 cm <sup>1)2)3)</sup>
Number of shelves	3

<sup>1)</sup> Optional CO<sub>2</sub>/LN<sub>2</sub> back-up systems add 8.65 cm/3.5 in to height.<sup>2)</sup> To allow for handles and hinges, add 80 mm to width of upright freezers and 110 mm to the depth of chest freezers.<sup>3)</sup> Door open adds up to 15 cm.

## Description

The Innova U725 is the most popular upright freezer in our lineup. It is the largest Innova upright freezer and is the perfect balance of quality, performance and efficiency. Energy efficient, quiet running, and dependable, the U725 occupies approximately the same footprint as the traditionally foamed Premium 570 L freezer but holds over 25 % more samples.

## Product features

- > Capacity: 725 L
- > Occupies 102.5 x 86.7 cm of floor space
- > Consumes only 15.8 kWh/day (Freezer set to -80 °C)
- > Ambient to -85 °C pull down is 5.6 hours
- > Holds up to 50,400 samples

## Ordering information

Description	Order no.	Price
<b>New Brunswick™ Innova® U725</b> , 725 L, 230 V/50 Hz	U9440-0001	12,770.00 £
<b>Upright freezer rack</b> , Innova® U360, U535 and U725		
50 mm (2 in) tall box, 28 boxes per rack	K0641-3000	268.00 £
75 mm (3 in) tall box, 20 boxes per rack	K0641-3001	209.00 £
100 mm (4 in) tall box, 12 boxes per rack	K0641-3002	148.00 £
<b>New Brunswick™ Innova and Green "G" CO<sub>2</sub> back-up system</b> , 230 V/50 Hz	U9043-0004	1,451.00 £
<b>New Brunswick™ Innova and Green "G" LN<sub>2</sub> back-up system</b> , 230 V/50 Hz	U9044-0004	1,451.00 £

✎ Ordering information for other voltage options begins on page 484

i For more information go to [www.eppendorf.com](http://www.eppendorf.com)

# New Brunswick™ Innova® C585



## Technical specifications

<b>Insulation</b>	Vacuum insulation paneling/polyurethane foam
<b>Capacity</b>	585 L
<b>Max. racks per freezer</b>	32
<b>Boxes per freezer</b>	
<b>5 cm (2 in) tall boxes</b>	416
<b>7.5 cm (3 in) tall boxes</b>	288
<b>10 cm (4 in) tall boxes</b>	192
<b>Dimensions internal (W x D x H)</b>	120 x 62.5 x 78 cm
<b>Dimensions (W x D x H)</b>	169 x 78.5 x 109.2 cm <sup>1)2)</sup>
<b>Number of shelves</b>	N/A

<sup>1)</sup> Optional CO<sub>2</sub>/LN<sub>2</sub> back-up systems add 8.65 cm/3.5 in to height.<sup>2)</sup> To allow for handles and hinges, add 80 mm to width of upright freezers and 110 mm to the depth of chest freezers.

## Description

The Innova C585 chest freezer combines high efficiency and superior capacity with ergonomic operation. It continues the tradition of long-term durability and quality construction. It has a space-saving design and provides excellent energy efficiency.

## Product features

- > Capacity: 585 L
- > Occupies 169 x 78.5 cm of floor space
- > Consumes only 13.6 kWh/day (Freezer set to -80 °C)
- > Ambient to -85 °C pull down is 4.5 hours
- > Holds up to 41,600 samples
- > 30 mm thick inner lids, constructed from molded insulation, help maintain temperature stability

## Ordering information

Description	Order no.	Price
<b>New Brunswick™ Innova® C585</b> , 585 L, 230 V/50 Hz	U9400-0001	11,600.00 £
<b>Chest freezer rack</b> , Innova® C585 and C760, Premium C340 and C660		
50 mm (2 in) tall box, 13 boxes per rack	K0641-1690	129.00 £
75 mm (3 in) tall box, 9 boxes per rack	K0641-1700	124.00 £
100 mm (4 in) tall box, 6 boxes per rack	K0641-1750	120.00 £
<b>New Brunswick™ Innova and Green "G" CO<sub>2</sub> back-up system</b> , 230 V/50 Hz	U9043-0004	1,451.00 £
<b>New Brunswick™ Innova and Green "G" LN<sub>2</sub> back-up system</b> , 230 V/50 Hz	U9044-0004	1,451.00 £

✎ Ordering information for other voltage options begins on page 484

i For more information go to [www.eppendorf.com](http://www.eppendorf.com)

# New Brunswick™ Innova® C760



Technical specifications	
Insulation	Vacuum insulation paneling/polyurethane foam
Capacity	760 L
Max. racks per freezer	44
Boxes per freezer	
5 cm (2 in) tall boxes	572
7.5 cm (3 in) tall boxes	396
10 cm (4 in) tall boxes	264
Dimensions internal (W x D x H)	156 x 62.5 x 78 cm
Dimensions (W x D x H)	205 x 78.5 x 109.2 cm <sup>1)2)</sup>
Number of shelves	N/A

<sup>1)</sup> Optional CO<sub>2</sub>/LN<sub>2</sub> back-up systems add 8.65 cm/3.5 in to height.<sup>2)</sup> To allow for handles and hinges, add 80 mm to width of upright freezers and 110 mm to the depth of chest freezers.

## Description

The Innova C760 is the largest chest freezer in our freezer line up. It combines exceptional quality and high capacity to provide optimal performance, outstanding energy efficiency, and superior temperature management. It has a space-saving and ergonomic design to improve ease of use for every lab.

## Product features

- > Capacity: 760 Liters
- > Occupies only 205 x 78.5 cm of floor space
- > Consumes 16.0 kWh/day (Freezer set to -80 °C)
- > Ambient to -85 °C pull down is 5.8 hours
- > Holds up to 57,200 samples
- > 30 mm thick inner lids, constructed from molded insulation, help maintain temperature stability

## Ordering information

Description	Order no.	Price
<b>New Brunswick™ Innova® C760</b> , 760 L, 230 V/50 Hz	U9410-0001	13,070.00 £
<b>Chest freezer rack</b> , Innova® C585 and C760, Premium C340 and C660		
50 mm (2 in) tall box, 13 boxes per rack	K0641-1690	129.00 £
75 mm (3 in) tall box, 9 boxes per rack	K0641-1700	124.00 £
100 mm (4 in) tall box, 6 boxes per rack	K0641-1750	120.00 £
<b>New Brunswick™ Innova and Green "G" CO<sub>2</sub> back-up system</b> , 230 V/50 Hz	U9043-0004	1,451.00 £
<b>New Brunswick™ Innova and Green "G" LN<sub>2</sub> back-up system</b> , 230 V/50 Hz	U9044-0004	1,451.00 £

✎ Ordering information for other voltage options begins on page 484

i For more information go to [www.eppendorf.com](http://www.eppendorf.com)

## New Brunswick™ Premium Freezers



### Description

Premium freezers are the original benchmark for top quality ultra low temperature freezers. They provide many of the same features as our Innova models but are conventionally insulated for an cost effective alternative. Four models offered are U410, U570, U700 and C660.

i For more information go to [www.eppendorf.com](http://www.eppendorf.com)

Manufacturer's recommended retail price. All prices excl. VAT.  
Technical specifications subject to change.

# New Brunswick™ Premium U410



Technical specifications	
Insulation	Polyurethane foam
Capacity	410 L
Number of internal doors	5
Max. racks per freezer	15
Boxes per freezer	
5 cm (2 in) tall boxes	240
7.5 cm (3 in) tall boxes	180
10 cm (4 in) tall boxes	120
Dimensions internal (W x D x H)	55 x 57.5 x 126.5 cm
Dimensions (W x D x H)	80 x 85.2 x 191.5 cm <sup>1)2)3)</sup>
Number of shelves	5

<sup>1)</sup> Optional CO<sub>2</sub>/LN<sub>2</sub> back-up systems add 8.65 cm/3.5 in to height.<sup>2)</sup> To allow for handles and hinges, add 80 mm to width of upright freezers and 110 mm to the depth of chest freezers.<sup>3)</sup> Door open adds up to 15 cm.

## Description

The economical U410 is the smallest Premium upright freezer, but provides the same level of quality performance. The U410 will provide years of maintenance-free, reliable operation with minimal energy consumption.

## Product features

- > Capacity: 410 L
- > Occupies 80 x 85.2 cm of floor space
- > Consumes only 10.8 kWh/day (Freezer set to -80 °C)
- > Ambient to -85 °C pull down is 5.3 hours
- > Holds up to 24,000 samples

## Ordering information

Description	Order no.	Price
<b>New Brunswick™ Premium U410</b> , 410 L, 230 V/50 Hz	U9260-0001	8,989.00 £
<b>Upright freezer rack</b> , Premium U410, U570 and U700		
50 mm (2 in) tall box, 16 boxes per rack	K0641-1900	159.00 £
75 mm (3 in) tall box, 12 boxes per rack	K0641-1890	145.00 £
100 mm (4 in) tall box, 8 boxes per rack	K0641-1880	129.00 £
<b>New Brunswick™ Premium and HEF® CO<sub>2</sub> back-up system</b> , 230 V/50 Hz	U9043-0008	1,451.00 £
<b>New Brunswick™ Premium and HEF® LN<sub>2</sub> back-up system</b> , 230 V/50 Hz	U9044-0008	1,451.00 £

✎ Ordering information for other voltage options begins on page 484

i For more information go to [www.eppendorf.com](http://www.eppendorf.com)

# New Brunswick™ Premium U570



Technical specifications	
Insulation	Polyurethane foam
Capacity	570 L
Number of internal doors	5
Max. racks per freezer	25
Boxes per freezer	
5 cm (2 in) tall boxes	400
7.5 cm (3 in) tall boxes	300
10 cm (4 in) tall boxes	200
Dimensions internal (W x D x H)	76.5 x 57.5 x 126.5 cm
Dimensions (W x D x H)	102.5 x 85.2 x 192.5 cm <sup>1)2)3)</sup>
Number of shelves	5

<sup>1)</sup> Optional CO<sub>2</sub>/LN<sub>2</sub> back-up systems add 8.65 cm/3.5 in to height.<sup>2)</sup> To allow for handles and hinges, add 80 mm to width of upright freezers and 110 mm to the depth of chest freezers.<sup>3)</sup> Door open adds up to 15 cm.

## Description

The Premium U570 is the second largest freezer in the Premium line. It is known for its worry-free and reliable sample preservation together with outstanding energy efficiency. The U570 is available also in a -45 °C version (upon request).

## Product features

- > Capacity: 570 L
- > Occupies 102.5 x 85.2 cm of floor space
- > Consumes only 11.8 kWh/day (Freezer set to -80 °C)
- > Ambient to -85 °C pull down is 5.2 hours
- > Holds up to 40,000 samples

## Ordering information

Description	Order no.	Price
<b>New Brunswick™ Premium U570</b> , 570 L, 230 V/50 Hz	U9270-0001	10,320.00 £
<b>Upright freezer rack</b> , Premium U410, U570 and U700		
50 mm (2 in) tall box, 16 boxes per rack	K0641-1900	159.00 £
75 mm (3 in) tall box, 12 boxes per rack	K0641-1890	145.00 £
100 mm (4 in) tall box, 8 boxes per rack	K0641-1880	129.00 £
<b>New Brunswick™ Premium and HEF® CO<sub>2</sub> back-up system</b> , 230 V/50 Hz	U9043-0008	1,451.00 £
<b>New Brunswick™ Premium and HEF® LN<sub>2</sub> back-up system</b> , 230 V/50 Hz	U9044-0008	1,451.00 £

✂ Ordering information for other voltage options begins on page 484

i For more information go to [www.eppendorf.com](http://www.eppendorf.com)

# New Brunswick™ Premium U700



Technical specifications	
Insulation	Polyurethane foam
Capacity	700 L
Number of internal doors	5
Max. racks per freezer	30
Boxes per freezer	
5 cm (2 in) tall boxes	480
7.5 cm (3 in) tall boxes	360
10 cm (4 in) tall boxes	240
Dimensions internal (W x D x H)	86.7 x 61.3 x 131.6 cm
Dimensions (W x D x H)	112.1 x 87 x 195.9 cm <sup>1)2)3)</sup>
Number of shelves	4

<sup>1)</sup> Optional CO<sub>2</sub>/LN<sub>2</sub> back-up systems add 8.65 cm/3.5 in to height.<sup>2)</sup> To allow for handles and hinges, add 80 mm to width of upright freezers and 110 mm to the depth of chest freezers.<sup>3)</sup> Door open adds up to 15 cm.

## Description

The Premium U700 is the largest upright freezer in our Premium lineup. The U700 is a great cost alternative to the Innova U725 but still shares the same reliability and efficiency.

## Product features

- > Capacity: 700 L
- > Occupies 112.1 x 87 cm of floor space
- > Consumes only 15.9 kWh/day (Freezer set to -80 °C)
- > Ambient to -85 °C pull down is 6.0 hours
- > Holds up to 48,000 samples

## Ordering information

Description	Order no.	Price
<b>New Brunswick™ Premium U700</b> , 700 L, 230 V/50 Hz	U9280-0003	11,560.00 £
<b>Upright freezer rack</b> , Premium U410, U570 and U700		
50 mm (2 in) tall box, 16 boxes per rack	K0641-1900	159.00 £
75 mm (3 in) tall box, 12 boxes per rack	K0641-1890	145.00 £
100 mm (4 in) tall box, 8 boxes per rack	K0641-1880	129.00 £
<b>New Brunswick™ Premium and HEF® CO<sub>2</sub> back-up system</b> , 230 V/50 Hz	U9043-0008	1,451.00 £
<b>New Brunswick™ Premium and HEF® LN<sub>2</sub> back-up system</b> , 230 V/50 Hz	U9044-0008	1,451.00 £

✎ Ordering information for other voltage options begins on page 484

i For more information go to [www.eppendorf.com](http://www.eppendorf.com)

# New Brunswick™ Premium C660



Technical specifications	
Insulation	Polyurethane foam
Capacity	660 L
Max. racks per freezer	40
Boxes per freezer	
5 cm (2 in) tall boxes	520
7.5 cm (3 in) tall boxes	360
10 cm (4 in) tall boxes	240
Dimensions internal (W x D x H)	147 x 59 x 76 cm
Dimensions (W x D x H)	205 x 84 x 107.5 cm <sup>1)2)</sup>
Number of shelves	N/A

<sup>1)</sup> Optional CO<sub>2</sub>/LN<sub>2</sub> back-up systems add 8.65 cm/3.5 in to height.<sup>2)</sup> To allow for handles and hinges, add 80 mm to width of upright freezers and 110 mm to the depth of chest freezers.

## Description

The C660 freezer combines high efficiency and superior capacity with an ergonomic operation while maintaining the reputation of long-term durability and quality construction. This freezer offers a cost-saving alternative for those who need a reliable freezer but do not require the space-saving advantages of the Innova line.

## Product features

- > Capacity: 660 L
- > Occupies 205 x 84 cm of floor space
- > Consumes only 14.3 kWh/day (Freezer set to -80 °C)
- > Ambient to -85 °C pull down is 5.8 hours
- > Holds up to 52,000 samples
- > 10 mm thick insulated inner lid helps to maintain temperature stability

## Ordering information

Description	Order no.	Price
<b>New Brunswick™ Premium C660</b> , 660 L, 230 V/50 Hz	U9250-0001	11,090.00 £
<b>Chest freezer rack</b> , Innova® C585 and C760, Premium C340 and C660		
50 mm (2 in) tall box, 13 boxes per rack	K0641-1690	129.00 £
75 mm (3 in) tall box, 9 boxes per rack	K0641-1700	124.00 £
100 mm (4 in) tall box, 6 boxes per rack	K0641-1750	120.00 £
<b>New Brunswick™ Premium and HEF® CO<sub>2</sub> back-up system</b> , 230 V/50 Hz	U9043-0008	1,451.00 £
<b>New Brunswick™ Premium and HEF® LN<sub>2</sub> back-up system</b> , 230 V/50 Hz	U9044-0008	1,451.00 £

✂ Ordering information for other voltage options begins on page 484

i For more information go to [www.eppendorf.com](http://www.eppendorf.com)



## New Brunswick™ Green "G" and HEF® Freezers



### Description

The HEF and Green Freezers are one of the industry leaders in hydrocarbon based freezers and are one of the most energy-efficient ULT freezers on the market. They reduce energy consumption by up to 25 % compared to our already energy-saving Innova and Premium models. Safely store your samples while saving operating expense and being good to the environment. The four models offered are HEF C660, HEF U410, HEF U570 and U725-G.

i For more information go to [www.eppendorf.com](http://www.eppendorf.com)

# New Brunswick™ Innova® U725-G



Technical specifications	
Insulation	Vacuum insulation paneling/ polyurethane foam
Capacity	725 L
Number of internal doors	3
Max. racks per freezer	18
Boxes per freezer	
5 cm (2 in) tall boxes	504
7.5 cm (3 in) tall boxes	360
10 cm (4 in) tall boxes	216
Dimensions internal (W x D x H)	86.5 x 61.5 x 136.5 cm
Dimensions (W x D x H)	102.5 x 86.7 x 195 cm <sup>1)2)3)</sup>
Number of shelves	3

<sup>1)</sup> Optional CO<sub>2</sub>/LN<sub>2</sub> back-up systems add 8.65 cm/3.5 in to height.<sup>2)</sup> To allow for handles and hinges, add 80 mm to width of upright freezers and 110 mm to the depth of chest freezers.<sup>3)</sup> Door open adds up to 15 cm.

## Description

For large-capacity needs, the U725-G “Green” freezer is one of the most environmentally friendly, energy efficient ULT freezers on the market. It improves on the Innova U725 by eliminating all use of CFCs, HCFCs and hydrofluorocarbons (HFCs). This further reduces energy consumption and greenhouse gases.

## Product features

- > Capacity: 725 L
- > Occupies 102.5 x 86.7 cm of floor space
- > Air-cooled model consumes only 12.2 kWh/day (Freezer set to -80 °C)
- > Ambient to -85 °C pull down is 4.8 hours (air-cooled)
- > Holds up to 50,400 samples
- > Uses safe hydrocarbon-based refrigerants instead of traditional refrigerants to reduce energy consumption by another 19 % over our Innova U725
- > Air cooled and water cooled models offered. Water cooling with energy-saving heat recapture provides maximum energy and environmental savings
- > Occupies approximately the same footprint as the traditionally foamed Premium 570 L freezer, but holds over 25 % more samples.

## Ordering information

Description	Order no.	Price
New Brunswick™ Innova® U725-G, 725 L, 230 V/50 Hz, Air-Cooled	U9440-0005	13,280.00 £
New Brunswick™ Innova® U725-G, 725 L, 230 V/50 Hz, Water-Cooled	U9440-0004	13,800.00 £
<b>Upright freezer rack, Innova® U360, U535 and U725</b>		
50 mm (2 in) tall box, 28 boxes per rack	K0641-3000	268.00 £
75 mm (3 in) tall box, 20 boxes per rack	K0641-3001	209.00 £
100 mm (4 in) tall box, 12 boxes per rack	K0641-3002	148.00 £
New Brunswick™ Innova and Green “G” CO <sub>2</sub> back-up system, 230 V/50 Hz	U9043-0004	1,451.00 £
New Brunswick™ Innova and Green “G” LN <sub>2</sub> back-up system, 230 V/50 Hz	U9044-0004	1,451.00 £

✂ Ordering information for other voltage options begins on page 484

# New Brunswick™ HEF® U410



Technical specifications	
Insulation	Vacuum insulation paneling/polyurethane foam
Capacity	410 L
Number of internal doors	5
Max. racks per freezer	15
Boxes per freezer	
5 cm (2 in) tall boxes	240
7.5 cm (3 in) tall boxes	180
10 cm (4 in) tall boxes	120
Dimensions internal (W x D x H)	55 x 57.5 x 126.5 cm
Dimensions (W x D x H)	80 x 85.2 x 191.5 cm <sup>1)2)3)</sup>
Number of shelves	5

<sup>1)</sup> Optional CO<sub>2</sub>/LN<sub>2</sub> back-up systems add 8.65 cm/3.5 in to height.<sup>2)</sup> To allow for handles and hinges, add 80 mm to width of upright freezers and 110 mm to the depth of chest freezers.<sup>3)</sup> Door open adds up to 15 cm.

## Description

The HEF U410 is the most compact model in the HEF line. It is identical to the Premium U410, except that it further reduces energy consumption by about 22 %. It is composed of both Vacuum Insulation Panels and traditional urethane foam to achieve energy savings.

## Product features

- > Capacity: 410 L
- > Occupies 80 x 85.2 cm of floor space
- > Consumes only 8.4 kWh/day (Freezer set to -80 °C)
- > Ambient to -85 °C pull down is 4.7 hours
- > Holds up to 24,000 samples

## Ordering information

Description	Order no.	Price
<b>New Brunswick™ HEF® U410</b> , 410 L, 230 V/50 Hz	U9260-0008	9,800.00 £
<b>Upright freezer rack</b> , Premium U410, U570 and U700		
50 mm (2 in) tall box, 16 boxes per rack	K0641-1900	159.00 £
75 mm (3 in) tall box, 12 boxes per rack	K0641-1890	145.00 £
100 mm (4 in) tall box, 8 boxes per rack	K0641-1880	129.00 £
<b>New Brunswick™ Premium and HEF® CO<sub>2</sub> back-up system</b> , 230 V/50 Hz	U9043-0008	1,451.00 £
<b>New Brunswick™ Premium and HEF® LN<sub>2</sub> back-up system</b> , 230 V/50 Hz	U9044-0008	1,451.00 £

✂ Ordering information for other voltage options begins on page 484

# New Brunswick™ HEF® U570



Technical specifications	
Insulation	Vacuum insulation paneling/ polyurethane foam
Capacity	570 L
Number of internal doors	5
Max. racks per freezer	25
Boxes per freezer	
5 cm (2 in) tall boxes	400
7.5 cm (3 in) tall boxes	300
10 cm (4 in) tall boxes	200
Dimensions internal (W x D x H)	76.5 x 57.5 x 126.5 cm
Dimensions (W x D x H)	102.5 x 85.2 x 192.5 cm <sup>1)2)3)</sup>
Number of shelves	5

<sup>1)</sup> Optional CO<sub>2</sub>/LN<sub>2</sub> back-up systems add 8.65 cm/3.5 in to height.<sup>2)</sup> To allow for handles and hinges, add 80 mm to width of upright freezers and 110 mm to the depth of chest freezers.<sup>3)</sup> Door open adds up to 15 cm.

## Description

Like all HEF high efficiency freezers, the HEF U570 is one of the most environmentally friendly, energy efficient -86 °C freezers on the market. The HEF U570 is identical to the Premium U570 upright freezer, except that it further reduces energy consumption by approximately 25 %. It is composed of both Vacuum Insulation Panels and traditional urethane foam to achieve energy savings.

## Product features

- > Capacity: 570 L
- > Occupies 102.5 x 85.2 cm of floor space
- > Consumes only 8.9 kWh/day (Freezer set to -80 °C)
- > Ambient to -85 °C pull down is 6 hours (230 V/50 Hz), 4.7 hours (120 V/60 Hz)
- > Holds up to 40,000 samples

## Ordering information

Description	Order no.	Price
<b>New Brunswick™ HEF® U570</b> , 570 L, 230 V/50 Hz	U9270-0008	11,310.00 £
<b>Upright freezer rack</b> , Premium U410, U570 and U700		
50 mm (2 in) tall box, 16 boxes per rack	K0641-1900	159.00 £
75 mm (3 in) tall box, 12 boxes per rack	K0641-1890	145.00 £
100 mm (4 in) tall box, 8 boxes per rack	K0641-1880	129.00 £
<b>New Brunswick™ Premium and HEF® CO<sub>2</sub> back-up system</b> , 230 V/50 Hz	U9043-0008	1,451.00 £
<b>New Brunswick™ Premium and HEF® LN<sub>2</sub> back-up system</b> , 230 V/50 Hz	U9044-0008	1,451.00 £

✂ Ordering information for other voltage options begins on page 484

i For more information go to [www.eppendorf.com](http://www.eppendorf.com)

# New Brunswick™ HEF® C660



Technical specifications	
Insulation	Vacuum insulation paneling/ polyurethane foam
Capacity	660 L
Max. racks per freezer	40
Boxes per freezer	
5 cm (2 in) tall boxes	520
7.5 cm (3 in) tall boxes	360
10 cm (4 in) tall boxes	240
Dimensions internal (W x D x H)	147 x 59 x 76 cm
Dimensions (W x D x H)	205 x 84 x 107.5 cm <sup>1)2)</sup>
Number of shelves	N/A

<sup>1)</sup> Optional CO<sub>2</sub>/LN<sub>2</sub> back-up systems add 8.65 cm/3.5 in to height.<sup>2)</sup> To allow for handles and hinges, add 80 mm to width of upright freezers and 110 mm to the depth of chest freezers.

## Description

The HEF C660 is one of the most energy efficient, eco-friendly chest freezers available on the market today. It is identical to the large capacity Premium C660, except it further reduces energy consumption by approximately 20 %.

## Product features

- > Capacity: 660 L
- > Occupies 205 x 84 cm of floor space
- > Consumes only 11.4 kWh/day (Freezer set to -80 °C)
- > Ambient to -85 °C pull down is 5 hours
- > Holds up to 52,000 samples
- > 10 mm thick insulated inner lid helps to maintain temperature stability

## Ordering information

Description	Order no.	Price
<b>New Brunswick™ HEF® C660</b> , 660 L, 230 V/50 Hz	U9250-0008	12,050.00 £
<b>Chest freezer rack</b> , Innova® C585 and C760, Premium C340 and C660		
50 mm (2 in) tall box, 13 boxes per rack	K0641-1690	129.00 £
75 mm (3 in) tall box, 9 boxes per rack	K0641-1700	124.00 £
100 mm (4 in) tall box, 6 boxes per rack	K0641-1750	120.00 £
<b>New Brunswick™ Premium and HEF® CO<sub>2</sub> back-up system</b> , 230 V/50 Hz	U9043-0008	1,451.00 £
<b>New Brunswick™ Premium and HEF® LN<sub>2</sub> back-up system</b> , 230 V/50 Hz	U9044-0008	1,451.00 £

✂ Ordering information for other voltage options begins on page 484

i For more information go to [www.eppendorf.com](http://www.eppendorf.com)

## Freezer Racks



### Ordering information

Description	Order no.	Price
<b>Upright freezer rack, Innova® U101</b>		
50 mm (2 in) tall box, 10 boxes per rack	K0641-3003	180.00 £
75 mm (3 in) tall box, 6 boxes per rack	K0641-3004	140.00 £
100 mm (4 in) tall box, 4 boxes per rack	K0641-3005	99.20 £
<b>Upright freezer rack, Innova® U360, U535 and U725</b>		
50 mm (2 in) tall box, 28 boxes per rack	K0641-3000	268.00 £
75 mm (3 in) tall box, 20 boxes per rack	K0641-3001	209.00 £
100 mm (4 in) tall box, 12 boxes per rack	K0641-3002	148.00 £
<b>Chest freezer rack, Innova® C585 and C760, Premium C340 and C660</b>		
50 mm (2 in) tall box, 13 boxes per rack	K0641-1690	129.00 £
75 mm (3 in) tall box, 9 boxes per rack	K0641-1700	124.00 £
100 mm (4 in) tall box, 6 boxes per rack	K0641-1750	120.00 £
<b>Upright freezer rack, Premium U410, U570 and U700</b>		
50 mm (2 in) tall box, 16 boxes per rack	K0641-1900	159.00 £
75 mm (3 in) tall box, 12 boxes per rack	K0641-1890	145.00 £
100 mm (4 in) tall box, 8 boxes per rack	K0641-1880	129.00 £

**i** For more information go to [www.eppendorf.com](http://www.eppendorf.com)

## Freezer Cardboard Storage Boxes



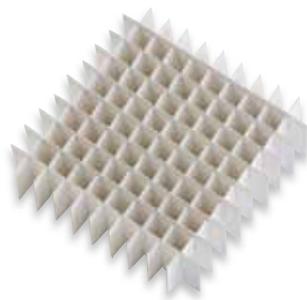
### Freezer Cardboard Storage Boxes

- > White cardboard box with water resistant coating, designed to withstand ultra-low temperature
- > Available in 50 mm (2in), 75 mm (3in) and 100 mm (4in) tall boxes
- > Compatible with box dividers 7 x 7 to 10 x 10 (dividers sold separately)

#### Ordering information

Description	Order no.	Price
<b>Freezer Cardboard Storage Boxes, white</b>		
50 mm tall	B50-SQ	3.60 £
75 mm tall	B75-SQ	4.30 £
100 mm tall	B95-SQ	4.30 £

## Freezer Boxes Dividers



### Freezer Boxes Dividers

- > Available in 7 x 7, 8 x 8, 9 x 9 and 10 x 10 configurations
- > Compatible with freezer cardboard storage boxes (sold separately)

#### Ordering information

Description	Order no.	Price
<b>Freezer Boxes Dividers</b>		
7 x 7, 17.4 mm max. tube diameter, holds 49 tubes	D49	3.60 £
8 x 8, 15 mm max. tube diameter, holds 64 tubes	D64	3.60 £
9 x 9, 13 mm max. tube diameter, holds 81 tubes	D81	3.60 £
10 x 10, 11.8 mm max. tube diameter, holds 100 tubes	D100	3.60 £

**i** For more information go to [www.eppendorf.com](http://www.eppendorf.com)

## Storage Box 5.0 mL



### Storage Box 5.0 mL

- > Made of Polypropylene (PP) for high stability in freezing applications
- > Alphanumeric code for easy sample reference
- > Dimensions optimized for Eppendorf Tubes 5.0 mL for space saving storage

#### Ordering information

Description	Order no.	Price
<b>Eppendorf Tubes® 5.0 mL, 5.0 mL</b>		
Eppendorf Quality™, 200 tubes (2 bags x 100 tubes)	0030 119.401	28.20 £
<b>Storage Box 5.0 mL</b> , for 25 tubes 5.0 mL, 2 pcs., 5 x 5 grid, blue and red, made of polypropylene, for freezing to -86 °C, with lid and alphanumeric code, height 65 mm	0030 127.943	14.90 £

## New Brunswick™ CO<sub>2</sub> and LN<sub>2</sub> Back-up System



### New Brunswick™ CO<sub>2</sub> and LN<sub>2</sub> Back-up System

- > Equipped with a battery back-up to temporarily protect the contents of your freezer in case of power failure.
- > Available in either liquid CO<sub>2</sub> and LN<sub>2</sub>. Liquid CO<sub>2</sub> can maintain temperatures between -50 °C and -70 °C, where as LN<sub>2</sub> can go down to -85 °C.
- > Both systems can be factory installed with your freezer order at no additional charge or retrofitted on location
- > CO<sub>2</sub> and LN<sub>2</sub> are not interchangeable systems

#### Ordering information

Description	Order no.	Price
<b>New Brunswick™ Innova and Green "G" CO<sub>2</sub> back-up system</b> , 230 V/50 Hz	U9043-0004	1,451.00 £
<b>New Brunswick™ Innova and Green "G" LN<sub>2</sub> back-up system</b> , 230 V/50 Hz	U9044-0004	1,451.00 £
<b>New Brunswick™ Premium and HEF® CO<sub>2</sub> back-up system</b> , 230 V/50 Hz	U9043-0008	1,451.00 £
<b>New Brunswick™ Premium and HEF® LN<sub>2</sub> back-up system</b> , 230 V/50 Hz	U9044-0008	1,451.00 £

i For more information go to [www.eppendorf.com/temperaturecontrol-mixing](http://www.eppendorf.com/temperaturecontrol-mixing)

# New Brunswick™ TCA-3 Temperature Monitor



## New Brunswick™ TCA-3 Temperature Monitor

- > Receive email, voicemail and text alarms if the temperature exceeds desired levels
- > Quick installation on any freezer regardless of manufacturer
- > View temperature data readings, graphs and statistics from any web browser
- > Temperature range is from -100 °C to 100 °C

### Ordering information

Description	Order no.	Price
<b>New Brunswick™ TCA-3 Temperature Monitor</b>		
230 V/50 Hz	P0625-2050	2,315.00 £

# Chart Recorder



## Chart Recorder

- > Includes chart recorder, RTD probe, keys, chart recorder paper and chart recorder pens
- > Will continuously monitor and record freezer temperature
- > Front mounted to your freezer for easy access and can be fitted to all freezer models
- > Battery powered and will provide a minimum of eighteen months of operation
- > Selectable temperature range (0 to -50 °C and -50 to -100 °C) and rotation speed
- > User configurable built in Hi and Lo temperature alarms
- > Can be factory installed with your freezer order at no additional charge or retrofitted on location

### Ordering information

Description	Order no.	Price
<b>Chart recorder pens, 3 pk</b>	K0660-0051	49.80 £
<b>Chart recorder paper, -50 to -100</b>	P0625-2110	70.40 £
<b>Chart recorder paper, 0 to -50</b>	P0625-2111	70.40 £
<b>Chart recorder, with reverse scale charts</b>	P0625-2100	882.00 £

## Freezers Accessories and Replacement Parts

### Ordering information

Description	Order no.	Price
<b>Upright freezer rack, Innova® U101</b>		
50 mm (2 in) tall box, 10 boxes per rack	K0641-3003	180.00 £
75 mm (3 in) tall box, 6 boxes per rack	K0641-3004	140.00 £
100 mm (4 in) tall box, 4 boxes per rack	K0641-3005	99.20 £
<b>Upright freezer rack, Innova® U360, U535 and U725</b>		
50 mm (2 in) tall box, 28 boxes per rack	K0641-3000	268.00 £
75 mm (3 in) tall box, 20 boxes per rack	K0641-3001	209.00 £
100 mm (4 in) tall box, 12 boxes per rack	K0641-3002	148.00 £
<b>Chest freezer rack, Innova® C585 and C760, Premium C340 and C660</b>		
50 mm (2 in) tall box, 13 boxes per rack	K0641-1690	129.00 £
75 mm (3 in) tall box, 9 boxes per rack	K0641-1700	124.00 £
100 mm (4 in) tall box, 6 boxes per rack	K0641-1750	120.00 £
<b>External Voltage Stabilizer, 208-230V, 50/60 Hz</b>	M1322-0002	1,657.00 £
<b>Upright freezer rack, Premium U410, U570 and U700</b>		
50 mm (2 in) tall box, 16 boxes per rack	K0641-1900	159.00 £
75 mm (3 in) tall box, 12 boxes per rack	K0641-1890	145.00 £
100 mm (4 in) tall box, 8 boxes per rack	K0641-1880	129.00 £
<b>Inner shelf, U101</b>	P0625-0180	51.80 £
<b>Freezer Extra Shelf, includes four mounting clips</b>		
U360	P0625-1180	97.30 £
U410	K0280-1031	91.20 £
U535	K0280-1034	145.00 £
U570	K0280-1030	101.00 £
U700	P0625-1185	123.00 £
U725	K0280-1036	156.00 £
<b>Stacking kit, U101</b>	P0625-0020	239.00 £
<b>Padlock adapter kit, for all upright models</b>	P0625-1170	127.00 £

### Ordering information

Description	Order no.	Price
<b>Freezer air filter</b>		
U101	K0200-0506	12.20 £
U360	P0625-1110	12.20 £
upright models	K0200-0511	30.30 £
chest models	K0200-0516	25.40 £
<b>Freezer air filter grille</b>		
U101	K0200-0505	247.00 £
U360	P0625-1100	108.00 £
upright models	K0200-0510	141.00 £
chest models	K0200-0515	271.00 £

i For more information go to [www.eppendorf.com](http://www.eppendorf.com)

# BioCommand® SFI Automated Data Logging Software



Graphical representation of the output

## Description

The BioCommand SFI software package is designed specifically for standard laboratory equipment including shakers, CO<sub>2</sub> incubators and ULT-Freezers. The software package allows you to track key operational information such as time, temperature, shaking speed, CO<sub>2</sub> concentrations and humidity.

## Product features

- > Track the operational parameters of your choice with the option to design and save templates
- > Monitor multiple units from the same PC
- > Trend and archive critical data including temperature, agitation speed and gas concentration for up to 32 units simultaneously
- > Provides indications of alarm conditions identified by the product
- > Ability to email or text message alarm events

## Ordering information

Description	Order no.	Price
<b>BioCommand® SFI Automated Data Logging Software</b>		
<b>ULT-Freezer package</b>	M1291-1002	1,150.00 £
<b>ULT-Freezer cable set, includes RS-485 board, 15 m</b>	M1291-5001	403.00 £
<b>RS-232 to USB converter, 4-port</b>	P0460-7751	664.00 £
<b>RS-232 to USB converter, 8-port</b>	P0460-7750	664.00 £

i For more information go to [www.eppendorf.com](http://www.eppendorf.com)

# ULT Freezer Performance Plans

## Preventive Maintenance

The Eppendorf Ultra-low temperature freezer Performance Plans components include a choice of preventive maintenance protocols designed to check, validate and to promote continuous stable freezer performance, optimizing instrument conformity with programmed storage temperatures.

## Certification Service

Installation Qualification (IQ) and Operational Qualification (OQ) certification services ensure your Quality Management requirements are fulfilled, providing you with qualified assurance that your ultra-low temperature freezer is functioning correctly, in accordance with manufacturers' specifications.

For more information go to [www.eppendorf.com/epServices](http://www.eppendorf.com/epServices). In selected countries only.

Performance Plans	ESSENTIAL CHECK
<b>Order Number</b>	0082 070.003
<b>External Checks &amp; Maintenance</b>	
Check installation environment	■
Check electrical supply and fittings	
Check CO <sub>2</sub> /LN <sub>2</sub> backup system installation <sup>1)</sup>	
Check independent temperature monitoring system <sup>1)</sup>	
Operation of freezer lid gas strut (chest freezer only)	
Alignment of door handle	
Alignment & sealing of outer door (upright freezer only)	
Air filter inspection & cleaning	
<b>Internal Equipment &amp; Fittings</b>	
Inspection & cleaning of heated vent	■
Condition and function of inner doors/lids	
Compressors: operating temperature check	
Cooling fan: condition of fan motor, bearings, fan blades	
Condition of insulation – accessible cooling circuit pipes	
Condition of accessible electrical wiring	
Display and function keys operation	■
Chamber temperature sensor function, alarms function	■
RS232 communications port functionality check	
<b>Validation &amp; Metrology</b>	
Validation and adjustment of operating parameters to within Eppendorf specifications	■
<b>Documentation</b>	
Issue preventative maintenance Check List (signed document)	■
Dated service sticker fixed to ULT freezer to confirm Eppendorf service	■
Provide IQ Report and Certificate	
Provide OQ Report and Certificate	
<b>Supporting Information</b>	
Contract period	one year
Number of routine preventive service visits included	one
Cost of repairs / parts replacement outside scope of preventive maintenance visit (where Eppendorf product warranty has expired)	not included
<b>Order number for combined Installation &amp; Operational Qualification Service (IQ/OQ):</b>	
<b>0082 070.009</b>	

<sup>1)</sup> Where this optional feature is present <sup>2)</sup> Please contact your local Eppendorf Service representative for details of discounts and/or any potential additional charges applying. Additionally, if you require a Customized Service we will be very pleased to discuss your requirements.



# Cell Handling



**Discover our comprehensive range of instruments and consumables for the manipulation, cultivation and analysis of cells.**

For nearly 70 years, Eppendorf has been providing innovative technologies and premium products for optimizing work processes in modern laboratories. For handling cells, in addition to manipulators and injectors, consumables and incubators for cultivation as well as complete bioreactor systems for cell culture applications are also available. Corresponding detection systems are offered as required for subsequent photometric or fluorescence-based analysis.

- > Photometry and Detection **322-345**
- > Cell Manipulation **348-375**
- > Cell Culture and Cell Imaging Consumables **378-393**
- > CO<sub>2</sub> Incubators **394-411**
- > Shakers **414-453**
- > Performance Plans **346, 376, 412, 453**

Bioprocessing (see separate Catalog)



Model	BioSpectrometer basic	BioSpectrometer kinetic
Page(s)	326	326
Dimensions (W × D × H)	295 × 400 × 150 mm	295 × 400 × 150 mm
Weight w/o accessories	5.4 kg	5.5 kg
Power supply	100 – 240 V, 50 – 60 Hz	100 – 240 V, 50 – 60 Hz
Beam receiver absorption	CMOS photodiode array	CMOS photodiode array
Beam receiver fluorescence		
Cuvette shaft	12.5 mm × 12,5 mm, untempered	12.5 mm × 12.5 mm, tempered
Light path height	8.5 mm	8.5 mm
Light source absorption	Xenon flash lamp	Xenon flash lamp
Light source fluorescence		
Measuring principle absorption	Single-beam absorption spectrophotometer with reference beam	Single-beam absorption spectrophotometer with reference beam
Measuring principle fluorescence		
Absorption measuring range	0 A – 3,0 A (260 nm)	0 A – 3,0 A (260 nm)
Fluorescence measuring range		
Power consumption	Approx. 15 W during operating step Approx. 5 W with dimmed display	Approx. 30 W during operating step Approx. 5 W with dimmed display and temperature control switched off
Random error absorption	≤ 0.002 at A = 0 ≤ 0.005 (0.5 %) at A = 1	≤ 0.002 at A = 0 ≤ 0.005 (0.5 %) at A = 1
Smallest step size	1 nm	1 nm
Spectral bandwidth	≤ 4 nm	≤ 4 nm
Systematic error	± 1 % (A = 1)	± 1 % (A = 1)
Wavelength range	200 nm – 830 nm	200 nm – 830 nm

i For more information go to [www.ependorf.com](http://www.ependorf.com)



<b>BioSpectrometer fluorescence 326</b>	<b>BioPhotometer D30 330</b>	<b>PlateReader AF2200 340</b>
295 × 400 × 150 mm	295 × 400 × 150 mm	462 × 458 × 282 mm
5.4 kg	5.4 kg	16 kg
100 – 240 V, 50 – 60 Hz	100 – 240 V, 50 – 60 Hz	100 – 240 V, 50/60 Hz
CMOS photodiode array	CMOS photodiodes	UV silicon photodiode
Photodiodes		Photomultiplier
12.5 mm × 12.5 mm, untempered	12.5 mm × 12.5 mm, untempered	
8.5 mm	8.5 mm	
Xenon flash lamp	Xenon flash lamp	UV Xenon flash lamp
LED		UV Xenon flash lamp
Single-beam absorption spectrophotometer with reference beam	Single-beam absorption photometer with reference beam	Filter-based absorbance detection in 6-384 well plates and microvolume plate (µPlate G0.5)
Confocal filter fluorometer with reference beam		Filter-based fluorescence top reading and fluorescence bottom reading with fiber optics; 6-384 well plates, PMT detector
0 A – 3,0 A (260 nm)	0 A – 3,0 A (260 nm)	0 A – 4,0 A
0.5 nM – 2,000 nM fluorescein (emission wavelength 520 nm)		0-60000 RFU
Approx. 15 W during operating step Approx. 5 W with dimmed display	Approx. 15 W during operating step Approx. 5 W with dimmed display	Max. 150 VA
≤ 0.002 at A = 0 ≤ 0.005 (0.5 %) at A = 1	± 0.5 nm	
1 nm		
≤ 4 nm	≤ 4 nm	
± 1 % (A = 1)	± 1 nm	
200 nm – 830 nm	230, 260, 280, 320, 340, 405, 490, 562, 595, 600 nm	UV/Vis absorption: 230 – 1,000 nm Fluorescence intensity: Ex: 230 – 600 nm, Em: 330 – 600 nm

**i** For more information go to [www.eppendorf.com](http://www.eppendorf.com)

# Eppendorf BioSpectrometer®



> UV/Vis spectral range  
200 nm to 830 nm

> Preprogrammed  
applications for quick  
start

> Freely selectable  
wavelengths across the  
entire spectral range  
(increment: 1 nm)

> Integrated application  
and results memory

> Xenon flash lamp with  
very long line life

> Direct print-out of  
results (Thermal Printer  
DPU-S445)

> Help box with  
explanation of each  
individual step in 5  
languages

> Data transfer via USB  
interface

i For more information go to [www.eppendorf.com/photometry](http://www.eppendorf.com/photometry)



### Description

The new Eppendorf BioSpectrometers are small, very compact spectrophotometers that allow users to conduct measurements in the UV/Vis and fluorescence range. Absorbance spectra can be recorded, and individual wavelength measurements can be conducted, in a spectral range of 200 nm to 830 nm. On the BioSpectrometer kinetic, the cuvette shaft can also be tempered in a range of +20 °C to +42 °C, meaning that enzyme and substrate kinetics can be measured directly in the device. The integrated fluorescence unit of the BioSpectrometer fluorescence can be used to increase the measuring range by using fluorescence dyes.

### Applications

- > Absorbance measurement for one or more wavelengths, recording of wavelength scans
- > Applications with evaluations via factor, standard or standard series
- > Two-wavelength method with subtraction and division evaluation
- > Concentration via standard series (including linear and non-linear regression and linear interpolation)
- > Fluorescence measurements to increase the measuring range by a factor of 1,000, for example, to detect low amounts of DNA
- > Temperature controlled cuvette shaft for determining enzyme and substrate kinetics

i For more information go to [www.eppendorf.com/photometry](http://www.eppendorf.com/photometry)

# Eppendorf BioSpectrometer®

Technical specifications			
Model	BioSpectrometer basic	BioSpectrometer kinetic	BioSpectrometer fluorescence
Display	5.7" VGA TFT display	5.7" VGA TFT display	5.7" VGA TFT display
Interfaces	USB master: for USB stick USB slave: for connecting to a PC Serial RS232 interface	USB master: for USB stick USB slave: for connecting to a PC Serial RS232 interface	USB master: for USB stick USB slave: for connecting to a PC Serial RS232 interface
Power supply	100 – 240 V, 50 – 60 Hz	100 – 240 V, 50 – 60 Hz	100 – 240 V, 50 – 60 Hz
Dimensions (W × D × H)	295 × 400 × 150 mm	295 × 400 × 150 mm	295 × 400 × 150 mm
Weight w/o accessories	5.4 kg	5.5 kg	5.4 kg
Beam receiver absorption	CMOS photodiode array	CMOS photodiode array	CMOS photodiode array
Beam receiver fluorescence			Photodiodes
Cuvette material	For measurements in the UV: quartz glass or UV-transparent plastic (Eppendorf UVette®, 220 nm to 1600 nm). For measurements in the visible range: glass or plastic. For microvolume measurements: microvolume measuring cells such as the Eppendorf $\mu$ Cuvette® G1.0	For measurements in the UV: quartz glass or UV-transparent plastic (Eppendorf UVette®, 220 nm to 1600 nm). For measurements in the visible range: glass or plastic. For microvolume measurements: microvolume measuring cells such as the Eppendorf $\mu$ Cuvette® G1.0	For measurements in the UV range: quartz glass or UV-transparent plastic (Eppendorf UVette®, 220 nm to 1,600 nm). For measurements in the visible range: glass or plastic. For microvolume measurements: microvolume measuring cells such as the Eppendorf $\mu$ Cuvette® G1.0
Cuvette shaft	12.5 mm × 12,5 mm, untempered	12.5 mm × 12.5 mm, tempered	12.5 mm × 12.5 mm, untempered
Temperature control of cuvette shaft		20 °C – 42 °C, smallest increment: 0.1 °C	
Emission wavelength I fluorescence			520 nm, bandwidth: 15 nm
Emission wavelength II fluorescence			560 nm, bandwidth: 40 nm
Excitation wavelength fluorescence			470 nm, bandwidth: 25 nm
Light path height	8.5 mm	8.5 mm	8.5 mm
Light source absorption	Xenon flash lamp	Xenon flash lamp	Xenon flash lamp
Light source fluorescence			LED
Measuring principle absorption	Single-beam absorption spectrophotometer with reference beam	Single-beam absorption spectrophotometer with reference beam	Single-beam absorption spectrophotometer with reference beam
Measuring principle fluorescence			Confocal filter fluorometer with reference beam
Absorption measuring range	0 A – 3,0 A (260 nm)	0 A – 3,0 A (260 nm)	0 A – 3,0 A (260 nm)
Fluorescence measuring range			0.5 nM – 2 000 nM fluorescein (emission wavelength 520 nm)
Method memory	> 100 method programs	> 100 method programs	> 100 method programs
Mode absorption	Spectrophotometer	Spectrophotometer	Spectrophotometer

i For more information go to [www.eppendorf.com/photometry](http://www.eppendorf.com/photometry)

Technical specifications			
Model	BioSpectrometer basic	BioSpectrometer kinetic	BioSpectrometer fluorescence
Mode fluorescence			Fluorometer
Operator guidance language	Spanish, Italian, French, English, German	Spanish, Italian, French, English, German	Spanish, Italian, French, English, German
Power consumption	Approx. 15 W during operating step Approx. 5 W with dimmed display	Approx. 30 W during operating step Approx. 5 W with dimmed display and temperature control switched off	Approx. 15 W during operating step Approx. 5 W with dimmed display
Random error absorption	$\leq 0.002$ at A = 0 $\leq 0.005$ (0.5 %) at A = 1	$\leq 0.002$ at A = 0 $\leq 0.005$ (0.5 %) at A = 1	$\leq 0.002$ at A = 0 $\leq 0.005$ (0.5 %) at A = 1
Random error fluorescence			$\pm 2$ % at 1 nM fluorescein (emission wavelength 520 nm)
Smallest step size	1 nm	1 nm	1 nm
Spectral bandwidth	$\leq 4$ nm	$\leq 4$ nm	$\leq 4$ nm
Systematic error	$\pm 1$ % (A = 1)	$\pm 1$ % (A = 1)	$\pm 1$ % (A = 1)
Wavelength range	200 nm – 830 nm	200 nm – 830 nm	200 nm – 830 nm

#### Ordering information

Description	Order no.	Price
<b>Eppendorf BioSpectrometer® basic</b> , 230 V/50 – 60 Hz (GB)	6135 000.025	5,137.00 £
<b>Eppendorf BioSpectrometer® kinetic</b> , 230 V/50 – 60 Hz (GB)	6136 000.029	6,214.00 £
<b>Eppendorf BioSpectrometer® fluorescence</b> , 100 – 240 V/50 – 60 Hz	6137 000.022	6,998.00 £
<b>BioSpectrometer Reference Filter Sets</b> , filter set for verifying photometric accuracy and wavelength systematic error (according to NIST)	6135 928.001	1,213.00 £
<b>BioSpectrometer Fluorescence Reference Filter Set</b> , filter set for verifying photometric accuracy and wavelength systematic error (according to NIST) and verifying fluorimetric precision (random error) and linearity	6137 928.009	2,223.00 £
<b>Eppendorf µCuvette® G1.0 &amp; BioSpectrometer basic (bundle)</b> , Eppendorf microvolume measuring cell and BioSpectrometer basic	6135 000.906	5,892.00 £

✎ Ordering information for other voltage options begins on page 484

i For more information go to [www.eppendorf.com/photometry](http://www.eppendorf.com/photometry)

# Eppendorf BioPhotometer® D30



## Description

The Eppendorf BioPhotometer D30 is the 3rd generation of Eppendorf BioPhotometers, which have become an established standard in the field of life sciences. It utilizes fixed wavelengths, making the BioPhotometer D30 the ideal device for quick and precise routine applications. Ultra stable Xenon light source quickly lights up for immediate instrument use. Data is clearly processed making the evaluation of results fast and simple while minimizing mistakes. Additional help menus assist the user and offer an additional level of security. Relevant ratios are automatically determined for the corresponding applications.

The BioPhotometer D30 offers the option of recording purity scans for specific applications. In a defined measuring range, additional measurement data are collected and shown extrapolated, allowing contamination in the sample to be visually identified quickly.

## Applications

- > Absorption measurements for one or more fixed wavelengths
- > Display of purity scans for specific applications
- > Applications with evaluations via factor, standard or standard series

## Product features

- > Fixed wavelengths at 230 nm, 260 nm, 280 nm, 320 nm, 340 nm, 405 nm, 490 nm, 562 nm, 595 nm and 600 nm
- > Display of purity scan for specific applications
- > Preprogrammed applications for quick start
- > Integrated application and results memory
- > Data transfer via USB interface
- > Direct print-out of results (Thermal Printer DPU-S445)
- > Xenon flash lamp with very long life time
- > Guided software process to minimize errors
- > Help box with explanation of each individual step in 5 languages
- > Compatible with microvolume measuring cells and standard cuvettes

**i** For more information go to [www.eppendorf.com/photometry](http://www.eppendorf.com/photometry)



Technical specifications	
<b>Model</b>	<b>BioPhotometer D30</b>
<b>Display</b>	5.7" VGA TFT display
<b>Interfaces</b>	USB master: for USB stick USB slave: for connecting to a PC Serial RS232 interface
<b>Power supply</b>	100 – 240 V, 50 – 60 Hz
<b>Dimensions (W x D x H)</b>	295 x 400 x 150 mm
<b>Weight w/o accessories</b>	5.4 kg
<b>Beam receiver absorption</b>	CMOS photodiodes
<b>Cuvette material</b>	For measurements in the UV range: quartz glass or UV-transparent plastic (Eppendorf UVette®, 220 nm to 1,600 nm) For measurements in the visible range: glass or plastic For microvolume measurements: microvolume measuring cells such as the Eppendorf µCuvette® G1.0
<b>Cuvette shaft</b>	12.5 mm x 12.5 mm, untempered
<b>Light path height</b>	8.5 mm
<b>Light source absorption</b>	Xenon flash lamp
<b>Measuring principle absorption</b>	Single-beam absorption photometer with reference beam
<b>Absorption measuring range</b>	0 A – 3,0 A (260 nm)
<b>Operator guidance language</b>	Spanish, Italian, French, English, German
<b>Power consumption</b>	Approx. 15 W during operating step Approx. 5 W with dimmed display
<b>Random error absorption</b>	± 0.5 nm
<b>Spectral bandwidth</b>	≤ 4 nm
<b>Systematic error</b>	± 1 nm
<b>Wavelengths</b>	230, 260, 280, 320, 340, 405, 490, 562, 595, 600 nm

Ordering information		
Description	Order no.	Price
<b>Eppendorf BioPhotometer® D30</b> , 100 – 240 V/50 – 60 Hz	6133 000.028	3,982.00 £
<b>Eppendorf µCuvette® G1.0 &amp; BioPhotometer D30 (bundle)</b> , Eppendorf microvolume measuring cell and BioPhotometer D30	6133 000.909	4,852.00 £
<b>BioPhotometer D30 Reference Filter Set</b> , filter set for verifying photometric accuracy and wavelength systematic error (according to NIST)	6133 928.004	1,037.00 £

✎ Ordering information for other voltage options begins on page 484

NEW

# Thermal Printer DPU-S445



## Description

The Thermal Printer DPU-S445 is a thermal line dot printer with a high printing speed while producing a clear type face. This allows the Thermal Printer DPU-S445 to print out scanned images. As an alternative to using USB sticks, the automatic print-out function of the DPU-S445 printer can be used to quickly obtain the results. The printer is compatible with the BioPhotometer D30 and the BioSpectrometer product line.

## Product features

- > Automatic print-out of results
- > Easy and direct connection via USB
- > Compact and light-weight (approx. 0.5 kg)
- > Easy paper operation
- > Max. printing speed: 90 mm/ sec.
- > Number of dots/line: 832
- > Resolution (dots/mm): 8

## Ordering information

Description	Order no.	Price
Thermal Printer DPU-S445	6135 011.000	504.00 £
Thermal paper, 5 rolls	0013 021.566	38.30 £

**i** For more information go to [www.eppendorf.com](http://www.eppendorf.com)

# BioSpectrometer Reference Filter Sets



**The secondary UV/Vis BioSpectrometer reference filter set:** is used to verify the photometric accuracy and wavelength systematic error. The reference filter can be used with the BioSpectrometer basic and the BioSpectrometer kinetic.

#### Product features

- > Filter traceable to NIST
- > Certificate with two-year period of validity
- > Filter recertification via Eppendorf (contact: Eppendorf Service)
- > Inspection protocol preprogrammed in device
- > Verification of wavelength accuracy and precision at 260 nm, 280 nm and 800 nm
- > Verification of the photometric accuracy and precision in the 260 nm to 800 nm range
- > The variation coefficient is listed along with the average value of 15 measurements.
- > Contains 7 filters (1 blank filter, 3 filters for checking the wavelength systematic error and precision, 3 filters for photometric verification)

**The BioSpectrometer fluorescence reference filter set:** is issued for verifying photometric accuracy, wavelength systematic error, and fluorimetric precision (random error) and linearity on the BioSpectrometer fluorescence.

#### Product features

- > All features of the BioSpectrometer UV/Vis reference filter set
- > Additional filter for verifying fluorimetric precision (random error) and linearity
- > Inspection protocol preprogrammed in device
- > 8 filters (1 blank filter, 3 filters for UV/Vis wavelength systematic error and precision, 3 filters for UV/Vis photometric verification, 1 filter for fluorometric verification)

#### Ordering information

Description	Order no.	Price
<b>BioSpectrometer Reference Filter Sets</b> , filter set for verifying photometric accuracy and wavelength systematic error (according to NIST)	6135 928.001	1,213.00 £
<b>BioSpectrometer Fluorescence Reference Filter Set</b> , filter set for verifying photometric accuracy and wavelength systematic error (according to NIST) and verifying fluorimetric precision (random error) and linearity	6137 928.009	2,223.00 £

## BioPhotometer D30 Reference Filter Set



### Description

The secondary UV/Vis BioSpectrometer D30 reference filter set is issued for verifying the photometric accuracy and wavelength systematic error on the BioPhotometer D30.

### Product features

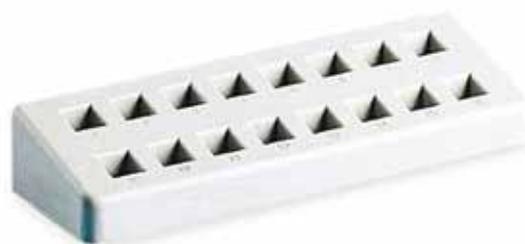
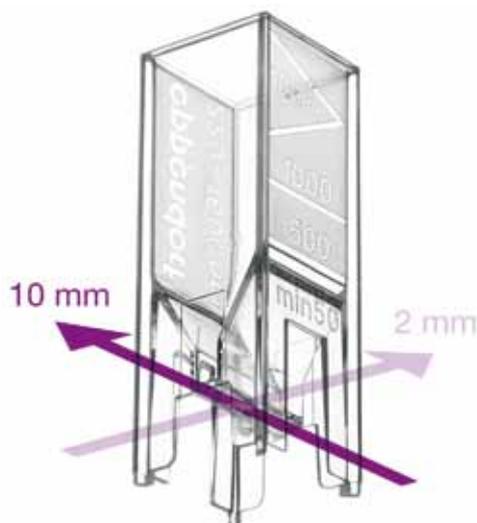
- > Filter traceable to NIST
- > Certificate with two year period of validity
- > Filter recertification via Eppendorf (contact: Eppendorf Service)
- > Inspection protocol preprogrammed in device
- > Verification of wavelength accuracy and precision at 260 nm and 280 nm
- > Verification of the photometric accuracy and precision for all BioPhotometer D30 wavelengths
- > Contains 6 filters (1 blank filter, 2 filters for checking wavelength systematic error and precision, 3 filters for photometric verification)

### Ordering information

Description	Order no.	Price
<b>BioPhotometer D30 Reference Filter Set</b> , filter set for verifying photometric accuracy and wavelength systematic error (according to NIST)	6133 928.004	1,037.00 £

i For more information go to [www.eppendorf.com/photometry](http://www.eppendorf.com/photometry)

## UVette® and adapters



### Description

The Eppendorf UVette® allows for measurements in the UV/Vis range with transparency from 220 nm to 1,600 nm. Choose between two optical path lengths, 10 mm and 2 mm, with a single 90° rotation. The UVette is ideally matched for use with the Eppendorf BioPhotometer and BioSpectrometer. For use with other spectrophotometers, the UVette can be used with the aid of an adapter.

### Applications

- > UV/Vis measurements from 220 to 1,600 nm
- > Concentration determination of nucleic acids, proteins and fluorescence signals
- > Individually packaged and certified PCR clean and protein-free quality for sensitive (e.g. RNA) and valuable samples
- > Routine pack for convenient access to each UVette and safe storage in a reclosable box

### Product features

- > Suitable for measuring small volumes ( $\geq 50 \mu\text{L}$ )
- > UV and Vis-transparent between 220 nm and 1,600 nm
- > Two built-in optical path lengths in a single cuvette—just turn the UVette 90° to change from 10 mm and 2 mm
- > Volume markings for 500  $\mu\text{L}$  and 1,000  $\mu\text{L}$
- > Available in individually packaged PCR clean and protein-free quality
- > Deeplying optical window prevents scratches
- > Tapered cuvette base for optimal filling
- > Frosted grip for labeling
- > Ideal for use in the BioPhotometer and BioSpectrometer
- > Adapters available for use with other common spectrophotometers

Technical specifications	
Model	UVette®
Volume range	50 – 2,000 $\mu\text{L}$
Dimensions (W × D × H)	12.5 × 12.5 × 36 mm
Cuvette blank	0.5 A at 260 nm
Layer thickness	10 mm 2 mm
Light path height	8.5 mm
Material	UV-transparent plastic, free of fluoropolymers and other halogenated hydrocarbons
No. of optical windows	4
Wavelength range	220 – 1,600 nm

## UVette® and adapters



### Ordering information

Description	Order no.	Price
<b>UVette® 220 nm – 1,600 nm</b> , original Eppendorf plastic cuvette, individually packed, certified PCR-clean, (including RNase-free, DNase-free) and protein-free, 50 – 2,000 µL, 80 pcs.	0030 106.300	43.60 £
<b>UVette® starter set</b> , 80 UVettes + 1 universal adapter for light path height of 15 mm and 8.5 mm, 50 – 2,000 µL	4099 100.007	65.30 £
<b>UVette® routine pack 220 nm – 1,600 nm</b> , Eppendorf Quality degree of purity, reclosable box, 200 pcs.	0030 106.318	91.40 £
<b>Adapter for UVette®</b> , for photometer/spectrophotometer with light path height		
8.5 mm	4099 001.009	48.40 £
10 mm	4099 002.005	48.40 £
15 mm	4099 003.001	48.40 £
20 mm	4099 005.004	48.40 £
<b>Cuvette stand</b> , for 16 cuvettes	4308 078.006	11.40 £

i For more information go to [www.eppendorf.com/photometry](http://www.eppendorf.com/photometry)

# Eppendorf<sup>®</sup> Vis Cuvettes



## Product features

- > Two different cuvette sizes (semi-micro and macro) for a wide variety of volumes and applications
- > Disposable cuvettes made of clear plastic with a light transmission of 300 nm to 900 nm

## Applications

- > Vis measurements from 300 nm to 900 nm
- > Suitable for colorimetric protein assays, OD600, kinetic and fluorescence measurements

## Description

The Eppendorf Vis Cuvettes are disposable cuvettes made of clear plastic with a light transmission of 300 nm to 900 nm. The Vis cuvettes are the perfect tool for applications outside of the UV range, for example, colorimetric protein assays (Bradford, Lowry, etc.), determining of the optical density of bacterial cultures (OD600 methods), kinetic and fluorescence measurements. Based on the volume you would like to measure, you can select semi-micro or macro cuvette.

Technical specifications		
Model	macro Vis Cuvette	semi-micro Vis Cuvette
Dimensions (W × D × H)	12.5 × 12.5 × 45 mm	12.5 × 12.5 × 45 mm
Layer thickness	10 mm	10 mm
Light path height	8.5 – 15 mm	8.5 – 15 mm
Maximum volume	4,500 µL	3,000 µL
Minimum volume	1,500 µL (in Eppendorf photometers) 2,500 µL (in devices from other manufacturers)	400 µL (in Eppendorf photometers) 1,500 µL (in devices from other manufacturers)
Wavelength range	300 – 900 nm	300 – 900 nm

## Ordering information

Description	Order no.	Price
Eppendorf <sup>®</sup> macro Vis Cuvette, plastic cuvette for measurements in the Vis range, max. filling volume 4,500 µL, 10 x box of 100	0030 079.345	89.80 £
Eppendorf <sup>®</sup> semi-micro Vis Cuvette, plastic cuvette for measurements in the Vis range, max. filling volume 3,000 µL, 10 x box of 100	0030 079.353	95.50 £
Cuvette stand, for 16 cuvettes	4308 078.006	11.40 £

i For more information go to [www.eppendorf.com](http://www.eppendorf.com)

## Eppendorf $\mu$ Cuvette<sup>®</sup> G1.0



### Description

The Eppendorf  $\mu$ Cuvette G1.0 microliter measuring cell is the perfect tool for measuring high concentrations in the smallest volumes\*<sup>1</sup>. With an optical path length of only 1 mm, the  $\mu$ Cuvette G1.0 features a light path that is ten times shorter than the light path of standard cuvettes. This allows nucleic acid concentrations to be measured with high reproducibility in a much higher concentration range without prior dilution. Self-absorption of the  $\mu$ Cuvette G1.0 is very low, meaning that the entire measuring range of the photometer can be used.

\*<sup>1</sup> Higher sample concentrations require a shaker optical path length for measurements.

### Applications

- > Concentration determination of nucleic acids and proteins
- > Measurement of high sample concentrations without prior dilution
- > Low sample volume

### Product features

- > Microvolume measuring cell for measuring 1.5 - 10  $\mu$ L sample volumes
- > Low self-absorption ( $\leq 0.05$  A @ 260 nm)
- > Hydrophobic surface coating on quartz glass for precise formation and positioning of the sample volume
- > Simple cleaning to minimize the risk of sample carry-over
- > A defined angle for folding the sides of the cuvette guarantees reproducible handling
- > One component hinged design, prevents the loss of individual parts
- > Exclusively available for Eppendorf BioPhotometer and Eppendorf BioSpectrometer

i For more information go to [www.eppendorf.com](http://www.eppendorf.com)



Technical specifications	
Model	Eppendorf μCuvette® G1.0
Dimensions (W × D × H)	12.5 × 12.5 × 48 mm
Coating	Hydrophobic surface coating
Cuvette blank	≤ 0.1 A @ 230 nm, ≤ 0.05 A @ 260 nm
Layer thickness	1 mm
Light path height	8.5 mm
Material	Quartz glass and aluminum
Minimum volume	1.5 μL dsDNA, 3 μL protein
Wavelength range	180 nm – 2,000 nm

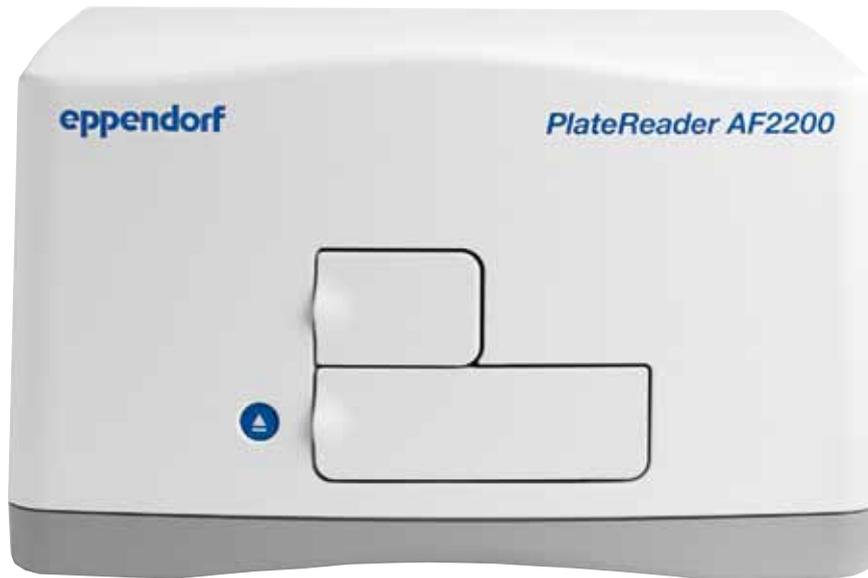
#### Ordering information

Description	Order no.	Price
Eppendorf μCuvette® G1.0, Eppendorf microvolume measuring cell for Eppendorf BioPhotometer and BioSpectrometer	6138 000.018	1,411.00 £
Eppendorf μCuvette® G1.0 & BioPhotometer D30 (bundle), Eppendorf microvolume measuring cell and BioPhotometer D30	6133 000.909	4,852.00 £
Eppendorf μCuvette® G1.0 & BioSpectrometer basic (bundle), Eppendorf microvolume measuring cell and BioSpectrometer basic	6135 000.906	5,892.00 £

✎ Ordering information for other voltage options begins on page 484

i For more information go to [www.eppendorf.com](http://www.eppendorf.com)

# Eppendorf PlateReader



## Description

The PlateReader AF2200 is the ideal device for quantifying biomolecules such as nucleic acids and proteins, and measuring fluorescence-based assays in a plate format. Thanks to the large selection of filters, a wide variety of applications can be carried out in the UV/Vis range and a high number of fluorescence dyes can be detected. The device software features optimized, preprogrammed applications and a flexible selection of individual parameters. It also offers the option to freely program all parameters in order to meet special requirements. The PlateReader AF2200 unites the simplest programming and evaluation with maximum flexibility.

## Product features

- > Dual-mode plate reader for UV/Vis absorption and fluorescence intensity
- > Optimal preconfigured, and freely configurable filter combinations
- > Preprogrammed applications for quick start and basic data evaluation (factor or standard series)
- > Results displayed in Excel format
- > Intuitive and clearly designed software
- > Optional  $\mu$ Plate for measuring the smallest sample volumes using own application
- > Temperature control and the option to shake the sample plate

## Applications

- > Quantification of biomolecules via absorption measurements in the UV/Vis range
- > Fluorescence intensity: top/bottom for sensitive nucleic acid quantification, cell-based assays and other applications
- > Preprogrammed applications for standard series (e.g., colorimetric protein assays, cell-based applications, etc.)
- > Preprogrammed applications for the Eppendorf  $\mu$ Plate G0.5
- > Preprogrammed applications with factor evaluation (for use with Eppendorf plates)
- > Freely programmable parameters

**i** For more information go to [www.eppendorf.com/detection](http://www.eppendorf.com/detection)



Technical specifications	
<b>Model</b>	<b>PlateReader AF2200</b>
<b>Software</b>	PlateReader AF2200 application software, multi-user license, preprogrammed applications including evaluation
<b>Power supply</b>	100 – 240 V, 50/60 Hz
<b>Dimensions (W × D × H)</b>	462 × 458 × 282 mm
<b>Weight w/o accessories</b>	16 kg
<b>Beam receiver absorption</b>	UV silicon photodiode
<b>Beam receiver fluorescence</b>	Photomultiplier
<b>Compatible plates</b>	6 to 384 wells, microvolume plate (Eppendorf $\mu$ Plate G0.5)
<b>Detector</b>	UV/Vis absorption: UV silicon photodiode Fluorescence intensity: Photomultiplier
<b>Shortest measurement time</b>	96-well plate (20 s), 384-well plate (30 s)
<b>Temperature control</b>	Ambient temperature + 5 °C up to 42 °C
<b>Light source absorption</b>	UV Xenon flash lamp
<b>Light source fluorescence</b>	UV Xenon flash lamp
<b>Measuring principle absorption</b>	Filter-based absorbance detection in 6-384 well plates and microvolume plate ( $\mu$ Plate G0.5)
<b>Measuring principle fluorescence</b>	Filter-based fluorescence top reading and fluorescence bottom reading with fiber optics; 6-384 well plates, PMT detector
<b>Absorption measuring range</b>	0 A – 4,0 A
<b>Fluorescence measuring range</b>	0-60000 RFU
<b>Mode absorption</b>	Two operating modes: UV/Vis absorption Fluorescence intensity: top/bottom
<b>Power consumption</b>	Max. 150 VA
<b>Shaking</b>	Linear/orbital, amplitude can be selected from 1 – 6 mm in 0.5 mm increments
<b>Software compatibility</b>	Windows 7, XP or Vista
<b>Wavelength range</b>	UV/Vis absorption: 230 – 1,000 nm Fluorescence intensity: Ex: 230 – 600 nm, Em: 330 – 600 nm

#### Ordering information

Description	Order no.	Price
<b>Eppendorf PlateReader AF2200</b> , 100 – 240 V/50/60 Hz	6141 000.029	POA
<b>Eppendorf <math>\mu</math>Plate G0.5</b> , Eppendorf microvolume plate for the Eppendorf PlateReader AF2200	6144 000.003	POA
<b>Fluorescence filter slide for PlateReader AF2200</b> , preconfigured filter slide, optimized for the fluorescence dyes most frequently used in molecular biology and cell biology labs, 4 pieces of filters (360/465, 485/535, 485/595, 535/595)	6141 070.027	POA
<b>UV/Vis filter slide for PlateReader AF2200</b> , preconfigured filter slide, optimized for applications in the UV and Vis range, 4 filters (260, 280, 340, 600 nm)	6141 070.019	POA

⚡ Ordering information for other voltage options begins on page 484

## Filter Slides for PlateReader AF2200



### Description

For the most frequently used PlateReader AF2200 applications, Eppendorf offers two pre-configured filter slides with optimized filter assignment. The combination of filters covers a wide spectrum, making it the perfect tool for a variety of applications. A large number of additional filters are available to create individual filter slides in a flexible way. An online configurator helps to combine the filters.

### Applications

- > Preprogrammed applications including evaluation for concentration determination of nucleic acids and proteins via factor or standard
- > Preprogrammed cell biology assays (viability and apoptosis)
- > Large selection of additional filters

### Product features

- > Optimized filter assignment for UV/Vis and fluorescence applications preprogrammed in the PlateReader AF2200
- > Filter assignment covers a broad spectrum of UV/Vis or fluorescence applications
- > Optimized arrangement in UV/Vis filter slide for molecular biology applications (nucleic acids, proteins, OD600)
- > Optimized arrangement in fluorescence filter slide for molecular biology and cell biology applications
- > Combination of filters in the fluorescence filter slide are arranged to prevent cross-talk

**i** For more information go to [www.eppendorf.com](http://www.eppendorf.com)



Technical specifications	UV/Vis filter slide for PlateReader AF2200	Fluorescence filter slide for PlateReader AF2200	Fluorescence filter slide for PlateReader AF2200
		Excitation	Emission
<b>Filter wavelengths</b>	260 nm (5 nm) 280 nm (5 nm) 340 nm (10 nm) 600 nm (10 nm)	360 nm (35 nm) 485 nm (20 nm) 485 nm (20 nm) 535 nm (25 nm)	465 nm (35 nm) 535 nm (25 nm) 595 nm (35 nm) 595 nm (35 nm)

#### Ordering information

Description	Order no.	Price
<b>UV/Vis filter slide for PlateReader AF2200</b> , preconfigured filter slide, optimized for applications in the UV and Vis range, 4 filters (260, 280, 340, 600 nm)	6141 070.019	POA
<b>Fluorescence filter slide for PlateReader AF2200</b> , preconfigured filter slide, optimized for the fluorescence dyes most frequently used in molecular biology and cell biology labs, 4 pieces of filters (360/465, 485/535, 485/595, 535/595)	6141 070.027	POA
<b>Filter case for filter slides</b>	6141 070.035	POA

i For more information go to [www.eppendorf.com](http://www.eppendorf.com)

## Eppendorf $\mu$ Plate G0.5



### Description

As an optional accessory for the PlateReader AF2200, Eppendorf offers a microvolume plate that can be used to measure up to 16 samples in the microvolume scale. The Eppendorf  $\mu$ Plate G0.5 features simple handling and cleaning, and is used to measure high concentrations in the smallest volumes. The short optical path length of just 0.5 mm allows high nucleic acid concentrations to be measured with high reproducibility and without prior dilution. Because the concentration is determined using a sample-specific factor, a standard series measurement is not required.

### Applications

- > Concentration determination of nucleic acids via sample specific factor (no need to prepare a standard curve)
- > Measurement of high sample concentrations without prior dilution
- > Low sample volume

### Product features

- > Simple handling and cleaning
- > Sample-specific factor for the concentration calculation eliminates the need for a standard series measurement
- > Application for sample quantification is preprogrammed in the Eppendorf PlateReader AF2200
- > Available for the Eppendorf PlateReader AF2200

**i** For more information go to [www.eppendorf.com](http://www.eppendorf.com)



Technical specifications	
<b>Model</b>	<b>Eppendorf μPlate G0.5</b>
<b>Dimensions (W × D × H)</b>	85.4 × 127.8 × 14.6 mm
<b>Weight</b>	160 g
<b>Measuring time for the entire plate - nucleic acid quantification</b>	1:15 min for all 16 samples
<b>Wavelength precision</b>	< ± 0.5 nm ( $\lambda > 315$ nm) < ± 0.3 nm ( $\lambda \leq 315$ nm)
<b>Optics</b>	16 quartz wells (one per sample)
<b>Parallel measurement</b>	16 sample positions (2 rows of 8 samples each)
<b>Quartz lens and optical path length</b>	Optical path length: 0.5 nm Diameter: 2.2 nm
<b>Sample volume</b>	≥ 2 μL

Ordering information		
Description	Order no.	Price
<b>Eppendorf μPlate G0.5</b> , Eppendorf microvolume plate for the Eppendorf PlateReader AF2200	6144 000.003	POA
<b>Eppendorf μPlate G0.5 &amp; PlateReader AF2200 Bundle</b> , Eppendorf microvolume plate and PlateReader AF2200	6141 000.910	POA

✎ Ordering information for other voltage options begins on page 484

i For more information go to [www.eppendorf.com](http://www.eppendorf.com)

# Photometry Performance Plans

## Preventive Maintenance

Regular cleaning, inspection and maintenance of your Eppendorf Photometers ensures that these instruments are consistently operating at peak performance and are ready for use. This is particularly important for precision instruments designed to achieve permanently reproducible measurement results.

## Certification Service

Our Operational Qualification service (OQ) includes the performance of comparative measurements with certified reference materials, the cleaning of internal parts and electrical testing to ensure that your instrument is in perfect working order. We recommend that you have your instrument calibrated at regular intervals. This is the only way to ensure that it complies with manufacturer specifications or that it can be correctly readjusted if necessary. You are also able to verify photometric and wavelength accuracy and the respective precision using the Secondary UV-VIS Filter Set. In the event your instrument does not conform to specifications, you must have it checked and properly adjusted by a trained service



technician. The filter sets themselves must be inspected every two years as part of a test equipment inspection as their spectral properties can change over time. Your filter set must be tested, maintained and certified directly by the manufacturer at Eppendorf's plant.

## Performance Plans

### Recommended service period

#### Preventive Maintenance:

Preventive Maintenance<sup>1)</sup> including cleaning/inspection of housing, cuvette shaft; test of display, keyboard, stability, serial interfaces (printer, USB); log file evaluation; software update, function test with test filter

#### Certification Service:

Operational Qualification (OQ) including cleaning and inspection of all internal parts and electrical testing; testing/adjustment of wavelength accuracy/precision and photometric accuracy/precision; temperature check/adjustment of Eppendorf BioSpectrometer kinetic

Photometer test (wavelength accuracy and precision and photometric accuracy and precision)

Photometer test (wavelength accuracy and precision, photometric accuracy and precision, fluometric precision and linearity)

Temperature verification/adjustment (BioSpectrometer kinetic)

Electrical testing according to country-specific regulations<sup>2)</sup>

#### Additional Service every second year:

Inspection of light path

Adjustment of number of flashes

Certification of Eppendorf BioPhotometer Secondary UV-VIS Filter Set according to NIST

Certification of Eppendorf BioPhotometer D30 Reference Filter Set according to NIST

Certification of Eppendorf BioSpectrometer Reference Filter Set according to NIST

Certification of Eppendorf BioSpectrometer fluorescence Reference Filter Set according to NIST

<sup>1)</sup> Spare parts that may be required are not included and will be invoiced additionally. <sup>2)</sup> Electrical testing/test duty in Germany is to be performed every 12 months!

**epServices**  
for premium performance

**Service features**

- > Eppendorf customer care and quality commitment
- > Only use of genuine and quality inspected Eppendorf parts
- > Certified service and calibration reports

**Long-term benefits**

- > Reliable system operation over the total system lifetime
- > GLP compliant documentation



For more information go to [www.eppendorf.com/epServices](http://www.eppendorf.com/epServices).  
In selected countries only.

<b>BioPhotometer</b>	<b>BioSpectrometer</b>	<b>PlateReader</b>
Eppendorf BioPhotometer®, Eppendorf BioPhotometer® plus Eppendorf BioPhotometer® D30	Eppendorf BioSpectrometer® basic, Eppendorf BioSpectrometer® kinetic, Eppendorf BioSpectrometer® fluorescence	Eppendorf PlateReader AF2200
Once per year	Once per year	Once per year
<b>Order no.</b>	<b>Order no.</b>	<b>Order no.</b>
6132 005.000	6135 005.000	6141 005.004
6132 005.018	6135 005.019	6141 005.012
6132 005.026	6135 005.027	
	6137 005.008	
	6136 005.004	
6132 005.034	6132 005.034	6132 005.034
6132 005.042	6132 005.042	
6132 005.050	6132 005.050	
6131 928.104		
0082 110.001		
	6135 928.109	
	6137 005.016	

# Eppendorf Eporator®



## Description

The Eppendorf Eporator® is a compact instrument designed for fast and controlled electroporation of bacteria, yeasts and other microorganisms. The instrument is unique due to its intuitive operation and user-friendly programming of standard methods, as well as its USB port where experimental data can be easily exported and documented.

## Applications

- > Transformation of bacteria, yeast or microorganisms with an optimum transformation efficiency of approx 5 ms time constant
- > Mainly for delivery of plasmid DNA, but also RNA, proteins and other small molecules

## Product features

- > Faster sample handling - simple one-button operation
- > Maximum safety via integrated cuvette holder
- > Self-explanatory operation guided by display indicators
- > Fast, freely programmable softkeys for saving and accessing the 2 most frequently used parameters
- > Compact, space-saving design
- > USB interface for data transfer and GLP-compliant documentation

**i** For more information go to [www.eppendorf.com](http://www.eppendorf.com)



USB interface on the Eporator.

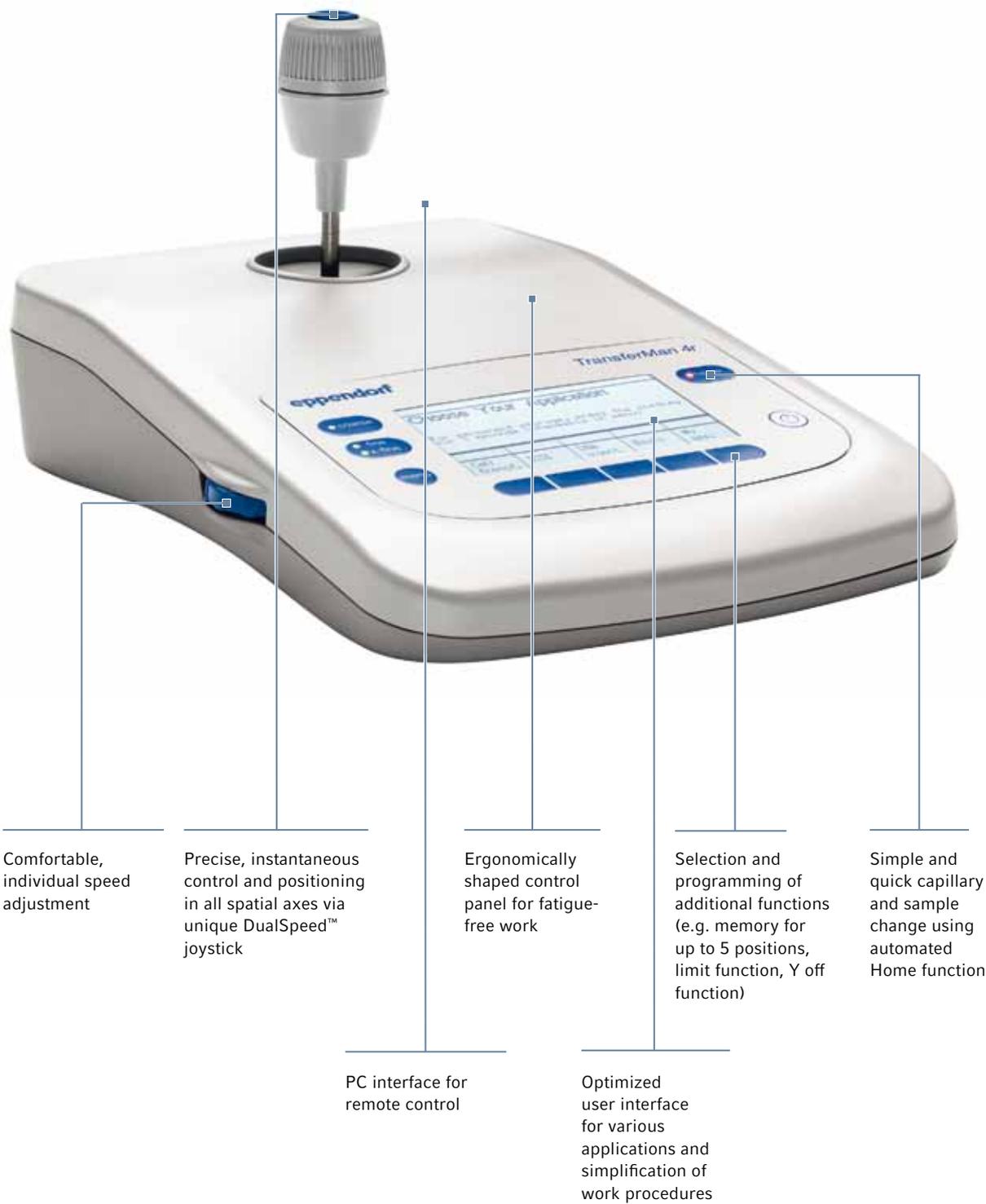
Technical specifications	
<b>Model</b>	<b>Eporator</b>
<b>Interfaces</b>	USB 2.0
<b>Dimensions (W x D x H)</b>	19 x 27.5 x 12.5 cm
<b>Weight w/o accessories</b>	3.2 kg
<b>Capacitor</b>	10 Microfarad
<b>Pulse form</b>	Exponentially decreasing
<b>Pulse voltage</b>	200 – 2.500 V
<b>Resistance</b>	600 Ohm
<b>Special features</b>	Electronic protective circuit to prevent arcs
<b>Time constant</b>	Nominal 5 ms

Ordering information		
Description	Order no.	Price
<b>Eppendorf Eporator®</b> , for bacteria and yeasts, 100 – 240 V/50 – 60 Hz (GB)	4309 000.035	2,374.00 £
<b>Cuvette stand</b> , for 16 cuvettes	4308 078.006	11.40 £

✎ Ordering information for other voltage options begins on page 484

i For more information go to [www.eppendorf.com](http://www.eppendorf.com)

# Eppendorf TransferMan® 4



Comfortable,  
individual speed  
adjustment

Precise, instantaneous  
control and positioning  
in all spatial axes via  
unique DualSpeed™  
joystick

Ergonomically  
shaped control  
panel for fatigue-  
free work

Selection and  
programming of  
additional functions  
(e.g. memory for  
up to 5 positions,  
limit function, Y off  
function)

Simple and  
quick capillary  
and sample  
change using  
automated  
Home function

PC interface for  
remote control

Optimized  
user interface  
for various  
applications and  
simplification of  
work procedures

**i** For more information go to [www.eppendorf.com](http://www.eppendorf.com)



The easy adjustable working angle can be set from 0° to 90°.



Ergonomic setup with DualSpeed™ joysticks of TransferMan 4m/r

### Description

The new user-friendly TransferMan® 4 combines an ergonomic and innovative design to meet the most demanding micromanipulation requirements. Smart functions, such as improved automated Home function and position memory, enable simple and precise execution of even one of the most complex micromanipulation techniques.

The unique DualSpeed™ joystick allows for precise and intuitive movement during injection in all three dimensions as well as dynamic movement for covering longer distances or speeding up sample processing.

The TransferMan 4 is ideal for manipulation of suspension cells such as oocytes, stem cells, microparticles and a wide variety of applications in reproductive biology. Application-specific user profiles simplify the individual workflow process with four pre-defined application masks to choose from (e.g. for cell transfer, DNA injection, etc). The freely programmable „My app“ mask can be optimized for specific individual needs.

### Applications

- > Micromanipulation of suspension cells
- > ES and iPS cell transfer
- > Nucleus transfer
- > Production of transgenic animals using pronuclear and cytoplasmic injection (e.g. TALEN)
- > Selection of individual cells (e.g. biopsies)
- > Positioning and selection of microparticles
- > Microdissection of chromosomes, etc.
- > Applications in animal reproductive medicine (e.g. mouse ICSI)
- > TransferMan 4m is suitable for applications in human reproductive medicine (assisted reproductive technologies) in selected countries.\*

\*Registered in Europe as medical device (according to Medical Device Directive, MDD 93/42/EEC). For availability in your country, please contact your local sales organization.

### Product features

- > Maximum stability ensures vibration-free work
- > One-hand operation for capillary and angle settings
- > Programmable Z-axis limit for preventing capillary breakage
- > Connection with Eppendorf PiezoXpert® and electronic microinjectors
- > Can be adapted to all conventional microscopes
- > Electronic coupling to microinjectors FemtoJet® 4i/4
- > PC interface for remote control

**i** For more information go to [www.eppendorf.com](http://www.eppendorf.com)

# Eppendorf TransferMan® 4

Technical specifications		
Model	TransferMan® 4r	TransferMan® 4m
<b>Motor module</b>		
<b>Max. traveling distance</b>	≥ 20 mm	≥ 20 mm
<b>Weight (complete)</b>	2.15 kg	2.15 kg
<b>Stepper motor</b>	X-, Y-, Z-module	X-, Y-, Z-module
<b>Module (X,Y,Z)</b>		
<b>Step size</b>	< 20 nm (computational resolution)	< 20 nm (computational resolution)
<b>Speed</b>	0 – 10,000 µm/s	0 – 10,000 µm/s
<b>Mechanical adjustability</b>	> 80 mm	> 80 mm
<b>Dimensions</b>	129 mm x 51 mm x 36 mm	129 mm x 51 mm x 36 mm
<b>Weight</b>	570 g	570 g
<b>Swivel joint</b>		
<b>Direction of rotation</b>	-45° – +90°	-45° – +90°
<b>Capillary exchange</b>	Direction of rotation: forward	Direction of rotation: forward
<b>Sample replacement</b>	Direction of rotation: backward	Direction of rotation: backward
<b>Angle head</b>		
<b>Operating angle</b>	0° – 90°	0° – 90°
<b>Control board</b>		
<b>Control</b>	Joystick	Joystick
<b>Dimensions (W x H x D)</b>	205 mm x 288 mm x 152 mm	205 mm x 288 mm x 152 mm
<b>Weight (incl. mains/power supply device)</b>	1.8 kg	1.8 kg
<b>Working area</b>	coarse, fine, x-fine	coarse, fine, x-fine
<b>External Device/PC</b>	Serial interface SUBD9, male	Serial interface SUBD9, male
<b>Joystick</b>		
<b>Speed control</b>	Proportional and dynamic kinetics	Proportional and dynamic kinetics
<b>Regulatory features</b>	Research only	The TransferMan® 4m is registered in the European Union as a medical device (according to Medical Device Directive, MDD 93/42/EEC). For availability in your country, please contact your local sales organization.

i For more information go to [www.eppendorf.com](http://www.eppendorf.com)



Workstation for cell transfer - TransferMan 4r mounted on Olympus® IX73.



Workstation for DNA/RNA microinjection into zygotes - TransferMan 4r mounted on Zeiss Axio Vert® A1.

#### Ordering information

Description	Order no.	Price
<b>Eppendorf TransferMan® 4m</b> , micromanipulator with DualSpeed™ joystick for direct and dynamic movement control; control board, motor modules, angle head, swivel joint and YZ connector, 100 – 240 V/50 – 60 Hz (GB), <sup>1)</sup>	5191 000.031	12,700.00 £
<b>Eppendorf TransferMan® 4r</b> , micromanipulator with DualSpeed™ joystick for direct and dynamic movement control, 100 – 240 V/50 – 60 Hz (GB)	5193 000.039	11,970.00 £
<b>Microscope Adapter</b> , for TransferMan® 4m/r and InjectMan® 4		
Leica 1, for Leica® DMI3000 B, 3000 M, 4000 B, 5000 B, 5000 M, 6000 B, DM IRB E, HC, and DM IRE 2 microscopes	5192 301.000	509.00 £
Leica 2, for Leica® DM IL LED and HC microscopes	5192 302.007	509.00 £
Nikon 1, for Nikon Eclipse®Diaphot 200, 300 and Eclipse® Ti-E, Ti-U, Ti-S, TE200, TE300, TE2000 microscopes	5192 316.008	595.00 £
Olympus 1, for microscope Olympus® IX50, IX51, IX70, IX71, IX80, and IX81	5192 306.002	509.00 £
Olympus 2, for microscope Olympus® IX3 series with illumination column IX3-ILL	5192 307.009	458.00 £
Olympus 3, for microscope Olympus® IX3 series with illumination IX2-ILL30	5192 308.005	458.00 £
<b>Microscope Adapter</b> , for TransferMan® 4m/r and InjectMan® 4		
Zeiss 1, for Zeiss Axiovert® 200 and AxioObserver A1, D1, and Z1 microscopes	5192 311.006	509.00 £
<b>Microscope Adapter</b> , for TransferMan® 4m/r and InjectMan® 4		
Zeiss 2, for Zeiss Axio Vert.A1 microscope	5192 312.002	595.00 £
<b>Universal stand</b> , for mounting TransferMan® 4m/r and InjectMan® 4 micromanipulators on upright microscopes and stereo microscopes independent of the microscope tripod used	5192 325.007	621.00 £
<b>Adapter bridge</b> , for mounting TransferMan® 4m/r and InjectMan® 4 micromanipulators on microscope adapters for TransferMan® NK 2, InjectMan® NI 2 and PatchMan™ NP 2	5192 321.001	345.00 £
<b>Foot control</b> , for Eppendorf micromanipulators	5181 150.051	130.00 £
<b>Positioning aid</b> , pack of 2, for mounting universal capillary holder on TransferMan® 4m/r and InjectMan® 4	5192 072.001	74.60 £
<b>Y-cable FJ4</b> , Y-cable for connecting FemtoJet 4i/4x with a PC and TransferMan® 4r or InjectMan® 4	5192 080.004	92.70 £
<b>Y-cable PX</b> , Y-cable for connecting Eppendorf PiezoXpert® or a PC with TransferMan® 4r or InjectMan® 4	5192 081.000	92.70 £
<b>Spare parts kit</b>	5192 071.005	76.50 £

<sup>1)</sup> The TransferMan® 4m is registered in the European Union as a medical device (according to Medical Device Directive, MDD 93/42/EEC).

For availability in your country, please contact your local sales organization.

## Eppendorf InjectMan® 4



Comfortable,  
individual speed  
adjustment

Dynamic movement  
control via unique  
joystick

Define injection levels  
and prevention of  
capillary breakage by  
programming the Z-axis  
limit

Simple and quick  
capillary and sample  
change via swivel-  
mounted modules and  
automated Home function

Connection with  
Eppendorf FemtoJet®  
microinjectors for semi-  
automated axial injection

Optimized user interface  
for various applications

i For more information go to [www.eppendorf.com](http://www.eppendorf.com)



InjectMan 4 micromanipulator mounted for axial injection.



Safe and simple capillary exchange.

### Description

The new InjectMan® 4 is ideal for microinjection into adherent cells, smaller organisms and embryos in the early stages of development. The combination of InjectMan 4, FemtoJet® 4i or 4x enables a fast, semi-automatic injection. Furthermore, the InjectMan 4 is the ideal micromanipulator for all complex applications that require a dynamic movement mode and direct control of the injection process via the joystick button.

The axial injection movement ensures the optimal protection of sensitive cells and lowest possible mortality rate. The high advancing speed makes penetration in rigid structures easier than ever. Maximum stability and highest precision ensures accurate and drift-free work.

The new user interface with four pre-defined application masks facilitates the individual workflow process (e.g. for adherent cell injection, serial microinjection into fish larvae, etc.). The freely programmable "My app" mask can be optimized for specific individual needs.

### Applications

- > Semi-automatic microinjection into adherent cells
- > Serial microinjection into fish larvae, frog eggs, insect embryos, etc.
- > Injection into living plant cells, *C. elegans* and other roundworms and flatworms
- > Automatic dispensing of cell suspensions or solutions

### Product features

- > Maximum stability ensures drift-free work
- > Selection and programming of additional functions (e.g. axial movement, step injection)
- > Ergonomically shaped control panel for fatigue-free work
- > Easy and precise angle adjustment
- > Connection with Eppendorf PiezoXpert for piezo-supported penetration over a pre-defined distance
- > Can be adapted to all conventional microscopes
- > PC interface for remote control
- > Electronic coupling to FemtoJet microinjectors for fast serial semi-automatic injections with highest reproducibility

i For more information go to [www.eppendorf.com](http://www.eppendorf.com)

## Eppendorf InjectMan® 4



Workstation for adherent cell injection - InjectMan 4 mounted on Zeiss Axio Vert® A1.



Both the FemtoJet 4i and FemtoJet 4x, can easily be combined for all types of micromanipulators, yet they form the perfect system with Eppendorf micromanipulators.

Technical specifications	
<b>Model</b>	<b>InjectMan 4</b>
<b>Motor module</b>	
<b>Max. traveling distance</b>	≥ 20 mm
<b>Weight (complete)</b>	2.15 kg
<b>Stepper motor</b>	X-, Y-, Z-module
<b>Module (X,Y,Z)</b>	
<b>Step size</b>	< 20 nm (computational resolution)
<b>Speed</b>	0 – 10,000 µm/s
<b>Mechanical adjustability</b>	> 80 mm
<b>Dimensions</b>	129 mm x 51 mm x 36 mm
<b>Weight</b>	570 g
<b>Swivel joint</b>	
<b>Direction of rotation</b>	-45° – +90°
<b>Capillary exchange</b>	Direction of rotation: forward
<b>Sample replacement</b>	Direction of rotation: backward
<b>Angle head</b>	
<b>Operating angle</b>	0° – 90°
<b>Control board</b>	
<b>Control</b>	Joystick
<b>Dimensions (W x H x D)</b>	205 mm x 288 mm x 152 mm
<b>Weight (incl. mains/power supply device)</b>	1.8 kg
<b>Working area</b>	coarse, fine, x-fine
<b>External Device/PC</b>	Serial interface SUBD9, male
<b>Joystick</b>	
<b>Speed control</b>	Dynamic kinetics

i For more information go to [www.eppendorf.com](http://www.eppendorf.com)

**Ordering information**

Description	Order no.	Price
<b>Eppendorf InjectMan® 4</b> , micromanipulator with dynamic movement control, 100 – 240 V/50 – 60 Hz (GB)	5192 000.035	11,600.00 £
<b>Microscope Adapter</b> , for TransferMan® 4m/r and InjectMan® 4		
Leica 1, for Leica® DMI3000 B, 3000 M, 4000 B, 5000 B, 5000 M, 6000 B, DM IRB E, HC, and DM IRE 2 microscopes	5192 301.000	509.00 £
Leica 2, for Leica® DM IL LED and HC microscopes	5192 302.007	509.00 £
Nikon 1, for Nikon Eclipse®Diaphot 200, 300 and Eclipse® Ti-E, Ti-U, Ti-S, TE200, TE300, TE2000 microscopes	5192 316.008	595.00 £
Olympus 1, for microscope Olympus® IX50, IX51, IX70, IX71, IX80, and IX81	5192 306.002	509.00 £
Olympus 2, for microscope Olympus® IX3 series with illumination column IX3-ILL	5192 307.009	458.00 £
Olympus 3, for microscope Olympus® IX3 series with illumination IX2-ILL30	5192 308.005	458.00 £
<b>Microscope Adapter</b> , for TransferMan® 4m/r and InjectMan® 4		
Zeiss 1, for Zeiss Axiovert® 200 and AxioObserver A1, D1, and Z1 microscopes	5192 311.006	509.00 £
<b>Microscope Adapter</b> , for TransferMan® 4m/r and InjectMan® 4		
Zeiss 2, for Zeiss Axio Vert.A1 microscope	5192 312.002	595.00 £
<b>Universal stand</b> , for mounting TransferMan® 4m/r and InjectMan® 4 micromanipulators on upright microscopes and stereo microscopes independent of the microscope tripod used	5192 325.007	621.00 £
<b>Adapter bridge</b> , for mounting TransferMan® 4m/r and InjectMan® 4 micromanipulators on microscope adapters for TransferMan® NK 2, InjectMan® NI 2 and PatchMan™ NP 2	5192 321.001	345.00 £
<b>Foot control</b> , for Eppendorf micromanipulators	5181 150.051	130.00 £
<b>Headstage holder</b> , for pre-amplifier, for InjectMan 4®	5192 073.008	81.80 £
<b>Positioning aid</b> , pack of 2, for mounting universal capillary holder on TransferMan® 4m/r and InjectMan® 4	5192 072.001	74.60 £
<b>Y-cable FJ4</b> , Y-cable for connecting FemtoJet 4i/4x with a PC and TransferMan® 4r or InjectMan® 4	5192 080.004	92.70 £
<b>Y-cable PX</b> , Y-cable for connecting Eppendorf PiezoXpert® or a PC with TransferMan® 4r or InjectMan® 4	5192 081.000	92.70 £
<b>Spare parts kit</b>	5192 071.005	76.50 £

✂ Ordering information for other voltage options begins on page 484

i For more information go to [www.eppendorf.com](http://www.eppendorf.com)

# Eppendorf PiezoXpert®



## Applications

- > Transfer of embryonic or induced pluripotent stem cells into blastocysts
- > Mouse ICSI (Intracytoplasmic Sperm Injection)
- > Enucleation/nucleus transfer
- > Blastomere biopsy from mouse embryos
- > Biopsy of equine embryos for Preimplantation Genetic Diagnosis

## Product features

- > Fast and simple sample processing using intuitive operation
- > Reproducible parameter setting
- > Program keys to save your experimental parameters
- > Trigger impulses with an ergonomic foot control or rotary knobs right on the device
- > Optical feedback of triggered impulses
- > Additional "Clean" function for simple removal of contamination on the outside of the capillar

## Description

The Eppendorf PiezoXpert® provides piezo-assisted micromanipulation, enabling simple penetration in cells for microinjection or micromanipulation. Perforation of the cell membrane is supported by piezo impulses which are directly transferred to the capillary without any loss of intensity.

Piezo-assisted micromanipulation improves the results of a variety of applications including transfer of embryonic or induced pluripotent stem cells into blastocysts, mouse ICSI (Intracytoplasmic Sperm Injection) and enucleation/nuclear transfer.

The PiezoXpert forms the perfect system with Eppendorf micromanipulators, and it integrates just as easily with non-Eppendorf micromanipulation systems.



Eppendorf PiezoXpert actuator mounted onto TransferMan 4r.

**i** For more information go to [www.eppendorf.com](http://www.eppendorf.com)



Technical specifications	
<b>Model</b>	<b>PiezoXpert</b>
<b>Interfaces</b>	USB (for technical service), RS-232 (connection to foot control)
<b>Power supply</b>	100 – 240 V, 50 – 60 Hz
<b>Max. power consumption</b>	18 W
<b>Dimensions (W × D × H)</b>	17 × 23 × 11.5 cm
<b>Weight w/o accessories</b>	2.8 kg
<b>Clean function</b>	
<b>Intensity (of piezo impulses)</b>	1 – 86 (1 – 22 adjustable in increments of 1, 22 – 86 adjustable in increments of 4)
<b>Speed (frequency of piezo impulses/sec)</b>	1 – 40 (1 – 40 adjustable in increments of 1, 1 – 10: 1 Hz per increment, 10 – 20: 2 Hz per increment, 20 – 34: 5 Hz per increment, 34 – 40: 25 Hz per increment)
<b>Piezo impulse</b>	
<b>Intensity (of piezo impulses)</b>	1 – 50 (1 – 22 adjustable in increments of 1, 22 – 50 adjustable in increments of 4)
<b>Number (number of piezo impulses)</b>	1 – 10, ∞ (1 – 10 adjustable in increments of 1)
<b>Speed (frequency of piezo impulses/sec)</b>	1 – 10 (adjustable in increments of 1, 1 Hz per increment)

Ordering information		
Description	Order no.	Price
<b>Eppendorf PiezoXpert®</b> , for piezo-assisted micromanipulation, incl. actuator, foot control and spacer plate, 100 – 240 V/50 – 60 Hz	5194 000.032	9,061.00 £
<b>Grip head 0</b> , for microcapillaries with 1.0 to 1.1 mm outer diameter, 2 pieces	5176 210.003	60.20 £
<b>VacuTip</b> , holding capillary, 35° tip angle, 15 µm inner diameter, 1 mm flange, sterile, set of 25 <sup>1)</sup>	5175 108.000	303.00 £
<b>VacuTip FCH</b> , holding capillary, 25° tip angle, 60 µm inner diameter, 0.5 mm flange, sterile, set of 25 <sup>1)</sup>	5175 240.006	311.00 £
<b>Piezo Drill Tip Mouse ICSI</b> , for piezo-assisted mouse ICSI, 25° tip angle, 6 µm inner diameter, 6 mm flange, sterile, set of 25	5175 220.005	311.00 £
<b>Piezo Drill Tip ES</b> , for piezo-assisted mouse ES cell transfer, 25° tip angle, 15 µm inner diameter, 6 mm flange, sterile, set of 25	5175 250.001	311.00 £

<sup>1)</sup> This product is registered in Europe as medical device, according to Medical Device Directive MDD 93/42 EEC.

✂ Ordering information for other voltage options begins on page 484

# Microscope Adapter



## Description

Eppendorf microscope adapters enable the simple installation of the TransferMan® 4m, TransferMan® 4r or InjectMan™ 4 on all conventional inverted microscopes manufactured by Leica®, Nikon®, Olympus® and Zeiss®.

## Description

Universal Stand for mounting TransferMan 4m/r and InjectMan 4 micromanipulators on upright microscopes and stereo microscopes independent of the microscope tripod used. With its magnetic foot the Universal stand can be firmly fixed to any ferromagnetic base (plate or table).

## Ordering information

Description	Order no.	Price
<b>Microscope Adapter</b> , for TransferMan® 4m/r and InjectMan® 4		
Leica 1, for Leica® DMI3000 B, 3000 M, 4000 B, 5000 B, 5000 M, 6000 B, DM IRB E, HC, and DM IRE 2 microscopes	5192 301.000	509.00 £
Leica 2, for Leica® DM IL LED and HC microscopes	5192 302.007	509.00 £
Nikon 1, for Nikon Eclipse® Diaphot 200, 300 and Eclipse® Ti-E, Ti-U, Ti-S, TE200, TE300, TE2000 microscopes	5192 316.008	595.00 £
Olympus 1, for microscope Olympus® IX50, IX51, IX70, IX71, IX80, and IX81	5192 306.002	509.00 £
Olympus 2, for microscope Olympus® IX3 series with illumination column IX3-ILL	5192 307.009	458.00 £
Olympus 3, for microscope Olympus® IX3 series with illumination IX2-ILL30	5192 308.005	458.00 £
<b>Microscope Adapter</b> , for TransferMan® 4m/r and InjectMan® 4		
Zeiss 1, for Zeiss Axiovert® 200 and AxioObserver A1, D1, and Z1 microscopes	5192 311.006	509.00 £
<b>Microscope Adapter</b> , for TransferMan® 4m/r and InjectMan® 4		
Zeiss 2, for Zeiss Axio Vert.A1 microscope	5192 312.002	595.00 £
<b>Universal stand</b> , for mounting TransferMan® 4m/r and InjectMan® 4 micromanipulators on upright microscopes and stereo microscopes independent of the microscope tripod used	5192 325.007	621.00 £
<b>Adapter bridge</b> , for mounting TransferMan® 4m/r and InjectMan® 4 micromanipulators on microscope adapters for TransferMan® NK 2, InjectMan® NI 2 and PatchMan™ NP 2	5192 321.001	345.00 £

i For more information go to [www.eppendorf.com](http://www.eppendorf.com)

# Antivibration Pad



## Description

The antivibration pads are specifically designed to effectively protect your micromanipulation system against external vibrations. The pads are simply directly positioned under the base points of your microscope. Five different sizes are available, from XS to XL. The various pads are optimized for specific load ranges to guarantee perfect results. A selection of pads specifically chosen for each microscope foot ensures effective screening for your workstation.

## Product features

- > Effectively protects micromanipulation workstations from external vibrations
- > Five different sizes available
- > Different sizes combinable for optimal adjustment

## Ordering information

Description	Order no.	Price
Antivibration Pad XS, weight range 4.5 – 6.0 kg	5181 301.009	371.00 £
Antivibration Pad S, weight range 6.0 – 8.0 kg	5181 303.001	371.00 £
Antivibration Pad M, weight range 8.0 – 10.0 kg	5181 305.004	371.00 £
Antivibration Pad L, weight range 10.0 – 12.5 kg	5181 307.007	371.00 £
Antivibration Pad XL, weight range 12.5 – 16.5 kg	5181 309.000	371.00 £

It is decisive to take into account the total weight of your microscope, including the mounted accessories, and the load distribution of the individual contact points.

i For more information go to [www.eppendorf.com](http://www.eppendorf.com)

# Workstations for Microinjection and Micromanipulation



## Workstation for assisted reproduction technology (ART) and embryo manipulation techniques

Recommended setup:

- > 2 × TransferMan® 4m/r
- > 1 × Microscope adapter (to be specified at time of order)
- > 1 × CellTram® Air
- > 1 × CellTram® vario
- > 1 × set of 25 VacuTips
- > 1 × set of 25 TransferTips® (to be specified at time of order)

### Optional

## Workstation with Eppendorf PiezoXpert for piezo-assisted micromanipulation

Recommended setup:

- > 2 × TransferMan 4r
- > 1 × Microscope adapter (to be specified at time of order)
- > 1 × PiezoXpert
- > 1 × CellTram Air
- > 1 × CellTram vario
- > 1 × set of 25 VacuTips
- > 1 × set of 25 Piezo Drill Tips (to be specified at time of order)



## Workstation for injection into fish embryos

Recommended setup:

- > 1 × InjectMan 4
- > 1 × Microscope adapter (to be specified at time of order)
- > 1 × PiezoXpert
- > 1 × FemtoJet® 4x or FemtoJet® 4i
- > 1 × Y cable PX

### Optional

## Workstation with Eppendorf PiezoXpert

Recommended setup:

- > 1 × InjectMan 4
- > 1 × Universal stand
- > 1 × PiezoXpert
- > 1 × FemtoJet 4x
- > 2 × racks of 96 Microloader
- > 1 × Y cable PX

**i** For more information go to [www.eppendorf.com](http://www.eppendorf.com)



#### Workstation for adherent cell injection

Recommended setup:

- 1 × InjectMan® 4
- 1 × Microscope adapter (to be specified at time of order)
- 1 × FemtoJet® 4x or FemtoJet® 4i
- 2 × racks of 96 Microloader

#### Workstation for injection into *Drosophila*, *C. elegans*, plant cells etc.

Recommended setup:

- > 1 × InjectMan 4
- > 1 × Microscope adapter (to be specified at time of order)
- > 1 × FemtoJet® 4x or FemtoJet® 4i
- > 2 × racks of 96 Microloader

#### Optional

#### Workstation for injection with Eppendorf PiezoXpert

Recommended setup:

- > 1 × InjectMan 4
- > 1 × Microscope adapter (to be specified at time of order)
- > 1 × PiezoXpert
- > 1 × FemtoJet® 4x or FemtoJet® 4i
- > 1 × Y cable PX



#### Workstation for generation of transgenic animals using pronuclear injection

Recommended setup:

- > 2 × TransferMan 4r
- > 1 × Microscope adapter (to be specified at time of order)
- > 1 × CellTram Air
- > 1 × FemtoJet® 4i or FemtoJet® 4x
- > 1 × set of 25 VacuTips
- > 2 × racks of 96 Microloader

i For more information go to [www.eppendorf.com](http://www.eppendorf.com)



NEW

# FemtoJet® 4i and FemtoJet® 4x



i For more information go to [www.eppendorf.com](http://www.eppendorf.com)

Injection volumes can be set from femtoliters to microliters

Inject and Clean function can be triggered right on the device using the included foot control or optional hand control

User-friendly simple and clearly arranged operation menu for routine tasks

Programmable injection guarantees high reproducibility

Connection to InjectMan® 4 or TransferMan® 4r enables semi-automatic microinjection

Especially well suited for serial injection volumes covering the range from femtoliters to microliters

Independent pressure supply with built-in compressor (FemtoJet 4i only)

Small footprint

### Description

Eppendorf's electronic microinjectors FemtoJet® 4i and FemtoJet® 4x with their simple operation menu and a range of functionalities are perfectly suited for injecting small to intermediate volumes.

With a built-in compressor, the FemtoJet 4i is the tool of choice for injecting aqueous solutions into adherent cells and suspension cells. If your research demands injecting volumes greater than 100 pL and/or longer series at higher pressures, FemtoJet 4x with its external pressure supply (not included) delivers the precise and continuous pressure required.

Featuring the same quality design and compatibility features as the FemtoJet 4i, the FemtoJet 4x is the "heavy duty" device for those more demanding applications.

Both the FemtoJet 4i and FemtoJet 4x, form the perfect system with Eppendorf micromanipulators, yet they integrate just as easily with non-Eppendorf micromanipulation systems.

The electronic connection between FemtoJet 4i or 4x and TransferMan® 4r or InjectMan® 4 guarantees simple, rapid and reproducible microinjections into cells, simplifying your daily work and speeding up your workflow.

### Applications

- > Reproducible and serial microinjection into adherent cells when combined with the InjectMan® 4 or InjectMan® NI 2 micromanipulator
- > Microinjection into small organisms and embryos in the early stages of development (e.g., *Drosophila melanogaster*, Zebrafish, etc.)
- > Microinjection into suspension cells when combined with the TransferMan® 4r micromanipulator (e.g., pronuclear injection of fertilized mouse oocytes)



NEW

FemtoJet<sup>®</sup> 4i and FemtoJet<sup>®</sup> 4x**Description**

The electronic microinjector, FemtoJet 4i, with its simple operation and wide range of functionality is ideally suited for injecting small to intermediate volumes of up to 100 pL into adherent cells and suspension cells. The FemtoJet 4i with a built-in compressor forms a perfect team with Eppendorf micromanipulators, and it integrates just as easily with non-Eppendorf micromanipulator systems.

The electronic connection between FemtoJet 4i and TransferMan<sup>®</sup> 4r and InjectMan<sup>®</sup> 4 guarantees simple, rapid and reproducible microinjections into cells.

**Applications**

- > Reproducible and serial microinjection into adherent cells when combined with the InjectMan<sup>®</sup> 4 or InjectMan<sup>®</sup> NI 2 micromanipulator
- > Microinjection into suspension cells when combined with the TransferMan<sup>®</sup> 4r micromanipulator
- > Pronuclear injection of fertilized mouse oocytes
- > Especially well suited for injection volumes from femtoliters to 100 pL

**Description**

The FemtoJet 4x is the ideal solution if your research demands injection volumes greater than 100 pL and/or longer series at higher pressures – increasingly seen in functional genomics and developmental biology applications.

The FemtoJet 4x with its external pressure supply (not included) delivers the precise and continuous pressure required. Featuring the same quality design and compatibility as the FemtoJet 4i, the 4x model is the “heavy duty” device for those more demanding applications.

**Applications**

- > Microinjection into small organisms and embryos in the early stages of development (e.g., *Drosophila melanogaster*, Zebrafish, etc.)
- > Pronuclear injection of fertilized mouse oocytes
- > Especially well suited for serial injection volumes from 100 pL to 1 μL or more

Typical Injection Volume	FemtoJet 4i <span style="float: right;">--&gt;</span> FemtoJet 4x			
Cell nucleus of adherent cells				
Cytoplasm of adherent cells				
Pronucleus of fertilized mouse oocytes				
<i>Caenorhabditis elegans</i>				
Fish embryos in early development phases				
<i>Xenopus laevis</i> oocytes				
Volume (liter, logarithm, measurement unit)	10 <sup>-15</sup>	10 <sup>-12</sup>	10 <sup>-9</sup>	10 <sup>-6</sup>
Unit	femtoliter	picoliter	nanoliter	microliter

FemtoJet 4i is suitable for applications that require lower volume ranges; FemtoJet 4x is better suited for applications that require higher volume ranges. Both feature the same injection time and pressure parameters.

**i** For more information go to [www.eppendorf.com](http://www.eppendorf.com)



Both the FemtoJet 4i and FemtoJet 4x, can easily be combined for all types of micromanipulators, yet they form the perfect system with Eppendorf micromanipulators.

Technical specifications		
Model	FemtoJet 4i	FemtoJet 4x
Dimensions (W × D × H)	21.3 × 20.7 × 25 cm	21.3 × 20.7 × 25 cm
Weight w/o accessories	5 kg	3.5 kg
Clean function	Max. 6,000 hPa (87 psi)	Max. 6,000 hPa (87 psi)
Compensation pressure	5 – 6,000 hPa (87 psi); can be set in increments of 1 hPa	5 – 6,000 hPa (87 psi); can be set in increments of 1 hPa
Injection pressure	5 – 6,000 hPa (87 psi); can be set in increments of 1 hPa	5 – 6,000 hPa (87 psi); can be set in increments of 1 hPa
Pressure supply	Integrated compressor	External pressure supply (not included)

#### Ordering information

Description	Order no.	Price
<b>FemtoJet® 4i</b> , programmable microinjector with integrated pressure supply, including foot control, GB	5252 000.030	5,293.00 £
<b>FemtoJet® 4x</b> , programmable microinjector with external pressure supply (not included), including foot control, GB	5253 000.033	4,313.00 £
<b>Hand control</b> , for triggering inject function	5252 070.011	42.30 £
<b>O-Ring set</b> , for grip heads 0 to 3 with removal tool	5176 196.000	42.80 £
<b>Service kit</b> , for grip heads and capillary holder, consisting of O-ring set and adapter for Femtotips®	5176 195.004	162.00 £
<b>Grip head 1</b> , for microcapillaries with 1.2 to 1.3 mm outer diameter, 2 pieces	5176 212.006	60.20 £
<b>Grip head 2</b> , for microcapillaries with 1.4 to 1.5 mm outer diameter, 2 pieces	5176 214.009	60.20 £
<b>Grip head 3</b> , for microcapillaries with 0.7 to 0.9 mm outer diameter, 2 pieces	5176 207.002	60.20 £
<b>Grip head 0</b> , for microcapillaries with 1.0 to 1.1 mm outer diameter, 2 pieces	5176 210.003	60.20 £
<b>Universal capillary holder</b> , for mounting Femtotips®, Femtotip II or grip heads, incl. grip head 0, adapter for Femtotips® and replacement O-rings	5176 190.002	156.00 £
<b>Positioning aid</b> , pack of 2, for mounting universal capillary holder on TransferMan® 4m/r and InjectMan® 4	5192 072.001	74.60 £
<b>Y-cable FJ4</b> , Y-cable for connecting FemtoJet 4i/4x with a PC and TransferMan® 4r or InjectMan® 4	5192 080.004	92.70 £
<b>Y-cable PX</b> , Y-cable for connecting Eppendorf PiezoXpert® or a PC with TransferMan® 4r or InjectMan® 4	5192 081.000	92.70 £

✂ Ordering information for other voltage options begins on page 484



## CellTram® Air/Oil/vario



### Applications CellTram® Air

- > Gentle holding of larger suspension cells (e.g., oocytes and blastocysts)
- > Manual microinjection and dispensing of aqueous solutions

### Product features

- > Oil-free system with optimized resolution for holding of suspension cells
- > Simple setting of operating point via pressure compensation
- > Extremely simple operation because no oil filling is required
- > Maintenance-free piston/cylinder system with minimal friction force
- > Large, ergonomic rotary knob
- > Stable and secure base plate
- > Universal capillary holder for assembly onto all conventional micromanipulators



### Applications CellTram® Oil

- > Aspiration and dispensing of small cells (e.g., mouse sperm)
- > Manual microinjection under high pressure (e.g., into plants)

### Product features

- > QuickValve™ system for quick and simple filling
- > Biological compatibility via use of embryo-tested oil
- > Maximum pressure 20,000 hPa
- > Large, ergonomic rotary knob
- > Stable and secure base plate
- > Universal capillary holder for assembly onto all conventional micromanipulators



### Applications CellTram® vario

- > Transfer of suspension cells (e.g., ES cells)
- > Transfer of organelles (e.g., nucleus transfer)
- > Removal of cells (e.g., microdissection), biopsies
- > Aspiration and dispensing of small cells (e.g., mouse sperm)

### Product features

- > Two rotary knobs of variable transmission ratio (1:1 and 1:10) for the highest standards in terms of resolution, sensitivity and response behavior
- > QuickValve™ system for fast and simple filling
- > Biological compatibility via use of embryo-tested oil
- > Large, ergonomic rotary knobs
- > Stable and secure base plate
- > Universal capillary holder for assembly onto all conventional micromanipulators



### QuickValve system

With the QuickValve system, filling of the CellTram vario and CellTram Oil is quick and easy. A special valve screw allows the oil to be filled directly into the piston chamber. The optimized piston/cylinder system minimizes friction in the piston chamber, providing the utmost reliability and ultrafine sensitivity.

Technical specifications			
Model	CellTram Air	CellTram Oil	CellTram vario
Max. pressure	2,900 hPa	20,000 hPa	20,000 hPa
Minimum volume that can be set	< 200 nL	< 20 nL	<20 nL/<2 nL (coarse/fine)
Pressure generation	Piston/cylinder system, filled with air, maintenance-free	Piston/cylinder system, filled with oil	Piston/cylinder system, with gear, filled with oil
Total volume that can be set	2,640 $\mu$ L	960 $\mu$ L	960 $\mu$ L
Volume change per revolution	88 $\mu$ L	9.6 $\mu$ L	9.6 $\mu$ L/960 nL (coarse/fine)

### Ordering information

Description	Order no.	Price
<b>CellTram® Air</b> , pneumatic, manual microinjector, complete with pressure tube and universal capillary holder with grip head for capillaries with an outer diameter of 1 mm <sup>1)</sup>	5176 000.017	1,297.00 £
<b>CellTram® Oil</b> , hydraulic, manual microinjector, complete with pressure tube, filling tube, oil and universal capillary holder with grip head for capillaries with an outer diameter of 1 mm <sup>1)</sup>	5176 000.025	1,392.00 £
<b>CellTram® vario</b> , hydraulic, manual microinjector with gear, complete with pressure tube, filling tube, oil and universal capillary holder with grip head for capillaries with an outer diameter of 1 mm <sup>1)</sup>	5176 000.033	1,734.00 £
<b>O-Ring set</b> , for grip heads 0 to 3 with removal tool	5176 196.000	42.80 £
<b>Pressure tube</b> , for connecting CellTrams to universal capillary holder, 1 m	5176 114.004	45.90 £
<b>Service kit</b> , for grip heads and capillary holder, consisting of O-ring set and adapter for Femtotips®	5176 195.004	162.00 £
<b>Grip head 1</b> , for microcapillaries with 1.2 to 1.3 mm outer diameter, 2 pieces	5176 212.006	60.20 £
<b>Grip head 2</b> , for microcapillaries with 1.4 to 1.5 mm outer diameter, 2 pieces	5176 214.009	60.20 £
<b>Grip head 3</b> , for microcapillaries with 0.7 to 0.9 mm outer diameter, 2 pieces	5176 207.002	60.20 £
<b>Grip head 0</b> , for microcapillaries with 1.0 to 1.1 mm outer diameter, 2 pieces	5176 210.003	60.20 £
<b>Universal capillary holder</b> , for mounting Femtotips®, Femtotip II or grip heads, incl. grip head 0, adapter for Femtotips® and replacement O-rings	5176 190.002	156.00 £
<b>Positioning aid</b> , pack of 2, for mounting universal capillary holder on TransferMan® 4m/r and InjectMan® 4	5192 072.001	74.60 £

<sup>1)</sup> This product is registered in Europe as medical device, according to Medical Device Directive MDD 93/42 EEC.

✂ Ordering information for other voltage options begins on page 484

# Eppendorf Microcapillaries

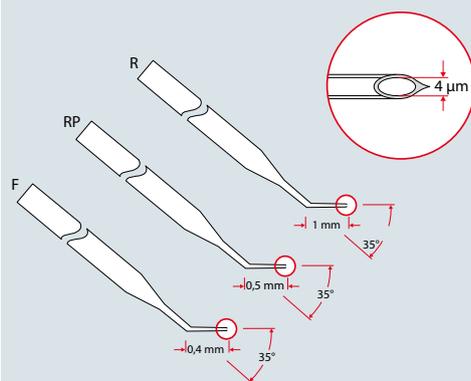


## Applications Eppendorf Microloader®

- > Filling of microcapillaries for microinjection
- > Recovery surplus solution from the capillary
- > Pipetting smallest volumes where additional reach is needed

## Product features

- > Extremely long, fine and flexible tip for filling of microcapillaries for microinjection and where additional reach is needed
- > Ideal for recovering surplus solution from the capillary
- > Microloader tips and rack autoclavable (121 °C, 20 min.)
- > Highest precision and accuracy when used with Eppendorf pipettes for 0.5 to 10 µL (gray control button)

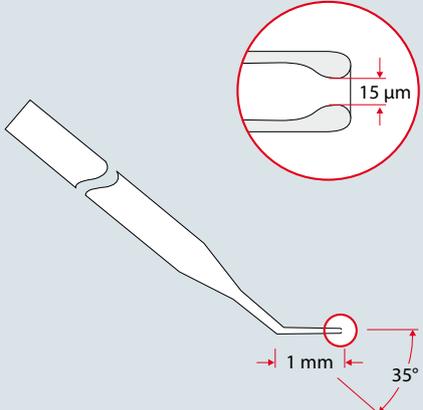


## Applications TransferTip® ICSI

- > Transfer of sperm to oocytes

## Product features

- > 4 µm inner diameter
- > 35° tip angle
- > Heat-formed spike eases penetration
- > Sterilized via validated gamma irradiation
- > Non-cytotoxic (as proven by the mouse embryo development test)
- > Capillary safe for optimum protection

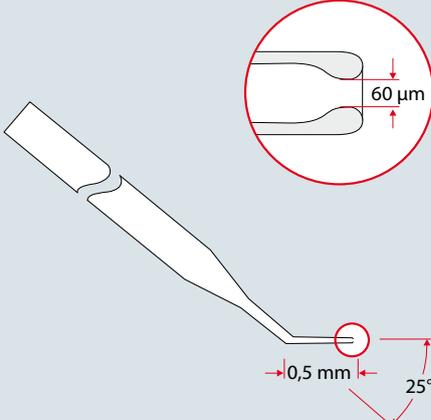


**Applications VacuTip**

- > Capillary for holding suspension cells (e.g., oocytes and blastocysts)

**Product features**

- > 15 µm inner diameter
- > 35° tip angle
- > Flange length 1 mm
- > Sterilized via validated gamma irradiation
- > Non-cytotoxic (as proven by the mouse embryo development test)
- > Capillary safe for optimum protection



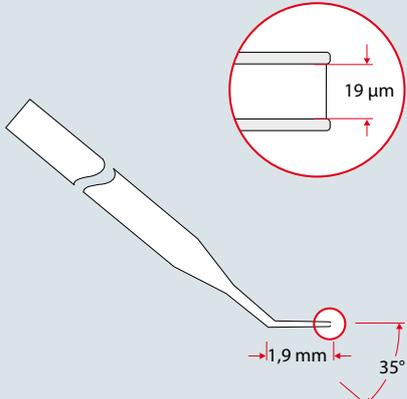
**Applications VacuTip FCH**

- > Capillary for holding suspension cells (e.g., oocytes and blastocysts)

**Product features**

- > 60 µm inner diameter
- > 25° tip angle
- > Flange length 0.5 mm
- > Sterilized via validated gamma irradiation
- > Non-cytotoxic (as proven by the mouse embryo development test)
- > Capillary safe for optimum protection

# Eppendorf Microcapillaries



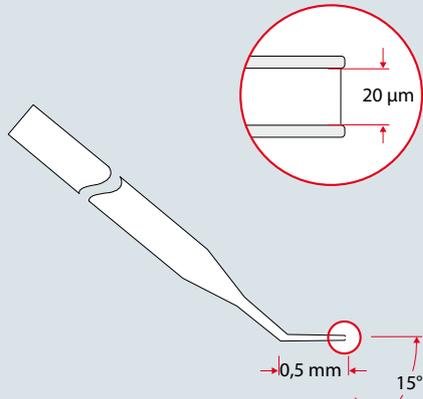
The diagram shows a microcapillary with a rounded tip. A circular inset provides a magnified view of the tip, showing an inner diameter of 19 μm. The main diagram indicates a flange length of 1.9 mm and a tip angle of 35°.

**Applications Polar Body Biopsy Tip MML**

- > Laser-assisted polar body biopsy according to Dr. Markus Montag

**Product features**

- > 19 μm inner diameter
- > 35° tip angle
- > Rigid flange, 1.9 mm length
- > Rounded
- > Sterilized via validated gamma radiation
- > Non-cytotoxic (as proven by the mouse development test)
- > Capillary safe for optimum protection



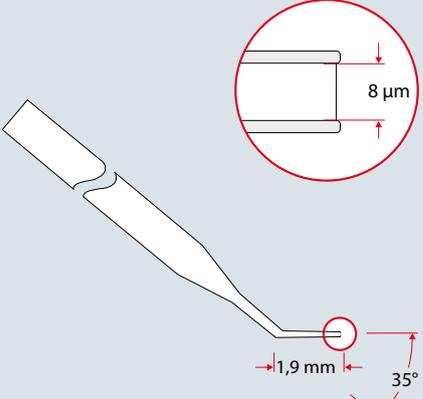
The diagram shows a microcapillary with a rounded tip. A circular inset provides a magnified view of the tip, showing an inner diameter of 20 μm. The main diagram indicates a flange length of 0.5 mm and a tip angle of 15°.

**Applications Polar Body Biopsy Tip FCH**

- > Laser-assisted polar body biopsy

**Product features**

- > 20 μm inner diameter
- > 15° tip angle
- > Rigid 0.5 mm flange
- > Rounded
- > Sterilized via validated gamma irradiation
- > Non-cytotoxic (as proven by the mouse development test)
- > Capillary safe for optimum protection



The diagram shows a microcapillary with a rounded tip. A circular inset provides a magnified view of the tip, showing an inner diameter of 8 μm. The main diagram indicates a flange length of 1.9 mm and a tip angle of 35°.

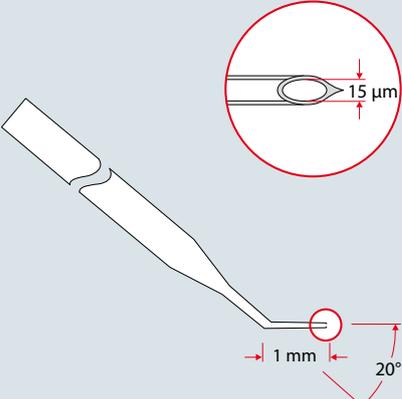
**Applications IMSI/TESE Tip**

- > Intracytoplasmic morphologically selected sperm injection (IMSI)
- > Testicular sperm extraction from biopsy tissue (TESE)

**Product features**

- > 8 μm inner diameter
- > 35° tip angle
- > Rigid flange, 1.9 mm length
- > Rounded, non polished
- > Sterilized via validated gamma irradiation
- > Non-cytotoxic (as proven by mouse embryo development test)
- > Capillary safe for optimum protection

**i** For more information go to [www.eppendorf.com](http://www.eppendorf.com)

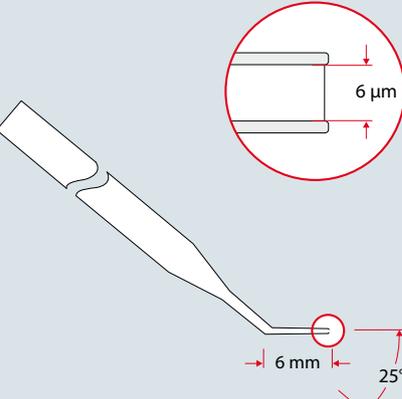


**Applications TransferTip® (ES)**

- > Production of transgenic animals via embryonic stem cell transfer

**Product features**

- > 15 µm inner diameter
- > 20° tip angle
- > Rigid flange, 1 mm length
- > Heat-formed spike eases penetration
- > Sterilized via validated gamma irradiation
- > Capillary safe for optimum protection

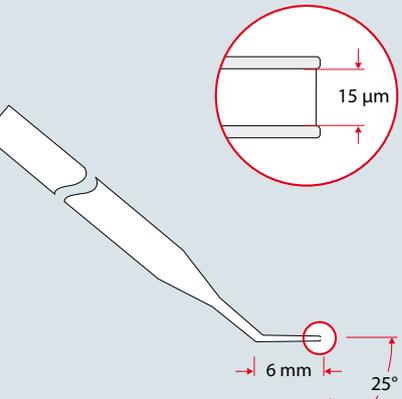


**Applications Piezo Drill Tip Mouse ICSI**

- > Transfer of mouse spermatocytes into the cytoplasm of unfertilized mouse oocytes

**Product features**

- > 6 µm inner diameter
- > 25° tip angle
- > Rigid flange, 6 mm length
- > Jagged, non-polished
- > Sterilized via validated gamma irradiation
- > Capillary safe for optimum protection



**Applications Piezo Drill Tip ES**

- > Piezo-assisted transfer of embryonic stem cells into blastocysts

**Product features**

- > 15 µm inner diameter
- > 25° tip angle
- > Rigid flange, 6 mm length
- > Jagged, non-polished
- > Sterilized via validated gamma irradiation
- > Capillary safe for optimum protection

MICROINJECTION/  
MICROMANIPULATION

**i** For more information go to [www.eppendorf.com](http://www.eppendorf.com)



# Eppendorf Microcapillaries

## Ordering information

Description	Order no.	Price
<b>Microloader™</b> , tip for filling Femtotips and other glass microcapillaries, sterile, 0.5 – 20 µL, 100 mm, light gray, 192 pcs. (2 racks x 96 pcs.)	5242 956.003	67.00 £
<b>VacuTip</b> , holding capillary, 35° tip angle, 15 µm inner diameter, 1 mm flange, sterile, set of 25 <sup>1)</sup>	5175 108.000	303.00 £
<b>VacuTip FCH</b> , holding capillary, 25° tip angle, 60 µm inner diameter, 0.5 mm flange, sterile, set of 25 <sup>1)</sup>	5175 240.006	311.00 £
<b>TransferTip® RP (ICSI)</b> , for sperm injection using the ICSI technique, 35° tip angle, 4 µm inner diameter, 0.5 mm flange, sterile, set of 25 <sup>1)</sup>	5175 114.000	398.00 £
<b>TransferTip® F (ICSI)</b> , for sperm injection using the ICSI technique, sterile, set of 25 <sup>1)</sup>	5175 106.008	398.00 £
<b>TransferTip® R (ICSI)</b> , for sperm injection using the ICSI technique, 35° tip angle, 4 µm inner diameter, 1 mm flange, sterile, set of 25 <sup>1)</sup>	5175 113.004	398.00 £
<b>Polar Body Biopsy Tip MML</b> , transfer capillary for laser-assisted polar body biopsy, 35° tip angle, 19 µm inner diameter, 1.9 mm flange, sterile, set of 25 <sup>1)</sup>	5175 210.000	311.00 £
<b>Polar Body Biopsy Tip FCH</b> , transfer capillary for laser-assisted polar body biopsy, 15° tip angle, 20 µm inner diameter, 0.5 mm flange, sterile, set of 25 <sup>1)</sup>	5175 230.000	311.00 £
<b>IMSI/TESE Tip</b> , for selection and transfer of sperm or other cells, 35° tip angle, 8 µm inner diameter, 1.9 mm flange, sterile, set of 25 <sup>1)</sup>	5175 117.000	391.00 £
<b>TransferTip® (ES)</b> , for ES cell transfer, 20° tip angle, 15 µm inner diameter, 1 mm flange, sterile, set of 25	5175 107.004	398.00 £
<b>Piezo Drill Tip Mouse ICSI</b> , for piezo-assisted mouse ICSI, 25° tip angle, 6 µm inner diameter, 6 mm flange, sterile, set of 25	5175 220.005	311.00 £
<b>Piezo Drill Tip ES</b> , for piezo-assisted mouse ES cell transfer, 25° tip angle, 15 µm inner diameter, 6 mm flange, sterile, set of 25	5175 250.001	311.00 £

<sup>1)</sup> This product is registered in Europe as medical device, according to Medical Device Directive MDD 93/42 EEC.

i For more information go to [www.eppendorf.com](http://www.eppendorf.com)

# Training



Eppendorf is your competent partner for all questions regarding cell biology. Our training provides an introduction to the most relevant areas of micromanipulation. Information about course contents is available at [www.eppendorf.com/training](http://www.eppendorf.com/training).

## Target group

Scientists and technicians in all biomedical research areas – basic experience working with tissue culture cells and light microscopes is helpful.

## Objectives

To obtain detailed knowledge on the technical aspects of microinjection and micromanipulation methods. Examples of usage in current research will be discussed in the lectures. At the end of the seminar, participants will be able to prepare and carry out microinjections into cells and to conduct basic micromanipulation procedures on cells.



In cooperation with the renowned European Molecular Biology Laboratory (EMBL®) in Heidelberg, additional courses are offered at their Advanced Training Centre (ATC) on the Heidelberg campus.

## Microinjection into adherent cells:

- > Sample preparation for microinjection
- > Semiautomated microinjection into adherent cells and the expression of GFP fusion proteins
- > Detection of GFP-marked proteins via fluorescence microscopy

## Microinjection techniques for the production of transgenic mice:

- > Injection of DNA into the pronucleus of fertilized mouse oocytes
- > Transfer of embryonic stem cells into blastocysts and morulae

i For more information go to [www.eppendorf.com](http://www.eppendorf.com)

# Cell Manipulation Performance Plans

## Preventive Maintenance

Periodically inspection and preventive maintenance of your instruments ensure that the cell manipulation instruments are consistently operating at peak performance and are ready for use. This includes cleaning of all external parts, visual checking of all sensitive parts and stability testing. Where applicable the following services are also included: checking leak tightness, analyzing device data, and exchange of oil and wear and tear parts. A complete and final system test will be performed.

## Certification Service

Installation and Operational Qualification (IQ/OQ) services are available for all instruments. IQ/OQ assures that your Eppendorf instrumentation is delivered, installed and operating according to manufacturer specifications. This service also includes cleaning of internal assemblies and electrical testing where applicable. We support you with establishing your documentation in regulated working areas issuing OQ certificate.



Performance Plans	Electroporators	Microinjectors	Microinjectors
	Electroporator 2510™, Eppendorf Eporator®, Multiporator®	CellTram® Air	CellTram® Oil, CellTram® vario
<b>Recommended service period</b>	once per year	once per year	once per year
<b>Preventive Maintenance</b>	<b>Order no.</b>	<b>Order no.</b>	<b>Order no.</b>
Preventive Maintenance* <sup>1</sup> Spare parts that may be required are not included and will be invoiced additionally.	4309 870.005	5176 870.003	5176 871.000
<b>Certification Service:</b>			
Operational Qualification (OQ) according to manufacturer specification	4309 870.102	5176 870.100	5176 871.107
Electrical testing according to country-specific regulations	4309 870.200		
<b>Additional Service:</b>			
Software upgrade	4309 870.307		
<b>Actuator Verification</b>			

\*<sup>1</sup> Spare parts that may be required are not included and will be invoiced additionally. \*<sup>2</sup> For research use only. \*<sup>3</sup> The TransferMan® 4m is registered in Europe as medical device (according to Medical Device Directive, MDD 93/42/EEC).

For technical support for the Eppendorf Microdissector please inquire separately.

**epServices**  
for premium performance

**Service features**

- > Eppendorf customer care and quality commitment
- > Only use of genuine and quality inspected Eppendorf parts
- > Certified service reports

**Long-term benefits**

- > Reliable system operation over the total system lifetime
- > GLP compliant documentation



For more information go to [www.eppendorf.com/epServices](http://www.eppendorf.com/epServices).  
In selected countries only.

Microinjectors	Micromanipulators	Micromanipulators	Eppendorf PiezoXpert
FemtoJet®, FemtoJet® express, FemtoJet® 4i, FemtoJet® 4x	InjectMan® NI 2, PatchMan NP 2, TransferMan® NK 2	InjectMan® 4 <sup>1,2</sup> , TransferMan® 4r <sup>2</sup> , TransferMan® 4m <sup>3</sup>	
once per year	once per year	once per year	once per year
<b>Order no.</b>	<b>Order no.</b>	<b>Order no.</b>	<b>Order no.</b>
5247 870.000	5188 870.009	0082 010 .001	
5247 870.107	5188 870.106	0082 010 .002	
4309 870.200	4309 870.200	4309 870.200	
4309 870.307	4309 870.307	4309 870.307	
			5194 075.016*1

# Cell Culture Consumables



## Description

Experience a new dimension in cell culture with Eppendorf Cell Culture Consumables. The products meet your needs for excellent cell performance and reliability as well as for advanced protection against contamination. Innovative technologies for surface activation enable a tissue-culture-treated (TC treated) surface with outstanding homogeneity. The planarity and transparency of all surfaces contribute to an optical performance that not only facilitates your routine analysis, but also saves time during automated read-out. In all formats, we focused on advanced handling, robustness

in stacking and unsurpassed performance when it comes to identification, readability and tracking.

The new packaging concept provides complete protection during transportation, tool-free opening, easy resealing for safe and clean storage and fast identification of the desired product. The boxes and bags are very compact for space saving storage. Learn more about the truly comprehensive solutions for cell culture on the following pages.

## Applications

- > Expansion and culture of adherent and suspension cells on TC treated or on non-treated polystyrene
- > Performance of cell-based assays and microscopic analysis

**All Cell Culture Consumables**

<b>Surface</b>	Tissue culture treated or non-treated
<b>Operating temperature</b>	-86 °C to 60 °C
<b>Storage before use</b>	Store dry and at RT. Protect from sunlight and UV rays
<b>Purities</b>	All products are sterile. Sterility is assured by irradiation according to DIN EN ISO 11137-2:2007 with sterility assurance level (SAL) of 10 <sup>-6</sup> . Sterility is tested according to USP, Ph. Eur. 2.6.1. All products are free of detectable pyrogens, RNase, DNase and DNA. All products are non-cytotoxic.
<b>Certificates</b>	Leachables, heavy metals, production conditions, cytotoxicity. The certificates can be downloaded at <a href="http://www.eppendorf.com">www.eppendorf.com</a>
<b>Lot-specific certificates</b>	Sterility Absence of: Pyrogens, RNase, DNase, DNA. TC treated surface: Testing for cell attachment and cell growth with an anchorage-dependent cell line Lot-specific certificates can be downloaded at <a href="http://www.eppendorf.com">www.eppendorf.com</a>

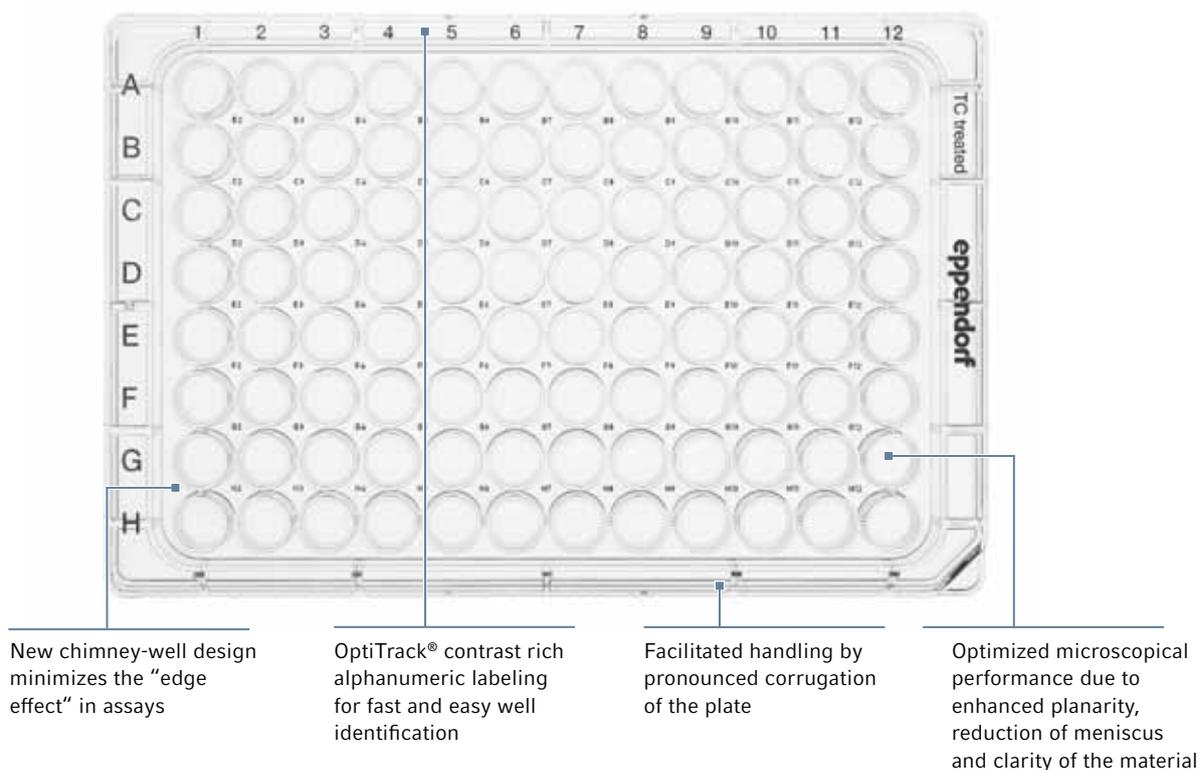
Plates					
	6-Well	12-Well	24-Well	48-Well	96-Well
<b>Theoretical total volume</b>	16.0 mL	6.8 mL	3.6 mL	1.5 mL	0.4 mL
<b>Work volume</b>	3 – 5 mL	1 – 2 mL	0.5 – 1 mL	0.3 – 0.5 mL	0.1 – 0.2 mL
<b>Growth area/well<sup>1)</sup></b>	940.3 mm <sup>2</sup>	391.1 mm <sup>2</sup>	208.9 mm <sup>2</sup>	85.6 mm <sup>2</sup>	37.0 mm <sup>2</sup>
<b>Well diameter</b>	34.6 mm	22.4 mm	16.2 mm	10.4 mm	6.8 mm
<b>L x W x H</b>	127.8 x 85.5 x 20.0 mm	127.8 x 85.5 x 20.0 mm	127.8 x 85.5 x 20.0 mm	127.8 x 85.5 x 20.0 mm	127.8 x 85.5 x 14.4 mm
<b>Height with lid</b>	23.2 mm	23.2 mm	23.2 mm	23.2 mm	17.6
<b>Dimensions</b>	Conforms to ANSI/SBS I	Conforms to ANSI/SBS I	Conforms to ANSI/SBS I	Conforms to ANSI/SBS I	Conforms to ANSI/SBS I to V
<b>Centrifugation</b>	Can be centrifuged up to 2500 x g. When stacked (up to 5 for 96-Well plates and up to 4 for all other formats) can be centrifuged up to 300 x g.				

<sup>1)</sup> For the initial seeding of cells, take into account the growth area in order to support optimal cell growth.

Flasks			
	T-25	T-75	T-175
<b>Theoretical total volume</b>	83.6 mL	279.8 mL	662.1 mL
<b>Work volume</b>	3.0 – 7.0 mL	8.0 – 20.0 mL	20.0 – 30.0 mL
<b>Growth area</b>	26.9 cm <sup>2</sup>	77.9 cm <sup>2</sup>	179.5 cm <sup>2</sup>
<b>L x W x H</b>	99.0 x 56.0 x 37.0 mm	163.0 x 82.0 x 46.6 mm	230.0 x 122.0 x 48.0 mm
<b>Centrifugation</b>	Can be centrifuged with the suitable adapters; refer to the manufacturer's instruction.		

Dishes			
	35 mm	60 mm	100 mm
<b>Theoretical total volume</b>	8.1 mL	26.6 mL	99.2 mL
<b>Work volume</b>	2.0 – 3.0 mL	3.0 – 5.0 mL	8.0 – 10.0 mL
<b>Growth area</b>	9.5 cm <sup>2</sup>	21.9 cm <sup>2</sup>	56.8 cm <sup>2</sup>
<b>Diameter x height</b>	36.7 x 10.8 mm	59.7 x 14.0 mm	93.8 x 19.4 mm
<b>Height with lid</b>	12.5 mm	15.7 mm	21.3 mm
<b>Centrifugation</b>	Cannot be centrifuged.		

## Eppendorf Cell Culture Plates



New chimney-well design minimizes the “edge effect” in assays

OptiTrack® contrast rich alphanumeric labeling for fast and easy well identification

Facilitated handling by pronounced corrugation of the plate

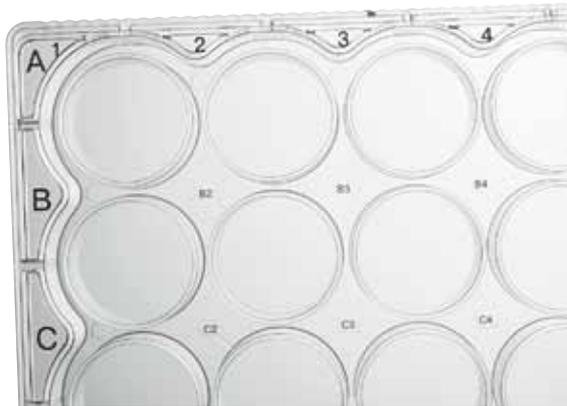
Optimized microscopical performance due to enhanced planarity, reduction of meniscus and clarity of the material

### Description

Eppendorf Cell Culture Plates are tailored for the expansion of smaller cell numbers as well as for cell-based assays. Qualification of cell morphology and cell performance can be especially critical in those steps. We optimized the optical performance by enhancement of the planarity, material clarity and reduction of the meniscus of liquids in the wells to facilitate every step where manual or automated read-out is necessary. Easy orientation and fast identification of individual wells due to the contrast rich alphanumeric OptiTrack® labeling is now available for cell culture! The new chimney-well design avoids inhomogeneous growth of cells in the outer ring of wells in any plate format which reduces costs and increases efficiency. If cells need to spend longer times outside the incubator the filling of the inter-well spaces of the complete plate will keep the temperature stable and prevents unwanted bias due to temperature shifts. The lid and plate bottom can easily be distinguished providing extra safety in transportation and stacking.

### Product features

- > Easy and fast well identification by contrast rich individual well ID and OptiTrack® alphanumeric labeling
- > Moat surrounding the outer wells to prevent the “edge effect” when filled with liquid
- > Chimney-well design to enable the filling of the inter-well spaces of the complete plate to level out well-to-well temperature shifts outside the incubator
- > Robust stacking performance by pronounced rims on plate lid and excellent fitting of lid and base when used in stacks
- > Lid taps under the plate for minimized surface contact and therefore reduced risk of contamination
- > Easy differentiation of lid and plate bottom due to a pronounced corrugation and wider sized base
- > Pronounced ventilation gaps for an optimized gas and temperature transfer when incubating in stacks
- > Optimized microscopical performance due to enhanced planarity, reduction of meniscus and clarity of the material



The contrast rich OptiTrack® matrix and individual well ID facilitate tracking and well identification in Eppendorf Cell Culture Plates.

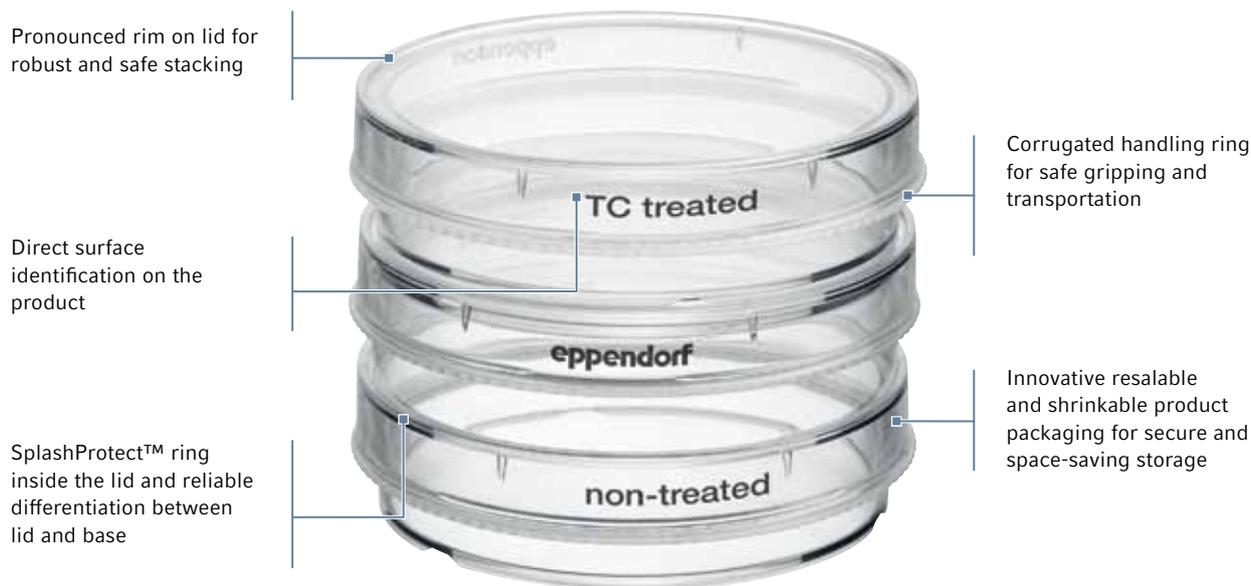
Prevention of edge effect by filling of the surrounding moat for up to 38 % more usable wells.

#### Ordering information

Description	Order no.	Price
<b>Eppendorf Cell Culture Plate, 6-Well</b> , with lid, flat bottom, sterile, free of detectable pyrogens, RNase & DNase, DNA. Non-cytotoxic.		
TC treated, 60 plates, individually wrapped	0030 720.113	POA
non-treated, 60 plates, individually wrapped	0030 720.016	POA
TC treated, 200 plates (20 bags x 10 plates)	0030 720.121	POA
<b>Eppendorf Cell Culture Plate, 12-Well</b> , with lid, flat bottom, sterile, free of detectable pyrogens, RNase & DNase, DNA. Non-cytotoxic.		
TC treated, 60 plates, individually wrapped	0030 721.110	POA
non-treated, 60 plates, individually wrapped	0030 721.012	POA
<b>Eppendorf Cell Culture Plate, 24-Well</b> , with lid, flat bottom, sterile, free of detectable pyrogens, RNase & DNase, DNA. Non-cytotoxic.		
TC treated, 60 plates, individually wrapped	0030 722.116	POA
non-treated, 60 plates, individually wrapped	0030 722.019	POA
<b>Eppendorf Cell Culture Plate, 48-Well</b> , with lid, flat bottom, sterile, free of detectable pyrogens, RNase & DNase, DNA. Non-cytotoxic.		
TC treated, 60 plates, individually wrapped	0030 723.112	POA
non-treated, 60 plates, individually wrapped	0030 723.015	POA
<b>Eppendorf Cell Culture Plate, 96-Well</b> , with lid, flat bottom, sterile, free of detectable pyrogens, RNase & DNase, DNA. Non-cytotoxic.		
TC treated, 80 plates, individually wrapped	0030 730.119	POA
non-treated, 80 plates, individually wrapped	0030 730.011	POA
TC treated, 200 plates (20 bags x 10 plates)	0030 730.127	POA

i For more information go to [www.eppendorf.com](http://www.eppendorf.com)

# Eppendorf Cell Culture Dishes



## Description

Whenever you need direct access to your cells, dishes are the format of choice. We focused on improved handling and stacking performance of the dishes to ensure a new level of safe and carefree usage of those formats in cell culture. It all starts with the packaging: opening is easy and tool free. An innovative resealable top and side makes tape-free closing possible. And the bags can be shrunk for spacesaving, safe and contamination-free storage of remaining dishes. With the Eppendorf dishes, a corrugated handling ring provides unsurpassed safety in handling during transportation and expansion of cells. A SplashProtect™ ring inside the dish lid prevents spillage and traps fluid if condensation occurs. Outstanding robust stacking completes these products in their ease, safety and handling convenience.

## Product features

- > Unsurpassed safety in handling during transportation and while working due to corrugated handling ring
- > SplashProtect™ ring inside of the dish lid traps liquid and prevents spills during transportation or incubation
- > Robust stacking performance by pronounced rims on dish lid and exact fitting of lid and bottom when used in stacks
- > Easy differentiation of lid and dish bottom prevents unintended removal of the lid
- > Packaging combines tool-free opening, resealable top and side for tape-free closing and an easy solution to shrink the package for space-conscious storage

**i** For more information go to [www.eppendorf.com](http://www.eppendorf.com)



The corrugated handling ring of the dishes provides extra safe handling and transport of cells in the workflow.



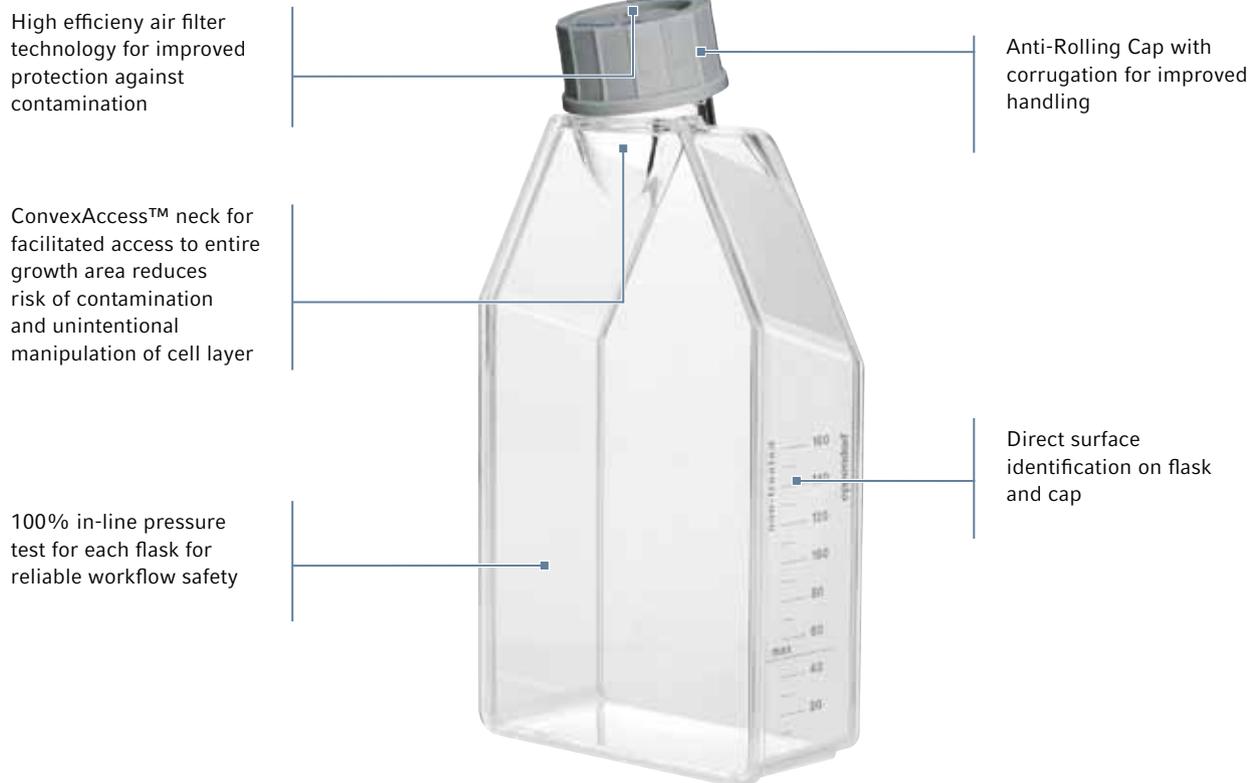
A SplashProtect™ ring inside the lid acts as a liquid trap, preventing spills and potential contamination due to condensed liquid.

#### Ordering information

Description	Order no.	Price
<b>Eppendorf Cell Culture Dish, 35 mm</b> , sterile, free of detectable pyrogens, RNase & DNase, DNA. Non-cytotoxic.		
TC treated, 300 dishes (30 bags x 10 dishes)	0030 700.112	POA
non-treated, 300 dishes (30 bags x 10 dishes)	0030 700.015	POA
<b>Eppendorf Cell Culture Dish, 60 mm</b> , sterile, free of detectable pyrogens, RNase & DNase, DNA. Non-cytotoxic.		
TC treated, 300 dishes (30 bags x 10 dishes)	0030 701.119	POA
non-treated, 300 dishes (30 bags x 10 dishes)	0030 701.011	POA
<b>Eppendorf Cell Culture Dish, 100 mm</b> , sterile, free of detectable pyrogens, RNase & DNase, DNA. Non-cytotoxic.		
TC treated, 300 dishes (30 bags x 10 dishes)	0030 702.115	POA
non-treated, 300 dishes (30 bags x 10 dishes)	0030 702.018	POA

i For more information go to [www.eppendorf.com](http://www.eppendorf.com)

# Eppendorf Cell Culture Flasks



## Description

For long term cultivation, expansion of large numbers of cells with best protection of your cells against contamination, flasks are the preferred vessels in routine application. Unsurpassed protection of your cells from contaminants was one of the key requirements in developing the Eppendorf Cell Culture Flasks. A new, high efficiency air filter technology combines excellent protection with reliable gas exchange. A 100 % in-line pressure test for each flask guarantees leakage-free flasks for maximum workflow safety. The unique ConvexAccess™ shape of the neck facilitates the access to the growth area and makes cell seeding and media exchange much more convenient, safe and reliable.

## Product features

- > ConvexAccess™ geometry for facilitated access to entire growth for easier and safe cell treatment
- > Optimized gas exchange and protection against contamination by high efficiency air filter technology
- > Defined arrested position with plug-seal caps to prevent undesired closing
- > Anti-rolling cap with corrugation facilitates cultivation steps when the cap needs to be set aside
- > 100 % in-line control for leakage-free flasks and maximum safety
- > Direct surface identification on flask and cap

**i** For more information go to [www.eppendorf.com](http://www.eppendorf.com)



ConvexAccess geometry facilitates the access to the growth area and prevents unintended manipulation of cell monolayer. The work position is more ergonomic and cell seeding and media exchange becomes easier and safer.

Safety in handling, protection against contamination, and excellent gas transfer are merged in the design of Eppendorf filter and plug-seal caps.

**Ordering information**

Description	Order no.	Price
<b>Eppendorf Cell Culture Flask T-25</b> , sterile, free of detectable pyrogens, RNase & DNase, DNA. Non-cytotoxic.		
TC treated, with filter cap, 192 flasks (24 bags x 8 flasks)	0030 710.126	POA
TC treated, with plug-seal cap, 192 flasks (24 bags x 8 flasks)	0030 710.118	POA
non-treated, with filter cap, 192 flasks (24 bags x 8 flasks)	0030 710.029	POA
non-treated, with plug-seal cap, 192 flasks (24 bags x 8 flasks)	0030 710.010	POA
<b>Eppendorf Cell Culture Flask T-75</b> , sterile, free of detectable pyrogens, RNase & DNase, DNA. Non-cytotoxic.		
TC treated, with filter cap, 80 flasks (16 bags x 5 flasks)	0030 711.122	POA
TC treated, with plug-seal cap, 80 flasks (16 bags x 5 flasks)	0030 711.114	POA
non-treated, with filter cap, 80 flasks (16 bags x 5 flasks)	0030 711.025	POA
non-treated, with plug-seal cap, 80 flasks (16 bags x 5 flasks)	0030 711.017	POA
<b>Eppendorf Cell Culture Flask T-175</b> , sterile, free of detectable pyrogens, RNase & DNase, DNA. Non-cytotoxic.		
TC treated, with filter cap, 48 flasks (12 bags x 4 flasks)	0030 712.129	POA
TC treated, with plug-seal cap, 48 flasks (12 bags x 4 flasks)	0030 712.110	POA
non-treated, with filter cap, 48 flasks (12 bags x 4 flasks)	0030 712.021	POA
non-treated, with plug-seal cap, 48 flasks (12 bags x 4 flasks)	0030 712.013	POA

i For more information go to [www.eppendorf.com](http://www.eppendorf.com)



NEW

# Cell Imaging Consumables



**i** For more information go to [www.eppendorf.com](http://www.eppendorf.com)

Manufacturer's recommended retail price. All prices excl. VAT.  
Technical specifications subject to change.

**Eppendorf Cell Imaging Plates  
 film bottom**

**Eppendorf Cell Imaging Plates  
 glass bottom**

**Eppendorf Cell Imaging  
 Coverglasses**

**Eppendorf Cell Imaging Dishes**

**Eppendorf Cell Imaging Slides**

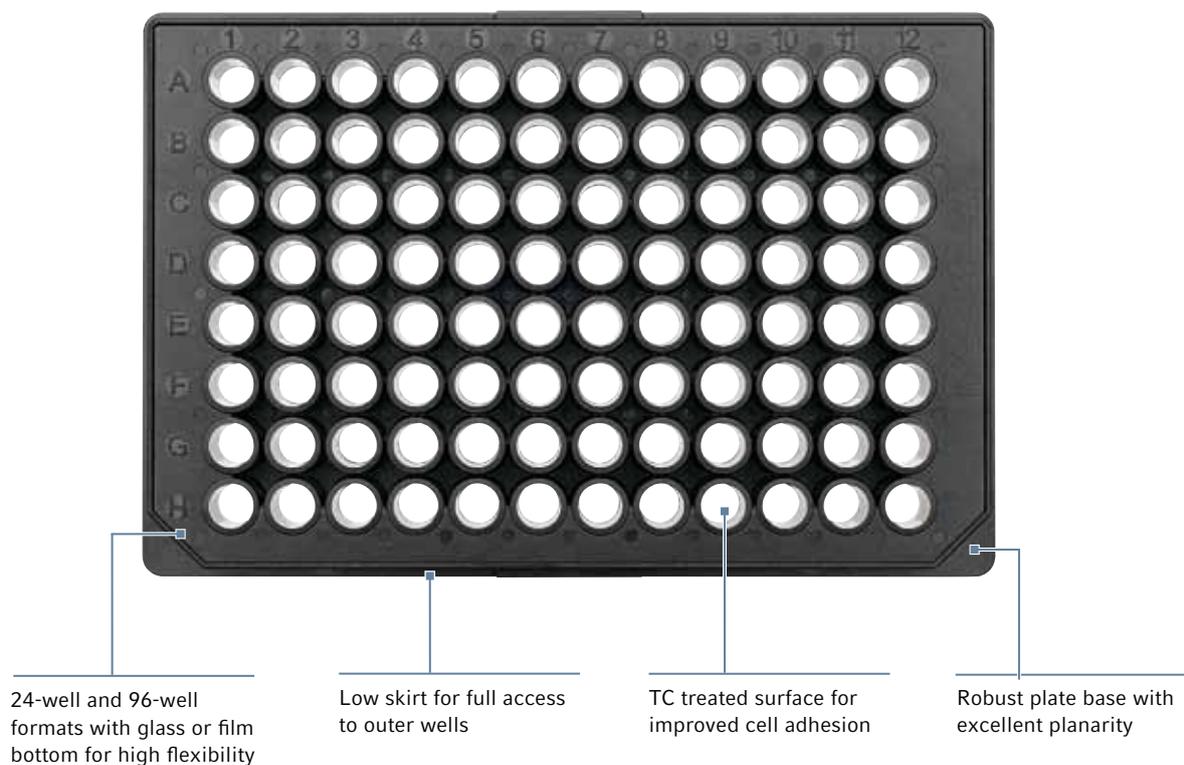
**Description**

Eppendorf Cell Imaging Consumables allow sophisticated imaging and microscopy applications on expert level. The products combine premium performance with innovative solutions for demanding optical analysis and fluorescent stainings. Whether you perform inverse microscopy, life cell imaging or fluorescence-based analysis. Find tailored solutions for single and parallel analysis as well as High Content Analysis (HCA) with Eppendorf Cell Imaging Consumables.

**Product features**

- > Unsurpassed performance of glass and film surfaces for adherent cells due to innovative tissue culture treatment
- > Low intrinsic fluorescence and high light transmission for enhanced signal-to-noise ratio
- > Easy access to the complete imaging area with immersion lenses for alleviated handling and advanced compatibility with microscopes
- > Ergonomic and robust design
- > Precise planarity supports high resolution microscopes and autofocus systems

## Cell Imaging Plates



### Description

The Eppendorf Cell Imaging Plates are black 24- or 96-well plates with clear bottom. You have the choice between a 170 µm coverglass bottom or an ultrathin 25 µm film bottom. Independent of the choice of material the plates are suitable for growing adherent cells due to their TC treated surfaces.

### Product features

- > Independent of the choice of material the plates are suitable for growing adherent cells due to their TC treated surfaces
- > All plate types have a low skirt design perfectly suited to access all wells with immersion objectives
- > An excellent signal-to-noise ratio can be expected from both plate bottom type
- > Excellent planarity of all plates ensures unsurpassed manual handling and reliable results in automated devices
- > Individually wrapped for reliable purity
- > The ultrathin film bottom allows for high gas permeability and UV-light transparency ideal for phototoxicity and hypoxic studies

**i** For more information go to [www.eppendorf.com](http://www.eppendorf.com)



TC treated coverglass with 170  $\mu$  thickness for best optical results



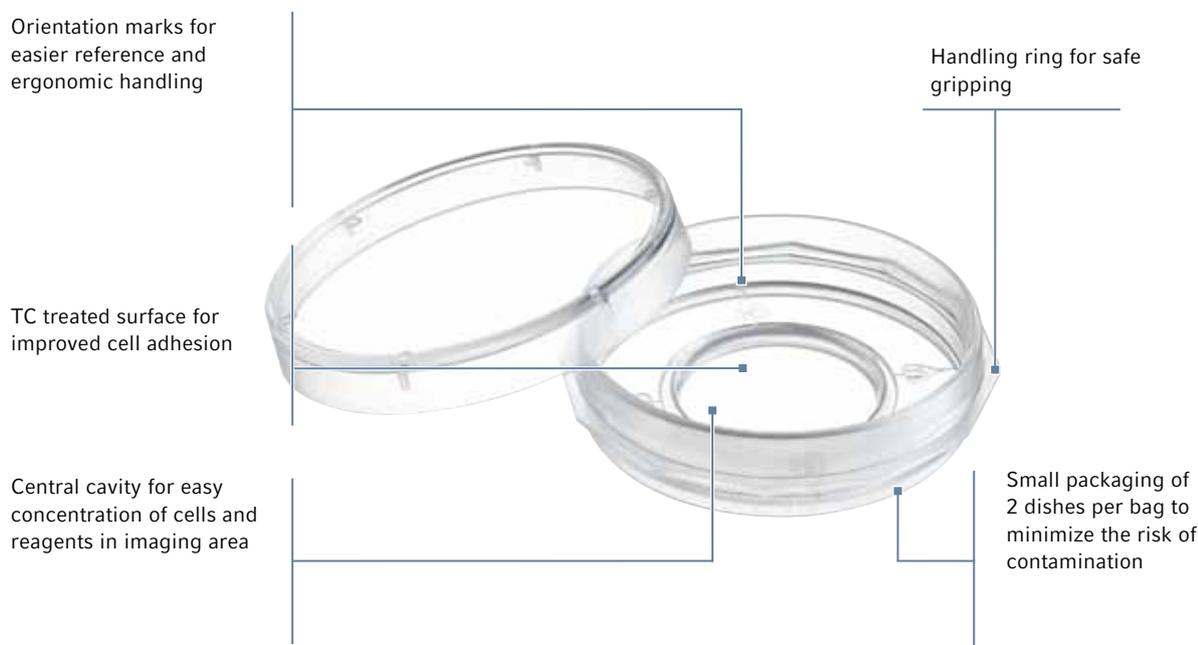
Ultrathin TC treated film bottom with low autofluorescence and high gas permeability

#### Ordering information

Description	Order no.	Price
<b>Eppendorf Cell Imaging Plates</b> , with lid, black with clear F-bottom. TC treated, sterile, free of detectable pyrogens, RNase and DNase, DNA. Non-cytotoxic.		
24-Well Cell Imaging Plate with coverglass bottom, individually wrapped, 20 pcs.	0030 741.021	POA
96-Well Cell Imaging Plate with coverglass bottom, individually wrapped, 20 pcs.	0030 741.030	POA
24-Well Cell Imaging Plate with 25 $\mu$ m film bottom, individually wrapped, 20 pcs.	0030 741.005	POA
96-Well Cell Imaging Plate with 25 $\mu$ m film bottom, individually wrapped, 20 pcs.	0030 741.013	POA

**i** For more information go to [www.eppendorf.com](http://www.eppendorf.com)

## Cell Imaging Dishes



### Description

Our 35mm Cell Imaging Dishes assist for premium performance in high-resolution microscopy of living and fixed cells. They are available in a thickness of 145  $\mu\text{m}$  or 170  $\mu\text{m}$  corresponding to coverglass thickness of 1.0 or 1.5.

### Product features

- > TC treated coverglass surface for facilitated workflows when working with adherent cells
- > Easy access to the complete imaging area with immersion lenses for alleviated handling and advanced compatibility with microscopes
- > A 18 mm central cavity for defined growth and staining of cells for reduced costs of antibodies and dyes
- > Polygonal gripping zone for improved handling
- > Macroscopic orientation marks facilitate easy orientation
- > Low rim side walls allow for easy access for microinjection
- > Extraordinary planarity supports enhanced optical performance even during temperature shifts

**i** For more information go to [www.eppendorf.com](http://www.eppendorf.com)



Orientation marks (N-O-S-W) for ergonomic handling



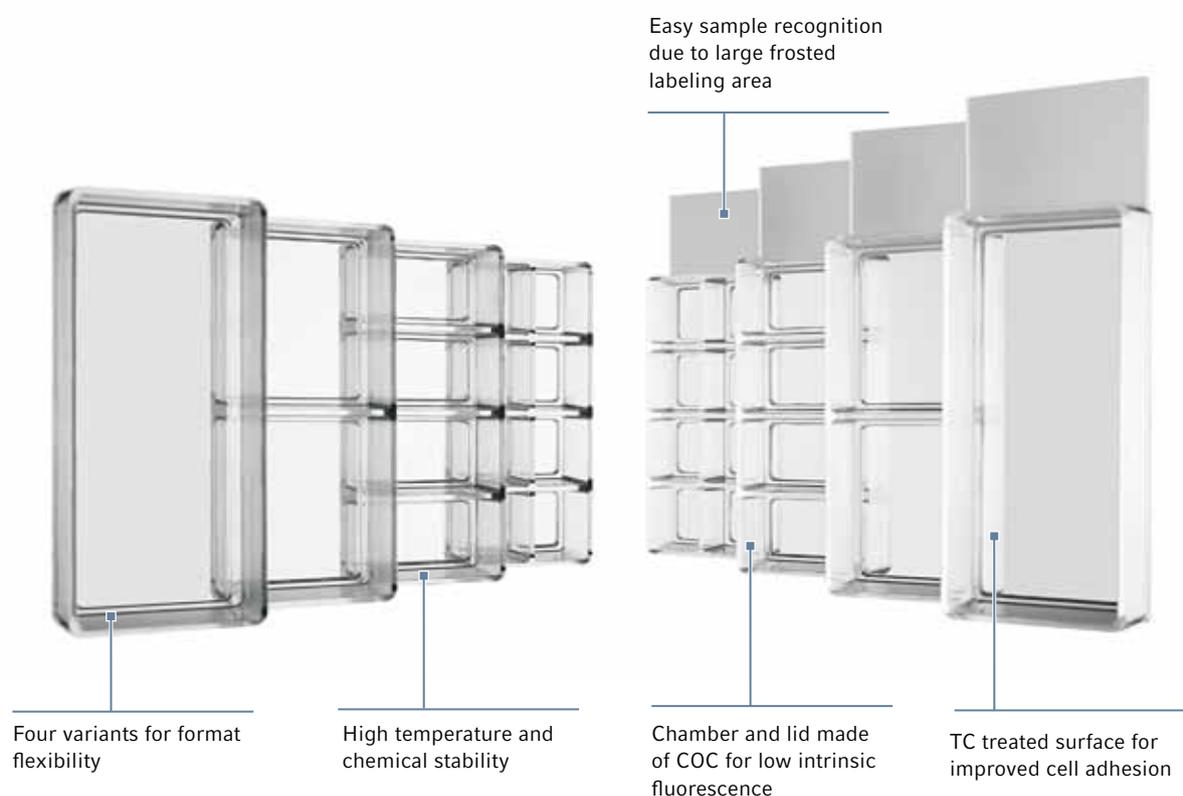
Central cavity for easy concentration of samples in imaging area

**Ordering information**

Description	Order no.	Price
<b>Eppendorf Cell Imaging Dishes</b> , with coverglass bottom, TC treated, sterile, free of detectable pyrogens, RNase and DNase, DNA. Non-cytotoxic.		
35 x 10 mm Cell Imaging Dish 145 $\mu\text{m}$ (1), 2 dishes per bag, 30 pcs.	0030 740.009	POA
35 x 10 mm Cell Imaging Dish 170 $\mu\text{m}$ (1.5), 2 dishes per bag, 30 pcs.	0030 740.017	POA

**i** For more information go to [www.eppendorf.com](http://www.eppendorf.com)

## Cell Imaging Slides and Coverglasses



### Description

Simplify your cell culture and analysis by using Eppendorf Cell Imaging Slides or Cell Imaging Coverglasses at all steps in your workflow. A high chemical resistance of materials facilitate fixation protocols. Tool-free and easy removal of chambers from Cell Imaging Slides and Coverglasses makes working with the Eppendorf Cell Imaging Slides and Coverglasses easy, convenient and reliable.

### Product features

- > Choose between a microscopic slide with 1 mm thickness or a 170  $\mu\text{m}$  coverglass, both providing excellent signal-to-noise ratios in fluorescent staining protocols
- > Facilitated growth of most adherent cell types due to innovative TC treated glass surface
- > Chambers and lids show high chemical resistance, so fixation even with acetone is possible without problems
- > Benefit from easy and tool-free removal of the chambers with minimized glue residues
- > Precise planarity supports high resolution microscopes and autofocus systems

**i** For more information go to [www.eppendorf.com](http://www.eppendorf.com)



Tool-free chamber removal with minimal glue residue for accurate coverslipping



TC treated glass surface for reliable growth of most adherent cell types

#### Ordering information

Description	Order no.	Price
<b>Eppendorf Cell Imaging Slides</b> , TC treated, sterile, free of detectable pyrogens, RNase and DNase, DNA. Non-cytotoxic.		
Cell Imaging Slide with 1 chamber, individually wrapped, 16 pcs.	0030 742.044	POA
Cell Imaging Slide with 2 chambers, individually wrapped, 16 pcs.	0030 742.052	POA
Cell Imaging Slide with 4 chambers, individually wrapped, 16 pcs.	0030 742.060	POA
Cell Imaging Slide with 8 chambers, individually wrapped, 16 pcs.	0030 742.079	POA
<b>Eppendorf Cell Imaging Coverglasses</b> , TC treated, sterile, free of detectable pyrogens, RNase and DNase, DNA. Non-cytotoxic.		
Cell Imaging Coverglass with 1 chamber, individually wrapped, 16 pcs.	0030 742.001	POA
Cell Imaging Coverglass with 2 chambers, individually wrapped, 16 pcs.	0030 742.010	POA
Cell Imaging Coverglass with 4 chambers, individually wrapped, 16 pcs.	0030 742.028	POA
Cell Imaging Coverglass with 8 chambers, individually wrapped, 16 pcs.	0030 742.036	POA

i For more information go to [www.eppendorf.com](http://www.eppendorf.com)



Model	New Brunswick™ Galaxy® 48 R	New Brunswick™ Galaxy® 170 S
Page(s)	396	404
Capacity	48 L	170 L
Dimensions (W x D x H)	48.3 x 47.5 x 64.5 cm	68.6 x 67.8 x 84.3 cm
Dimensions internal (W x D x H)	40.1 x 30.5 x 40.1 cm	53.3 x 44.4 x 69.1 cm
Weight w/o accessories	31.8 kg	89.9 kg
Communication interface	RS-232	RS-232
Display	LCD	LED
Benchtop (B), Under Bench (U), Floor (F) or Stackable (S)	B, U, F, S (x2)	B, U, F, S (x2)
Temperature range	Ambient +4 °C to 50 °C	Ambient +4 °C to 50 °C
Temperature control	± 0.1 °C	± 0.1 °C
Temperature stability at 37 °C	± 0.1 °C	± 0.1 °C
Temperature uniformity	± 0.3 °C	± 0.3 °C
CO <sub>2</sub> range	0.2 – 20 %	0.2 – 20 %
CO <sub>2</sub> control	± 0.1 %	± 0.1 %
CO <sub>2</sub> stability at 5 % CO <sub>2</sub>	± 0.2 %	± 0.2 %
CO <sub>2</sub> uniformity	± 0.1 %	± 0.1 %
0.1 – 19 % O <sub>2</sub> control	optional	
1 – 19 % O <sub>2</sub> control	optional	
1 – 95 % O <sub>2</sub> control	optional	
Access port	standard	standard
BioCommand® software	optional	optional
BMS relay	standard	standard
Copper chamber		
High temperature disinfection (4 hours at 120 °C)	optional	optional
Humidity alert and monitoring package	optional	
Number of shelves	3 (6 optional)	4 (8 optional)
Number of shelving racks	3 (6 optional)	4 (8 optional)
On-board data logging	standard	
Perforated shelves	standard	standard
Sealed inner glass doors		standard
2 split inner doors	optional	
4 split inner doors		optional
8 split inner doors		optional



**New Brunswick™ Galaxy® 170 R**

**400**

170 L

68.6 × 67.8 × 84.3 cm

53.3 × 44.4 × 69.1 cm

89.9 kg

RS-232

LCD

B, U, F, S (x2)

Ambient +4 °C to 50 °C

± 0.1 °C

± 0.1 °C

± 0.3 °C

0.2 – 20 %

± 0.1 %

± 0.2 %

± 0.1 %

optional

optional

optional

standard

optional

standard

optional

optional

optional

4 (8 optional)

8

standard

standard

standard

optional

optional

**New Brunswick™ S41i**

**410**

170 L

83.4 × 73 × 84.8 cm / 32.8 × 28.7 × 33.4 in

69.1 × 44.4 × 53.3 cm

152 kg / 335 lb

Ethernet

Touchscreen

U, F, S (x2)

Ambient +5 °C to 50 °C

± 0.1 °C

± 0.1 °C

±0.25 °C at 37 °C

0.2 – 20 %

± 0.1 %

± 0.2 %

± 0.1 %

standard

standard

standard

1 (2nd optional)

2

standard

standard

standard

# New Brunswick™ Galaxy® 48 R



**i** For more information go to [www.eppendorf.com](http://www.eppendorf.com)

**✂** Ordering information for other voltage options begins on page 484

Manufacturer's recommended retail price.  
All prices excl. VAT. Technical specifications subject to change.



One piece seamless chamber minimizes contamination risk and simplifies cleaning



Integrated, heated, viewing window in outer door allows observation without disturbing cultures

#### Description

Galaxy® 48 R CO<sub>2</sub> Incubator is a mid-sized, 48 liter incubator that is designed to optimize performance in applications that require a higher level of isolation and in small labs! The 48 R series of incubators feature a large backlit display with on screen help menus, control & data logging of temperature, humidity, CO<sub>2</sub>, door openings, alarms, and optional O<sub>2</sub> gases.

#### Product features

- > 48 Liter (1.7 ft<sup>3</sup>) provides mid-sized capacity within a small footprint
- > Options: High Temp. Disinfection (4 hour at 120 °C), O<sub>2</sub> control (e.g. for hyper- or hypoxic studies), 2-split inner glass door; and more (see ordering information)
- > Fanless design offers more usable space and eliminates the fan as a classic, and often repeated source of contamination
- > Six-sided direct heating system provides a uniform incubated environment to gently bathe cells
- > Deep-drawn, easy-to-clean stainless steel chamber without seams or welds
- > Low gas consumption

**i** For more information go to [www.eppendorf.com](http://www.eppendorf.com)

**✂** Ordering information for other voltage options begins on page 484

# New Brunswick™ Galaxy® 48 R

Technical specifications	
<b>Model</b>	<b>New Brunswick™ Galaxy® 48 R</b>
<b>Capacity</b>	48 L
<b>Dimensions (W x D x H)</b>	48.3 x 47.5 x 64.5 cm
<b>Dimensions internal (W x D x H)</b>	40.1 x 30.5 x 40.1 cm
<b>Weight w/o accessories</b>	31.8 kg
<b>Communication interface</b>	RS-232
<b>Display</b>	LCD
<b>Benchtop (B), Under Bench (U), Floor (F) or Stackable (S)</b>	B, U, F, S (x2)
<b>Temperature range</b>	A + 4 °C to 50 °C
<b>Temperature control</b>	± 0.1 °C
<b>Temperature stability at 37 °C</b>	± 0.1 °C
<b>Temperature uniformity</b>	± 0.3 °C
<b>CO<sub>2</sub> range</b>	0.2 – 20 %
<b>CO<sub>2</sub> control</b>	± 0.1 %
<b>CO<sub>2</sub> stability at 5 % CO<sub>2</sub></b>	± 0.2 %
<b>CO<sub>2</sub> uniformity</b>	± 0.1 %
<b>0.1 – 19 % O<sub>2</sub> control</b>	optional
<b>1 – 19 % O<sub>2</sub> control</b>	optional
<b>1 – 95 % O<sub>2</sub> control</b>	optional
<b>Access port</b>	standard
<b>BioCommand® software</b>	optional
<b>BMS relay</b>	standard
<b>Display readout</b>	Temperature and CO <sub>2</sub> level, 72-hour data/chart logger, alarm settings
<b>High temperature disinfection (4 hours at 120 °C)</b>	optional
<b>Humidity alert and monitoring package</b>	optional
<b>Number of shelves</b>	3 (6 optional)
<b>Number of shelving racks</b>	3 (6 optional)
<b>On-board data logging</b>	standard
<b>Perforated shelves</b>	standard

i For more information go to [www.eppendorf.com](http://www.eppendorf.com)

✂ Ordering information for other voltage options begins on page 484

Manufacturer's recommended retail price.  
All prices excl. VAT. Technical specifications subject to change.

**Ordering information**

Description	Order no.	Price
<b>New Brunswick™ Galaxy® 48 R, 48 L</b>		
Standard, UK/HKG	CO48300002	4,450.00 £
1-19 % O <sub>2</sub> Control, UK/HKG	CO48320002	6,042.00 £
High-Temp Disinfection, UK/HKG	CO48310002	5,072.00 £
High-Temp Disinfection, 1-19 % O <sub>2</sub> Control, UK/HKG	CO48330002	6,642.00 £
2-Split Inner Door, UK/HKG	CO48312002	5,725.00 £
High-Temp Disinfection, 0.1-19 % O <sub>2</sub> Control, UK/HKG	CO48310042	7,842.00 £
High-Temp Disinfection, 0.1-19 % O <sub>2</sub> Control, Humidity Package, UK/HKG	CO48310062	9,247.00 £
High-Temp Disinfection, 2-Split Inner Door, 0.1-19 % O <sub>2</sub> Control, UK/HKG	CO48312042	8,493.00 £
High-Temp Disinfection, 2-Split Inner Door, 0.1-19 % O <sub>2</sub> Control, Humidity Package, UK/HKG	CO48312062	9,892.00 £
High-Temp Disinfection, 1-95 % O <sub>2</sub> Control, UK/HKG	CO48310072	7,460.00 £
High-Temp Disinfection, 1-95 % O <sub>2</sub> Control, Humidity Package, UK/HKG	CO48310092	8,858.00 £
High-Temp Disinfection, 2-Split Inner Door, 1-95 % O <sub>2</sub> Control, UK/HKG	CO48312072	8,111.00 £
High-Temp Disinfection, 2-Split Inner Door, 1-95 % O <sub>2</sub> Control, Humidity Package, UK/HKG	CO48312092	9,512.00 £
High-Temp Disinfection, 2-Split Inner Door, 1-19 % O <sub>2</sub> Control, UK/HKG	CO48332002	7,294.00 £
High-Temp Disinfection, 2-Split Inner Door, 1-19 % O <sub>2</sub> Control, Humidity Package, UK/HKG	CO48332012	8,704.00 £

i For more information go to [www.eppendorf.com](http://www.eppendorf.com)

✎ Ordering information for other voltage options begins on page 484

Your local distributor: [www.eppendorf.com/contact](http://www.eppendorf.com/contact)

Eppendorf UK Limited · Stevenage SG1 2FP · United Kingdom · [sales@eppendorf.co.uk](mailto:sales@eppendorf.co.uk) · [www.eppendorf.co.uk](http://www.eppendorf.co.uk)

# New Brunswick™ Galaxy® 170 R



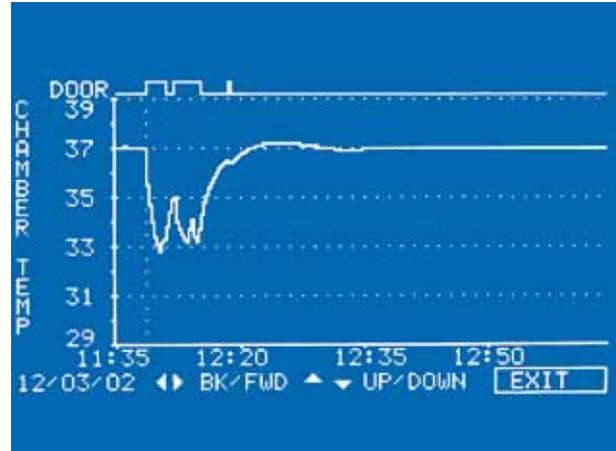
i For more information go to [www.eppendorf.com](http://www.eppendorf.com)

✂ Ordering information for other voltage options begins on page 484

Manufacturer's recommended retail price.  
All prices excl. VAT. Technical specifications subject to change.



Perforated shelves come standard on all Galaxy CO<sub>2</sub> Incubators



Galaxy R Series LC display, standard on Galaxy 170 R and Galaxy 48 R models

### Description

Galaxy® 170 R CO<sub>2</sub> incubators are high-capacity, 170 liter incubators that provide superior quality, outstanding performance and intuitive operation. These models can be conveniently placed on or under the bench or even double stacked, making them ideal for a wide range of specialized and traditional applications wherever incubation is required. Galaxy® 170 R models provide a tremendous amount of usable space that can be optimized with options including High Temp. Disinfection, O<sub>2</sub> control, split inner doors, and more. Galaxy® 170 R incubators feature an integrated controller for simple on-screen programming and data logging.

### Product features

- > Standard features: Sealed inner glass door, reliable IR CO<sub>2</sub> sensor, RS-232 communication port, 25 mm access ports
- > Three O<sub>2</sub> control options (0.1 – 19 %, 1 – 19 %, 1 – 95 %) for hyperoxic or hypoxic studies, also available with split inner doors
- > Further Options: High Temperature Disinfection (4 hour at 120 °C), Copper chamber and interior for optimized protection against contamination, humidity alert package
- > Fanless design offers more usable space and eliminates the fan as a classic, and often repeated source of contamination
- > Six-sided direct heating system provides a uniform incubated environment to gently bathe cells
- > Deep-drawn, easy-to-clean stainless steel chamber eliminates seams or welds and allows for easy disassembly
- > Low gas consumption

i For more information go to [www.eppendorf.com](http://www.eppendorf.com)

✂ Ordering information for other voltage options begins on page 484

# New Brunswick™ Galaxy® 170 R

Technical specifications	
<b>Model</b>	<b>New Brunswick™ Galaxy® 170 R</b>
<b>Capacity</b>	170 L
<b>Dimensions (W x D x H)</b>	68.6 x 67.8 x 84.3 cm
<b>Dimensions internal (W x D x H)</b>	53.3 x 44.4 x 69.1 cm
<b>Weight w/o accessories</b>	89.9 kg
<b>Communication interface</b>	RS-232
<b>Display</b>	LCD
<b>Benchtop (B), Under Bench (U), Floor (F) or Stackable (S)</b>	B, U, F, S (x2)
<b>Temperature range</b>	A + 4 °C to 50 °C
<b>Temperature control</b>	± 0.1 °C
<b>Temperature stability at 37 °C</b>	± 0.1 °C
<b>Temperature uniformity</b>	± 0.3 °C
<b>CO<sub>2</sub> range</b>	0.2 – 20 %
<b>CO<sub>2</sub> control</b>	± 0.1 %
<b>CO<sub>2</sub> stability at 5 % CO<sub>2</sub></b>	± 0.2 %
<b>CO<sub>2</sub> uniformity</b>	± 0.1 %
<b>0.1 – 19 % O<sub>2</sub> control</b>	optional
<b>1 – 19 % O<sub>2</sub> control</b>	optional
<b>1 – 95 % O<sub>2</sub> control</b>	optional
<b>Access port</b>	standard
<b>BioCommand® software</b>	optional
<b>BMS relay</b>	standard
<b>Copper chamber</b>	optional
<b>Display readout</b>	Temperature and CO <sub>2</sub> level, 72-hour data/chart logger, alarm settings
<b>High temperature disinfection (4 hours at 120 °C)</b>	optional
<b>Humidity alert and monitoring package</b>	optional
<b>Number of shelves</b>	4 (8 optional)
<b>Number of shelving racks</b>	8
<b>On-board data logging</b>	standard
<b>Perforated shelves</b>	standard
<b>Sealed inner glass doors</b>	standard
<b>4 split inner doors</b>	optional
<b>8 split inner doors</b>	optional

## Ordering information

Description	Order no.	Price
<b>New Brunswick™ Galaxy® 170 R, 170 L</b>		
230 V/50/60 Hz, Standard, UK/HKG	CO17301002	6,272.00 £
230 V/50/60 Hz, High-Temp Disinfection, UK/HKG	CO17311002	6,993.00 £
230 V/50/60 Hz, 1-19 % O <sub>2</sub> Control, UK/HKG	CO17321002	7,560.00 £
230 V, High-Temp Disinfection, 1-95 % O <sub>2</sub> Control, UK/HKG	CO17331002	8,507.00 £
230 V/50/60 Hz, High-Temp Disinfection, 4-Split Inner Door, 1-19 % O <sub>2</sub> Control, UK/HKG	CO17334002	9,512.00 £
230 V/50/60 Hz, 4-Split Inner Door, UK/HKG	CO17304002	7,274.00 £

✎ Ordering information for other voltage options begins on page 484

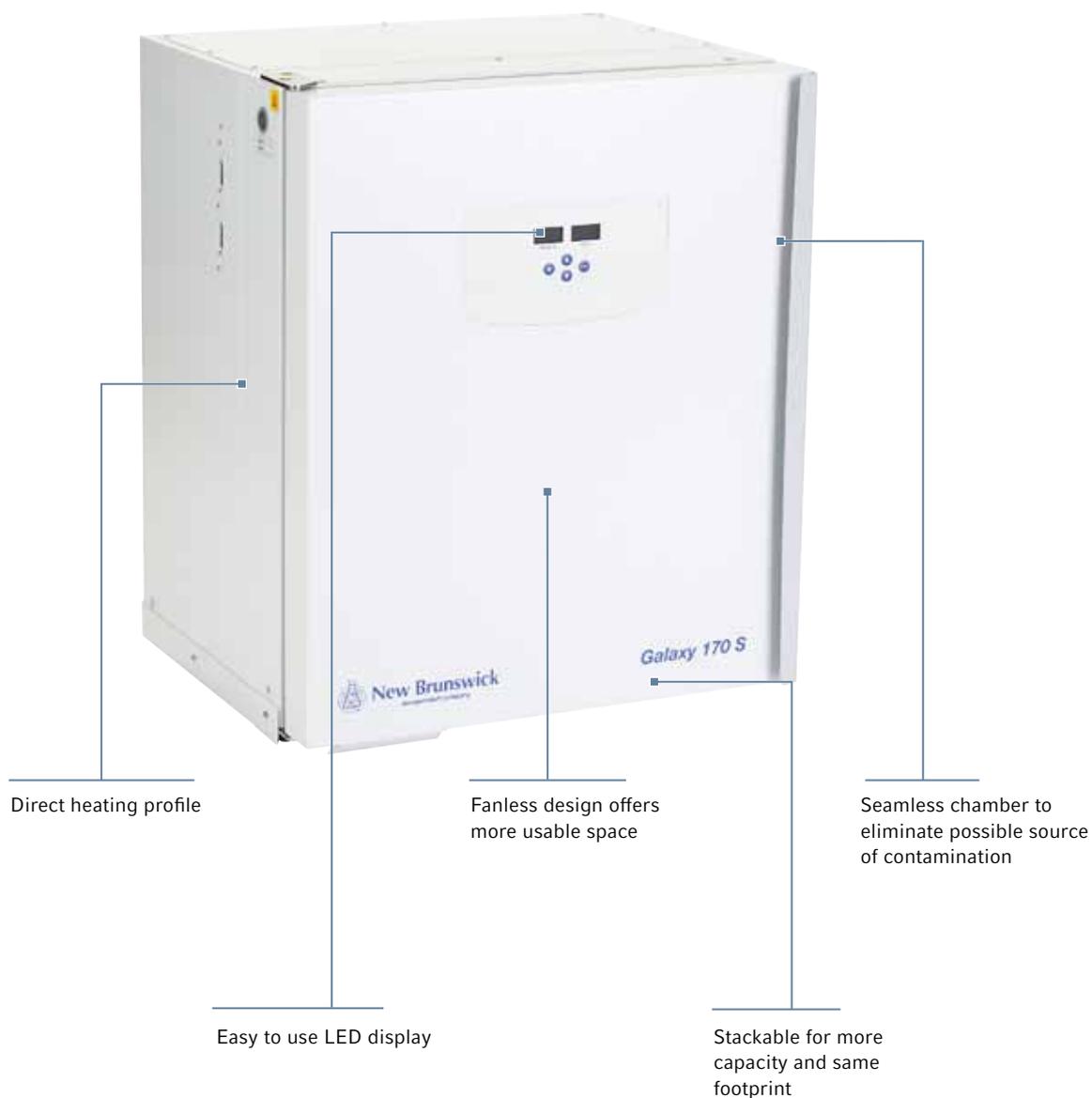
Manufacturer's recommended retail price.  
All prices excl. VAT. Technical specifications subject to change.

**Ordering information**

Description	Order no.	Price
230 V/50/60 Hz, 8-Split Inner Door, UK/HKG	CO17308002	7,775.00 £
230 V/50/60 Hz, 4-Split Inner Door, 1-19 % O <sub>2</sub> Control, UK/HKG	CO17324002	8,562.00 £
230 V/50/60 Hz, 8-Split Inner Door, 1-19 % O <sub>2</sub> Control, UK/HKG	CO17328002	9,061.00 £
230 V/50/60 Hz, High-Temp Disinfection, Humidity Package, UK/HKG	CO17311012	8,471.00 £
230 V/50/60 Hz, High-Temp Disinfection, Copper Chamber, UK/HKG	CO17311022	9,927.00 £
230 V/50/60 Hz, High-Temp Disinfection, Humidity Package, Copper Chamber, UK/HKG	CO17311032	11,400.00 £
230 V/50/60 Hz, High-Temp Disinfection, 0.1-19 % O <sub>2</sub> Control, UK/HKG	CO17311042	9,450.00 £
230 V/50/60 Hz, High-Temp Disinfection, 1-95 % O <sub>2</sub> Control, UK/HKG	CO17311072	9,839.00 £
230 V/50/60 Hz, High-Temp Disinfection, 4-Split Inner Door, Humidity Package, UK/HKG	CO17314012	9,476.00 £
230 V/50/60 Hz, High-Temp Disinfection, 4-Split Inner Door, Copper Chamber, UK/HKG	CO17314022	10,930.00 £
230 V/50/60 Hz, High-Temp Disinfection, 4-Split Inner Door, Humidity Package, Copper Chamber, UK/HKG	CO17314032	12,400.00 £
230 V/50/60 Hz, High-Temp Disinfection, 4-Split Inner Door, 0.1-19 % O <sub>2</sub> Control, UK/HKG	CO17314042	10,440.00 £
230 V/50/60 Hz, High-Temp Disinfection, 4-Split Inner Door, 0.1-19 % O <sub>2</sub> Control, Copper Chamber, UK/HKG	CO17314052	13,350.00 £
230 V/50/60 Hz, High-Temp Disinfection, 4-Split Inner Door, 0.1-19 % O <sub>2</sub> Control, Humidity Package, UK/HKG	CO17314062	11,110.00 £
230 V/50/60 Hz, High-Temp Disinfection, 4-Split Inner Door, 1-95 % O <sub>2</sub> Control, UK/HKG	CO17314072	10,850.00 £
230 V/50/60 Hz, High-Temp Disinfection, 4-Split Inner Door, 1-95 % O <sub>2</sub> Control, Humidity Package, UK/HKG	CO17314092	11,490.00 £
230 V/50/60 Hz, High-Temp Disinfection, 4-Split Inner Door, 1-95 % O <sub>2</sub> Control, Copper Chamber, UK/HKG	CO17314082	13,750.00 £
230 V/50/60 Hz, High-Temp Disinfection, 8-Split Inner Door, UK/HKG	CO17318002	8,497.00 £
230 V/50/60 Hz, High-Temp Disinfection, 8-Split Inner Door, Humidity Package, UK/HKG	CO17318012	9,972.00 £
230 V/50/60 Hz, High-Temp Disinfection, 8-Split Inner Door, Humidity Package, Copper Chamber, UK/HKG	CO17318032	12,900.00 £
230 V/50/60 Hz, High-Temp Disinfection, 8-Split Inner Door, 0.1-19 % O <sub>2</sub> Control, UK/HKG	CO17318042	10,940.00 £
230 V/50/60 Hz, High-Temp Disinfection, 8-Split Inner Door, 1-95 % O <sub>2</sub> Control, UK/HKG	CO17318072	11,330.00 £
230 V/50/60 Hz, High-Temp Disinfection, 1-19 % O <sub>2</sub> Control, Humidity Package, UK/HKG	CO17331012	9,980.00 £
230 V/50/60 Hz, High-Temp Disinfection, 1-19 % O <sub>2</sub> Control, Copper Chamber, UK/HKG	CO17331022	11,430.00 £
230 V/50/60 Hz, High-Temp Disinfection, 1-19 % O <sub>2</sub> Control, Humidity Package, Copper Chamber, UK/HKG	CO17331032	12,910.00 £
230 V/50/60 Hz, High-Temp Disinfection, 4-Split Inner Door, 1-19 % O <sub>2</sub> Control, Humidity Package, UK/HKG	CO17334012	10,990.00 £
230 V/50/60 Hz, High-Temp Disinfection, 4-Split Inner Door, 1-19 % O <sub>2</sub> Control, Copper Chamber, UK/HKG	CO17334022	12,430.00 £
230 V/50/60 Hz, High-Temp Disinfection, 4-Split Inner Door, 1-19 % O <sub>2</sub> Control, Humidity Package, Copper Chamber, UK/HKG	CO17334032	13,910.00 £
230 V/50/60 Hz, High-Temp Disinfection, 8-Split Inner Door, 1-19 % O <sub>2</sub> Control, UK/HKG	CO17338002	10,020.00 £
230 V/50/60 Hz, High-Temp Disinfection, 8-Split Inner Door, 1-19 % O <sub>2</sub> Control, Humidity Package, UK/HKG	CO17338012	11,670.00 £
230 V/50/60 Hz, High-Temp Disinfection, 8-Split Inner Door, 1-19 % O <sub>2</sub> Control, Humidity Package, Copper Chamber, UK/HKG	CO17338032	14,420.00 £
230 V/50/60 Hz, High-Temp Disinfection, 4-Split Inner Door, UK/HKG	CO17314002	7,996.00 £

Ordering information for other voltage options begins on page 484

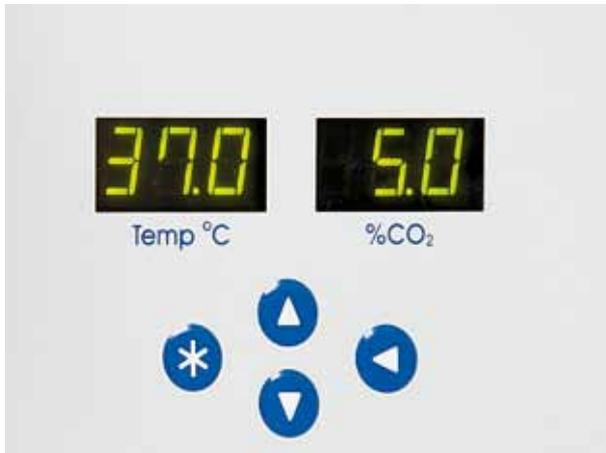
# New Brunswick™ Galaxy® 170 S



**i** For more information go to [www.eppendorf.com](http://www.eppendorf.com)

**⚡** Ordering information for other voltage options begins on page 484

Manufacturer's recommended retail price.  
All prices excl. VAT. Technical specifications subject to change.



Galaxy® S Series LED Display, standard on 170 S



Optional split-inner doors provide easy access to your samples without completely opening the chamber

### Description

Galaxy® 170 S CO<sub>2</sub> incubators are high-capacity, 170 liter incubators that provide superior quality, outstanding performance, and intuitive operation. These models can be conveniently placed on or under the bench or even double stacked, making them ideal for a wide range of specialized and traditional applications wherever incubation is required. Galaxy® 170 S models provide a tremendous amount of usable space that can be optimized with options including High Temperature Disinfection, split inner doors, and more.

### Product features

- > Standard features: Sealed inner glass door, reliable IR CO<sub>2</sub> sensor, RS-232 communication port, 25 mm access ports
- > High Temperature Disinfection (4 hour at 120 °C)
- > Available with split inner doors
- > Fanless design offers more usable space and eliminates the fan as a classic, and often repeated source of contamination
- > Six-sided direct heating system provides a uniform incubated environment to gently bathe cells
- > Deep-drawn, easy-to-clean stainless steel chamber eliminates seams or welds, removing potential sources of contamination
- > Low gas consumption

**i** For more information go to [www.eppendorf.com](http://www.eppendorf.com)

**✂** Ordering information for other voltage options begins on page 484

Your local distributor: [www.eppendorf.com/contact](http://www.eppendorf.com/contact)  
Eppendorf UK Limited · Stevenage SG1 2FP · United Kingdom · [sales@eppendorf.co.uk](mailto:sales@eppendorf.co.uk) · [www.eppendorf.co.uk](http://www.eppendorf.co.uk)

# New Brunswick™ Galaxy® 170 S

Technical specifications	
<b>Model</b>	<b>New Brunswick™ Galaxy® 170 S</b>
<b>Capacity</b>	170 L
<b>Dimensions (W x D x H)</b>	68.6 x 67.8 x 84.3 cm
<b>Dimensions internal (W x D x H)</b>	53.3 x 44.4 x 69.1 cm
<b>Weight w/o accessories</b>	89.9 kg
<b>Communication interface</b>	RS-232
<b>Display</b>	LED
<b>Benchtop (B), Under Bench (U), Floor (F) or Stackable (S)</b>	B, U, F, S (x2)
<b>Temperature range</b>	A +4 °C to 50 °C
<b>Temperature control</b>	± 0.1 °C
<b>Temperature stability at 37 °C</b>	± 0.1 °C
<b>Temperature uniformity</b>	± 0.3 °C
<b>CO<sub>2</sub> range</b>	0.2 – 20 %
<b>CO<sub>2</sub> control</b>	± 0.1 %
<b>CO<sub>2</sub> stability at 5 % CO<sub>2</sub></b>	± 0.2 %
<b>CO<sub>2</sub> uniformity</b>	± 0.1 %
<b>Access port</b>	standard
<b>BioCommand® software</b>	optional
<b>BMS relay</b>	standard
<b>Display readout</b>	Temperature and CO <sub>2</sub> level
<b>High temperature disinfection (4 hours at 120 °C)</b>	optional
<b>Internal sealed power</b>	optional
<b>Number of shelves</b>	4 (8 optional)
<b>Number of shelving racks</b>	4 (8 optional)
<b>Perforated shelves</b>	standard
<b>Sealed inner glass doors</b>	standard
<b>4 split inner doors</b>	optional
<b>8 split inner doors</b>	optional

i For more information go to [www.eppendorf.com](http://www.eppendorf.com)

✂ Ordering information for other voltage options begins on page 484

**Ordering information**

Description	Order no.	Price
<b>New Brunswick™ Galaxy® 170 S, 170 L</b>		
230 V/50/60 Hz, Standard, UK/HKG	CO17101002	4,829.00 £
230 V/50/60 Hz, Standard, 4-Split Inner Door, UK/HKG	CO17104002	5,832.00 £
230 V/50/60 Hz, High-Temp Disinfection, UK/HKG	CO17111002	5,208.00 £
230 V/50/60 Hz, High-Temp Disinfection, 4-Split Inner Door, UK/HKG	CO17114002	6,209.00 £

i For more information go to [www.eppendorf.com](http://www.eppendorf.com)

✎ Ordering information for other voltage options begins on page 484

## CO<sub>2</sub> Incubators Accessories

### CO<sub>2</sub> Incubators Accessories

Description	Order no.	Price
CO <sub>2</sub> supply line filters (2)	P0628-5020	76.40 £
In-line pressure regulator, for all gases	P0628-5030	116.00 £
CO <sub>2</sub> cylinder auto-changeover controller	P0628-5000	984.00 £
Galaxy® CO <sub>2</sub> gas analyzer	P0628-6150	1,718.00 £
Galaxy® CO <sub>2</sub> and O <sub>2</sub> gas analyzer	P0628-6831	1,917.00 £
Galaxy® CO <sub>2</sub> , O <sub>2</sub> , and RH gas analyzer	P0628-7890	2,618.00 £
Temperature probe, 5 mm tip for gas analyzer	P0628-7881	72.80 £
Temperature probe, 100mm tip for gas analyzer	P0628-7880	175.00 £
Two stage CO <sub>2</sub> regulator	P0628-5010	364.00 £
Two stage N <sub>2</sub> regulator	P0628-7220	364.00 £
Two stage O <sub>2</sub> regulator	P0628-7222	521.00 £

### Galaxy® 48 R shelves, pans and stacking stand

Description	Order no.	Price
Multi-position shelf rack	P0628-5100	301.00 £
Additional shelf, perforated	P0628-5080	84.90 £
Lower stacking frame, with casters	P0628-5090	318.00 £
Upper stacking frame	P0628-6720	165.00 £
Lower and upper stacking frame, with casters	P0628-5091	471.00 £
Under bench stand with feet, 200 mm	P0628-6730	292.00 £
Under bench stand with castors, 200 mm	P0628-6731	243.00 £
2 split inner doors	P0628-6741	528.00 £

i For more information go to [www.eppendorf.com](http://www.eppendorf.com)

Manufacturer's recommended retail price.  
All prices excl. VAT. Technical specifications subject to change.

**Galaxy® 170 R / Galaxy® 170 S, shelves, pans and stacking stand**

Description	Order no.	Price
<b>Multi-position shelf rack (standard on Galaxy® 170 R, optional on Galaxy® 170 S)</b>	P0628-6390	196.00 £
<b>Additional shelf, perforated (2)</b>	6710 859.009	278.00 £
<b>Lower and upper stacking frame, with casters</b>	P0628-6270	499.00 £
<b>Lower stacking frame, with casters</b>	P0628-6490	225.00 £
<b>Upper stacking frame</b>	P0628-7260	336.00 £
<b>4 split inner doors</b>	P0628-6780	973.00 £
<b>8 split inner doors</b>	P0628-6781	1,459.00 £

## New Brunswick™ S41i



### Description

The New Brunswick S41i is the only CO<sub>2</sub> incubator with an Eppendorf shaker inside. The S41i precisely controls temperature, shaking speed, and CO<sub>2</sub>, providing the ideal environment for growing mammalian and stem cells in culture. Accepts flasks up to 4 liters. Standard perforated shelf allows for static incubation at the same time as shaking and a second static shelf can be added as an option. The world famous triple eccentric drive provides stable, uniform and vibration free motion – connected to the shaking platform by four encapsulated support rods. The drive mechanism located below the chamber ensuring that heat generated by the drive does not affect the critical environment within the chamber. The intuitive touch screen display and controls allows you to operate and monitor performance.

For ordering information, options and accessories see page 414-453 (shaker section)

### Product features

- > Temperature range from 4 °C above ambient to 50 °C
- > Shaking speeds between 25 – 400 rpm (±1 % full scale), 25 – 300 rpm if stacked, provides versatility for culturing a wide range of cell types.
- > Large 35.6 x 61 cm (14 in x 24 in) platform accommodates flasks up to 4 liters providing flexibility with your cultures
- > Single or double stacked for increased capacity
- > Inner and outer door saves valuable gasses while maintaining the perfect environment for your cells
- > Standard High Temperature Disinfection provides a sterile surface protecting your cells
- > Intuitive touch screen controls provides for precise control of the culturing environment
- > Perforated shelf allows for static incubation at the same time as shaking

i For more information go to [www.eppendorf.com](http://www.eppendorf.com)

Manufacturer's recommended retail price.  
 All prices excl. VAT. Technical specifications subject to change.

# BioCommand® SFI Automated Data Logging Software



Graphical representation of the output

## Description

The BioCommand SFI software package is designed specifically for standard laboratory equipment including shakers, CO<sub>2</sub> incubators and ULT-Freezers. The software package allows you to track key operational information such as time, temperature, shaking speed, CO<sub>2</sub> concentrations and humidity.

## Product features

- > Track the operational parameters of your choice with the option to design and save templates
- > Monitor multiple units from the same PC
- > Trend and archive critical data including temperature, agitation speed and gas concentration for up to 32 units simultaneously
- > Provides indications of alarm conditions identified by the product
- > Ability to email or text message alarm events

## Ordering information

Description	Order no.	Price
<b>BioCommand® SFI Automated Data Logging Software</b>		
CO <sub>2</sub> incubator package	M1291-1001	POA
CO <sub>2</sub> incubator cable, 4.5 m	P0620-7012	116.00 £
RS-232 to USB converter, 4-port	P0460-7751	664.00 £
RS-232 to USB converter, 8-port	P0460-7750	664.00 £

i For more information go to [www.eppendorf.com](http://www.eppendorf.com)

# CO<sub>2</sub> Incubator Performance Plans

## Preventive Maintenance

CO<sub>2</sub> Incubator Performance Plans components include a choice of preventive maintenance protocols designed to check, validate and to promote continuous and stable incubator performance, optimizing instrument conformity with programmed culturing parameters.

## Certification Service

Installation Qualification (IQ) and Operational Qualification (OQ) certification services ensure your Quality Management requirements are fulfilled, providing you with qualified assurance that your CO<sub>2</sub> incubator is functioning correctly, in accordance with manufacturers' specifications.

Performance Plans	ESSENTIAL CHECK
<b>Order Number</b>	0082 060.003
<b>External Checks &amp; Maintenance</b>	
Check installation environment	■
Check electrical / gas supply and fittings	
Replace in-line gas filter(s) and auto-zero filter	
Check door seals and door hinges	
<b>Internal Equipment &amp; Fittings</b>	
Check condition of all chamber gas, temperature, humidity sensors	
Check security of incubator shelf / shelves and racking system	
Check sensor covers are present and undamaged	
Check condition of humidity trays	
Check condition of wiring system, PCB's, display & controller	
Check alarms functionality	
<b>Validation &amp; Metrology</b>	
Validation and adjustment of operating parameters to within Eppendorf specifications	■
<b>Documentation</b>	
Issue preventive maintenance Check List (signed document)	■
Dated service sticker to CO <sub>2</sub> incubator to confirm Eppendorf service	■
Provide IQ Report and Certificate	
Provide OQ Report and Certificate	
<b>Supporting Information</b>	
Contract period	one year
Number of routine preventive service visits included	one
Cost of repairs/parts replacement outside scope of preventive maintenance visit (where Eppendorf product warranty has expired)	not included
<b>Order number for combined Installation &amp; Operational Qualification Service (IQ/OQ):</b>	
<b>0082 060.009</b>	

<sup>1)</sup> We offer a discount on the cost of parts, labor and travel;<sup>2)</sup> Please contact your local Eppendorf Service representative for details of discounts and/or any potential additional charges applying. Additionally, if you require a Customized Service we will be very pleased to discuss your requirements.

**epServices**  
for premium performance

**Service features**

- > Eppendorf quality standards
- > Certified service reports

**Long-term benefits**

- > Reliable results over an extended period of time
- > Improves consistency of culturing

For more information go to [www.eppendorf.com/epServices](http://www.eppendorf.com/epServices).  
In selected countries only.



ADVANCED MAINTENANCE	PREMIUM SERVICE	Installation Qualification (IQ)	Operational Qualification (OQ)
0082 060.004	0082 060.005	0082 060.007	0082 060.008
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>		
<input type="checkbox"/>	<input type="checkbox"/>		
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>
one year	one year	n/a	n/a
one	one	n/a	n/a
not included	discount <sup>1)</sup> on parts, labor & travel time <sup>2)</sup>	n/a	n/a



Model	Innova® 40/40R	New Brunswick™ S41i	Innova® 42/42R
Page(s)	416	418	420
Dimensions (W × D × H)	55.9 × 76.2 × 61 cm / 22 × 30 × 24 in	83.4 × 73 × 84.8 cm / 32.8 × 28.7 × 33.4 in	62 × 75.4 × 82 cm / 32.3 × 29.7 × 32.3 in
External height (with lid/door open)	101.6 cm (40 in)		
External depth (with lid/door open)		144.8 cm (57 in)	131 cm (51.6 in)
Weight w/o accessories	60 kg / 133 lb	152 kg / 335 lb	99 kg / 217 lb
Audible and visual alarms	yes	yes	yes
Available program modes	<ul style="list-style-type: none"> <li>&gt; Constant speed and temperature</li> <li>&gt; Programmable multi-steps</li> <li>&gt; RS-232 control</li> </ul>	<ul style="list-style-type: none"> <li>&gt; Constant speed and temperature</li> </ul>	<ul style="list-style-type: none"> <li>&gt; Constant speed and temperature</li> <li>&gt; Programmable multi-steps</li> <li>&gt; RS-232 control</li> </ul>
Balanced drive mechanism	Triple-eccentric with permanently lubricated ball bearings	Triple-eccentric with permanently lubricated ball bearings	Triple-eccentric with permanently lubricated ball bearings
cETLus and CE marked	yes	yes	yes
Benchtop (B), Under Bench (U), Floor (F) or Stackable (S)	B	U, F, S (x2)	B, U, S (x2)
Memory	Non volatile with automatic power failure restart	Non volatile with automatic power failure restart	Non volatile with automatic power failure restart
Motor type	Solid state, DC brushless motor	Solid state, DC brushless motor	Solid state, DC brushless motor
Platform size	46×46 cm (18×18 in)	36×61 cm (14×24 in)	46×46 cm (18×18 in)
Slide out platform			
Space saving glide up doors			
Speed range <sup>1)</sup>	25 – 500 rpm	25 – 400 rpm	25 – 400 rpm; 25 – 300 rpm when stacked and using flasks larger than 500 mL
Steps per program	15		15
Stored programs	4		4
Temperature range	5 °C above ambient to 80 °C. (Innova 40R: 15 °C below ambient to 80 °C)	4 °C above ambient to 50 °C	5 °C above ambient to 80 °C. (Innova 42R: 20 °C below ambient to 80 °C)
Timer	0.01 – 99.59 h, continuous	Continuous	0.01 – 99.59 h, continuous

<sup>1)</sup> Baffled flasks will reduce maximum speed.



Innova® 43/43R	Innova® 44/44R	I26/I26R	Excella® E24/E24R	Excella® E25/E25R
<b>422</b>	<b>424</b>	<b>426</b>	<b>428</b>	<b>430</b>
115.6 × 81.3 × 103.1 cm / 45.5 × 20 × 40.6 in	135 × 87.3 × 66 cm / 53.1 × 33.2 × 78 in	128.3 × 77 × 70 cm / 50.5 × 30.3 × 27.6 in	56 × 76.2 × 61 cm / 22 × 30 × 24 in	127 × 77 × 105.9 cm / 50 × 30.5 × 41.7 in
165.1 cm (65 in)	119.3 cm (47 in)	125.4 cm (49.4 in)	101.6 cm (40 in)	165.1 cm (65 in)
202 kg / 445 lb	238 kg / 525 lb	168 kg / 370 lb	60 kg / 133 lb	171 kg / 377 lb
yes	yes		yes	yes
> Constant speed and temperature > Programmable multi-steps > RS-232 control	> Constant speed and temperature > Programmable multi-steps > RS-232 control	> Constant speed and temperature > Timed shaking	> Constant speed and temperature > Timed shaking	> Constant speed and temperature > Timed shaking
Triple-eccentric with permanently lubricated ball bearings	Triple-eccentric with permanently lubricated ball bearings	Triple-eccentric with permanently lubricated ball bearings	Heavy-duty with permanently lubricated ball bearings	Heavy-duty with automatic power failure restart
yes	yes		yes	yes
F	F, S (x3)	F, S (x3)	B	F
Non volatile with automatic power failure restart	Non volatile with automatic power failure restart	Non volatile with automatic power failure restart	Non volatile with automatic power failure restart	Non volatile with automatic power failure restart
Solid state, DC brushless motor	Solid state, DC brushless motor	Solid state, DC brushless motor	Solid state, DC brushless motor	Solid state, DC brushless motor
76×46 cm (30×18 in)	76×46 cm (30×18 in)	76×46 cm (30×18 in)	46×46 cm (18×18 in)	76×46 cm (30×18 in)
	yes	yes		
	yes			
25 – 500 at 2.5 cm orbit; 25 – 300 rpm with 5.1 cm orbit	25 – 400 rpm with 2.5 cm orbit; 25 – 300 rpm with 5.1 cm orbit or 2 stacked units; 25 – 250 rpm with 3 stacked units	25 – 400 rpm with 1 unit; 25 – 300 rpm with 2 stacked units; 25 – 250 rpm with 3 stacked units	50 – 400 rpm	50 – 400 rpm
15	15			
4	4			
5 °C above ambient to 80 °C. (Innova 43R: 20 °C below ambient to 80 °C)	5 °C above ambient to 80 °C. (Innova 44R: 20 °C below ambient to 80 °C)	5 °C above ambient to 60 °C. (I26R: 20 °C below ambient to 80 °C)	7 °C above ambient to 60 °C. (Excella 24R: 15 °C below ambient to 60 °C)	7 °C above ambient to 60 °C. (Excella 25R: 15 °C below ambient to 60 °C)
0.01 – 99.59 h, continuous	0.01 – 99.59 h, continuous	0.1 – 99.9 h, continuous	0.01 – 99.9 h	0.1 – 99.9 h

# New Brunswick™ Innova® 40/40R



## Product features

- > Exceptionally quiet operation provides a favorable work environment
- > Triple-eccentric counterbalanced drive in cast iron housing provides vibration and trouble free operation for years
- > Compact benchtop model – fits easily on the bench and holds flasks up to 3 L
- > Clear cover allows easy viewing of the cultures and lifts easily to access all samples
- > Versatile accessory platform (sold separately) accommodates flasks up to 3 L as well as test tube racks and Microplate holders
- > Certified. Meets cETL, UL, CSA and CE standards

## Description

The Innova 40 incubated and 40R incubated and refrigerated benchtop shakers provide years of dependable operation. The cast iron Eppendorf triple-eccentric counterbalanced drive is specifically designed to support high-speed applications and heavy workloads. Innova 40 incubated shakers provide very broad temperature capabilities for culturing a wide variety of organisms in flasks up to 3 liters. Refrigeration module is built into the Innova 40R.

Technical specifications		
Model	Innova® 40	Innova® 40R
External height (with lid/door open)	101.6 cm (40 in)	101.6 cm (40 in)
Timer	0.01 – 99.59 h, continuous	0.01 – 99.59 h, continuous
Dimensions (W × D × H)	55.9 × 76.2 × 61 cm / 22 × 30 × 24 in	55.9 × 76.2 × 61 cm / 22 × 30 × 24 in
Weight w/o accessories	60.3 kg / 133 lb	79.4 kg / 133 lb
Temperature range	Ambient +5 °C to 80 °C	15 °C below ambient to 80 °C (min. 4 °C)
Temperature uniformity	±0.25 °C at 37 °C	±0.25 °C at 37 °C
Available program modes	<ul style="list-style-type: none"> <li>&gt; Constant speed and temperature</li> <li>&gt; Programmable multi-steps</li> <li>&gt; RS-232 control</li> </ul>	<ul style="list-style-type: none"> <li>&gt; Constant speed and temperature</li> <li>&gt; Programmable multi-steps</li> <li>&gt; RS-232 control</li> </ul>
Memory	Non volatile with automatic power failure restart	Non volatile with automatic power failure restart
Motor type	Solid state, DC brushless motor	Solid state, DC brushless motor
Orbit	1.9/2.5 cm (0.75/1 in)	1.9/2.5 cm (0.75/1 in) cm
Platform size	46×46 cm (18×18 in)	46×46 cm (18×18 in)
Speed range <sup>1)</sup>	25 – 500 rpm	25 – 500 rpm
Multi-step programming	yes	yes
Steps per program	15	15
Stored programs	4	4

<sup>1)</sup> Baffled flasks will reduce maximum speed.

**Ordering information**

Description	Order no.	Price
<b>New Brunswick™ Innova® 40</b>		
230 V/50 Hz, orbit diameter 1.9 cm (3/4 in)	M1299-0082	7,577.00 £
230 V/50 Hz, orbit diameter 2.5 cm (1 in)	M1299-0092	7,577.00 £
<b>New Brunswick™ Innova® 40R</b>		
230 V/50 Hz, orbit diameter 1.9 cm (3/4 in)	M1299-0086	8,889.00 £
230 V/50 Hz, orbit diameter 2.5 cm (1 in)	M1299-0096	8,889.00 £
<b>Remote alarm</b>	M1320-8029	199.00 £
<b>Drip pan</b> , for universal platform M1250-9902	M1250-9906	189.00 £
<b>Interchangeable platforms for Innova® 2100/40/40R/42/42R, Excella® E5/E24/E24R, 45.7 × 45.7 cm, phenolic resin unless otherwise stated</b>		
Universal platform	M1250-9902	699.00 £
50 mL Erlenmeyer flask dedicated platform	M1194-9903	914.00 £
125 mL Erlenmeyer flask dedicated platform	M1194-9904	779.00 £
250 mL Erlenmeyer flask dedicated platform	M1194-9905	807.00 £
500 mL Erlenmeyer flask dedicated platform	M1194-9906	779.00 £
1 L Erlenmeyer flask dedicated platform	M1194-9907	746.00 £
2 L Erlenmeyer flask dedicated platform	M1194-9908	746.00 £
2.8 L Fernbach flask dedicated platform	M1233-9932	766.00 £
Sticky pad platform, sticky pads sold separately	M1250-9903	524.00 £
<b>Quick-change platform kit</b> , enables platform attachment without tools	M1192-9901	421.00 £
<b>Utility carrier</b> , holds glassware between rubber-cushioned cross bars	M1194-9909	658.00 £
<b>Utility tray</b> , with non-skid rubber surface	M1194-9910	599.00 £
<b>Rod kit</b> , for utility carrier (one additional rod)	M1194-9923	205.00 £

✎ Ordering information for other voltage options begins on page 484

# New Brunswick™ S41i



Glass inner door allows viewing of the cultures without compromising sample and environmental integrity

Easy-to-clean seamless stainless steel chamber eliminates a potential source of contamination

Removable shelf lets you simultaneously shake suspension cells and incubate adherent cells under the same conditions

World famous triple eccentric drive provides stable, uniform and vibration free motion – connected to the shaking platform by four encapsulated rods, it's located below the chamber ensuring that heat generated by the drive does not affect the critical environment within the chamber

The advanced and intuitive touch screen controls not only provides a clear and accurate determination of the conditions your cells are exposed to but allows you to track performance over time as well as many additional features and functions



### Description

The New Brunswick S41i is the only CO<sub>2</sub> incubator with an Eppendorf shaker inside. The S41i precisely controls temperature, shaking speed, and CO<sub>2</sub>, providing the ideal environment for growing mammalian and stem cells in culture. Accepts flasks up to 4 liters. Standard perforated shelf allows for static incubation at the same time as shaking and a second static shelf can be added as an option. The world famous triple eccentric drive provides stable, uniform and vibration free motion – connected to the shaking platform by four encapsulated support rods. The drive mechanism located below the chamber ensuring that heat generated by the drive does not affect the critical environment within the chamber. The intuitive touch screen display and controls allows you to operate and monitor performance.

### Applications

- > Culturing of suspension cells requiring gentle agitation
- > Incubating adherent cells on the shelf included with the unit: adding a 2nd static shelf and using the shaking platform as a 3rd shelf
- > Adherent cells such as Stem cells that require both incubation and periodic gentle shaking

### Product features

- > Temperature range from 4 °C above ambient to 50 °C
- > Shaking speeds between 25 – 400 rpm, 25 – 300 rpm if stacked, provides versatility for culturing a wide range of cell types.
- > Large 35.6 x 61 cm (14 in x 24 in) platform accommodates flasks up to 4 liters providing flexibility with your cultures
- > Single or double stacked for increased capacity
- > Inner and outer door saves valuable gasses while maintaining the perfect environment for your cells
- > Standard High Temperature Disinfection provides a sterile surface protecting your cells
- > Intuitive touch screen controls provides for precise control of the culturing environment
- > Perforated shelf allows for static incubation at the same time as shaking

i For more information go to [www.eppendorf.com](http://www.eppendorf.com)

# New Brunswick™ S41i

Technical specifications	
<b>Model</b>	<b>New Brunswick™ S41i</b>
<b>Capacity</b>	170 L
<b>External depth (with lid/door open)</b>	144.8 cm (57 in)
<b>Dimensions internal (W x D x H)</b>	69.1 x 44.4 x 53.3 cm
<b>Display</b>	Touchscreen
<b>Timer</b>	Continuous
<b>Dimensions (W x D x H)</b>	83.4 x 73 x 84.8 cm / 32.8 x 28.7 x 33.4 in
<b>Weight w/o accessories</b>	152 kg / 335 lb
<b>Temperature range</b>	A + 4 °C to 50 °C
<b>Temperature control</b>	± 0.1 °C
<b>Temperature stability at 37 °C</b>	± 0.1 °C
<b>CO<sub>2</sub> range</b>	0.2 – 20 %
<b>CO<sub>2</sub> control</b>	± 0.1 %
<b>CO<sub>2</sub> uniformity</b>	± 0.1 %
<b>CO<sub>2</sub> stability at 5 % CO<sub>2</sub></b>	± 0.2 %
<b>Audible and visual alarms</b>	yes
<b>Available program modes</b>	> Constant speed and temperature
<b>Communication interface</b>	Ethernet
<b>Benchtop (B), Under Bench (U), Floor (F) or Stackable (S)</b>	U, F, S (x2)
<b>Orbit</b>	2.5 cm (1 in)
<b>Platform size</b>	36x61 cm (14x24 in)
<b>Speed range<sup>1)</sup></b>	25 – 400 rpm
<b>Temperature uniformity</b>	±0.25 °C at 37 °C
<b>Access port</b>	standard
<b>BMS relay</b>	standard
<b>High temperature disinfection (4 hours at 120 °C)</b>	standard
<b>Number of shelves</b>	1 (2nd optional)
<b>Number of shelving racks</b>	2
<b>On-board data logging</b>	standard
<b>Perforated shelves</b>	standard
<b>Sealed inner glass doors</b>	standard

<sup>1)</sup> Baffled flasks will reduce maximum speed.

**i** For more information go to [www.eppendorf.com](http://www.eppendorf.com)

### Ordering information

Description	Order no.	Price
<b>New Brunswick™ S41i</b> , 170 L, CO <sub>2</sub> incubator shaker with inner shelf and touch screen control, 230 V/50 Hz, orbit diameter 2.5 cm (1 in)	S41i-230-0100	11,000.00 £
<b>Interchangeable platforms for New Brunswick™ S41i</b> , 35.6 × 61 cm (14×24 in)		
Universal platform	M1334-9920	597.00 £
125 mL Erlenmeyer flask dedicated platform, comes complete with 32 clamps installed	M1334-9921	685.00 £
250 mL Erlenmeyer flask dedicated platform, comes complete with 24 clamps installed	M1334-9922	643.00 £
500 mL Erlenmeyer flask dedicated platform, comes complete with 15 clamps installed	M1334-9923	631.00 £
1 L Erlenmeyer flask dedicated platform, comes complete with 11 clamps installed	M1334-9924	624.00 £
2 L Erlenmeyer flask dedicated platform, comes complete with 6 clamps installed	M1334-9925	624.00 £
2.8 L Erlenmeyer flask dedicated platform, comes complete with 3 clamps installed	M1334-9926	624.00 £
4 L Erlenmeyer flask dedicated platform, comes complete with 3 clamps installed	M1334-9927	624.00 £
<b>Stacking kit</b> , allows up to 2 each New Brunswick™ S41i shakers to be stacked one on top of the other	P0628-6502	1,027.00 £
<b>Additional shelf for New Brunswick™ S41i</b> , perforated, can easily be added to the New Brunswick S41i for static cell culture of adherent cells	P0628-6181	208.00 £

✎ Ordering information for other voltage options begins on page 484

i For more information go to [www.eppendorf.com](http://www.eppendorf.com)

## New Brunswick™ Innova® 42/42R



### Description

The Innova 42 incubated and 42R incubated and refrigerated shakers are our most versatile incubator shakers. The programmable Innova 42 & 42R provide exceptional convenience allowing you to simultaneously shake and static incubate cultures under the same conditions. Use on or

under the bench, or double stacked for space savings. An optional culture drawer, gassing manifold, remote alarm, and humidity monitor are available for both the models, and a photosynthetic light bank and UV germicidal light are available for the 42R.

### Product features

- > Cast iron triple-eccentric counterbalanced drive provides years of dependable operation
- > Programmable Innova controls automatically changes temperature, speed and optional photosynthetic and UV germicidal lights at timed intervals
- > Large viewing window and internal light provides easy viewing of samples without the need to open the door
- > Built-in water reservoir humidifies chamber to reduce sample evaporation, while also protecting unit from spills, includes a drain for easy cleaning
- > Versatile accessory platforms (sold separately) accommodates flasks up to 4 L as well as test tube racks and Microplate holders

Technical specifications		
Model	Innova® 42	Innova® 42R
External depth (with lid/door open)	131 cm (51.6 in)	131 cm (51.6 in)
Timer	0.01 – 99.59 h, continuous	0.01 – 99.59 h, continuous
Dimensions (W × D × H)	62 × 75.4 × 82 cm / 32.3 × 29.7 × 32.3 in	62 × 75.4 × 82 cm / 32.3 × 29.7 × 32.3 in
Weight w/o accessories	98.5 kg / 217 lb	121 kg / 267 lb
Temperature range	Ambient +5 °C to 80 °C	20 °C below ambient to 80 °C
Temperature uniformity	±0.25 °C at 37 °C	±0.25 °C at 37 °C
Available program modes	<ul style="list-style-type: none"> <li>&gt; Constant speed and temperature</li> <li>&gt; Programmable multi-steps</li> <li>&gt; RS-232 control</li> </ul>	<ul style="list-style-type: none"> <li>&gt; Constant speed and temperature</li> <li>&gt; Programmable multi-steps</li> <li>&gt; RS-232 control</li> </ul>
Balanced drive mechanism	Triple-eccentric with permanently lubricated ball bearings	Triple-eccentric with permanently lubricated ball bearings
Memory	Non volatile with automatic power failure restart	Non volatile with automatic power failure restart
Motor type	Solid state, DC brushless motor	Solid state, DC brushless motor
Orbit	1.9/2.5 cm (3/4/1 in)	1.9/2.5 cm (3/4/1 in)
Platform size	46×46 cm (18×18 in)	46×46 cm (18×18 in)
Speed range <sup>1)</sup>	25 – 400 rpm; 25 – 300 rpm when stacked and using flasks larger than 500 mL	25 – 400 rpm; 25 – 300 rpm when stacked and using flasks larger than 500 mL
Multi-step programming	yes	yes
Steps per program	15	15
Stored programs	4	4

<sup>1)</sup> Baffled flasks will reduce maximum speed.

**Ordering information**

Description	Order no.	Price
<b>New Brunswick™ Innova® 42</b>		
230 V/50 Hz, orbit diameter 1.9 cm (3/4 in)	M1335-0002	8,806.00 £
230 V/50 Hz, orbit diameter 2.5 cm (1 in)	M1335-0012	8,806.00 £
<b>New Brunswick™ Innova® 42R</b>		
230 V/50 Hz, orbit diameter 1.9 cm (3/4 in)	M1335-0006	10,000.00 £
230 V/50 Hz, orbit diameter 2.5 cm (1 in)	M1335-0016	10,000.00 £
<b>Photosynthetic light bank</b> , programmable, Innova® 42R only	M1335-0300	1,237.00 £
<b>UV germicidal light</b> , programmable, Innova® 42R only	M1335-0400	1,237.00 £
<b>Humidity Monitor</b> , for Innova® 42/42R	M1335-0500	620.00 £
<b>12-port gassing manifold</b> , for Innova® 42/42R	M1335-0600	605.00 £
<b>Remote alarm</b>	M1320-8029	199.00 £
<b>Interchangeable platforms for Innova® 2100/40/40R/42/42R, Excella® E5/E24/E24R</b> , 45.7 × 45.7 cm, phenolic resin unless otherwise stated		
Universal platform	M1250-9902	699.00 £
50 mL Erlenmeyer flask dedicated platform	M1194-9903	914.00 £
125 mL Erlenmeyer flask dedicated platform	M1194-9904	779.00 £
250 mL Erlenmeyer flask dedicated platform	M1194-9905	807.00 £
500 mL Erlenmeyer flask dedicated platform	M1194-9906	779.00 £
1 L Erlenmeyer flask dedicated platform	M1194-9907	746.00 £
2 L Erlenmeyer flask dedicated platform	M1194-9908	746.00 £
2.8 L Fernbach flask dedicated platform	M1233-9932	766.00 £
Sticky pad platform, sticky pads sold separately	M1250-9903	524.00 £
<b>Quick-change platform kit</b> , enables platform attachment without tools	M1192-9901	421.00 £
<b>Culture drawer</b> , prevents plates from drying	M1335-0501	713.00 £
<b>Stacking kit</b> , for stacking Innova® 42/42R units	M1335-0800	305.00 £
<b>Utility carrier</b> , holds glassware between rubber-cushioned cross bars	M1194-9909	658.00 £
<b>Stacking kit</b> , for stacking Innova® 4200/4230 units on top of Innova® 42/42R shakers	M1335-0810	438.00 £
<b>Utility tray</b> , with non-skid rubber surface	M1194-9910	599.00 £
<b>Rod kit</b> , for utility carrier (one additional rod)	M1194-9923	205.00 £
<b>Additional perforated shelf &amp; brackets</b> , for Innova® 42/42R	M1335-0080	204.00 £

✎ Ordering information for other voltage options begins on page 484

## New Brunswick™ Innova® 43/43R



### Product features

- > Console style shaker/incubator with triple-eccentric drive – provides large capacity shaking for flasks up to 6 L
- > Programmable Innova controls – automatically changes temperature, speed and optional photosynthetic and UV germicidal lights at timed intervals
- > Top mounted controls and display – for easy, ergonomic viewing and setting
- > Foot pedal release with easy opening lid – provides hands free operation
- > RS-232 port for data logging and controlling
- > Built-in water reservoir humidifies chamber to reduce sample evaporation, while also protecting unit from spills, includes a drain for easy cleaning.

### Description

The Innova 43 incubated and Innova 43R with added refrigeration are the perfect choice for handling large quantities or large volumes of cultures with precision and ease. The cast iron triple-eccentric counterbalanced drive is specifically designed to support high-speed applications and heavy workloads.

Technical specifications		
Model	Innova® 43	Innova® 43R
External height (with lid/door open)	165.1 cm (65 in)	165.1 cm (65 in)
Timer	0.01 – 99.59 h, continuous	0.01 – 99.59 h, continuous
Dimensions (W × D × H)	115.6 × 81.3 × 103.1 cm / 45.5 × 20 × 40.6 in	115.6 × 81.3 × 103.1 cm / 45.5 × 20 × 40.6 in
Weight w/o accessories	202 kg / 445 lb	216 kg / 475 lb
Temperature range	Ambient +5 °C to 80 °C	20 °C below ambient to 80 °C
Temperature uniformity	±0.25 °C at 37 °C	±0.25 °C at 37 °C
Available program modes	<ul style="list-style-type: none"> <li>&gt; Constant speed and temperature</li> <li>&gt; Programmable multi-steps</li> <li>&gt; RS-232 control</li> </ul>	<ul style="list-style-type: none"> <li>&gt; Constant speed and temperature</li> <li>&gt; Programmable multi-steps</li> <li>&gt; RS-232 control</li> </ul>
Memory	Non volatile with automatic power failure restart	Non volatile with automatic power failure restart
Orbit	2.5/5.1 cm (1/2 in)	2.5/5.1 cm (1/2 in)
Platform size	76×46 cm (30×18 in)	76×46 cm (30×18 in)
Speed range <sup>1)</sup>	25 – 500 at 2.5 cm orbit; 25 – 300 rpm with 5.1 cm orbit	25 – 500 at 2.5 cm orbit; 25 – 300 rpm with 5.1 cm orbit
Multi-step programming	yes	yes
Steps per program	15	15
Stored programs	4	4

<sup>1)</sup> Baffled flasks will reduce maximum speed.

### Ordering information

Description	Order no.	Price
<b>New Brunswick™ Innova® 43</b>		
230 V/50 Hz, orbit diameter 2.5 cm (1 in)	M1320-0002	12,690.00 £
230 V/50 Hz, orbit diameter 5.1 cm (2 in)	M1320-0012	12,690.00 £
<b>New Brunswick™ Innova® 43R</b>		
230 V/50 Hz, orbit diameter 2.5 cm (1 in)	M1320-0006	14,400.00 £
230 V/50 Hz, orbit diameter 5.1 cm (2 in)	M1320-0016	14,400.00 £
<b>Photosynthetic light bank</b> , for Innova® 43R only	M1320-0300	1,237.00 £
<b>UV germicidal light</b> , in the airflow path outside the chamber reduces the bio-burden of circulated air, Innova® 43R only	M1320-0400	1,237.00 £
<b>12-port gassing manifold</b> , permits direct gassing into flasks	M1320-0500	605.00 £
<b>Humidity monitor</b>	M1320-0600	620.00 £
<b>Remote alarm</b>	M1320-8029	199.00 £
<b>Interchangeable platforms for Innova® 2300/43/43R, Excella® E10/E25/E25R, 76 × 46 cm, aluminum</b>		
Universal platform	M1250-9920	850.00 £
50 mL Erlenmeyer flask dedicated platform	M1191-9908	1,340.00 £
125 mL Erlenmeyer flask dedicated platform	M1191-9909	1,303.00 £
250 mL Erlenmeyer flask dedicated platform	M1191-9910	1,207.00 £
500 mL Erlenmeyer flask dedicated platform	M1191-9911	1,130.00 £
1 L Erlenmeyer flask dedicated platform	AG-1	1,069.00 £
2 L Erlenmeyer flask dedicated platform	AG-2	1,054.00 £
2.8 L Fernbach flask dedicated platform	AG-28	1,069.00 £
4 L Erlenmeyer flask dedicated platform	AG-4	1,008.00 £
6 L Erlenmeyer flask dedicated platform, cannot be used with light bank	AG-6	1,035.00 £
Sticky pad platform, sticky pads sold separately	M1250-9904	690.00 £
<b>Utility tray</b> , with non-skid rubber surface	AG-00	773.00 £
<b>Utility basket</b> , for incubating/refrigerating stationary glassware	M1320-0700	146.00 £

✎ Ordering information for other voltage options begins on page 484

## New Brunswick™ Innova® 44/44R



### Product features

- > Stackable – up to three units for maximum space savings
- > Programmable Innova controls automatically changes temperature, speed and optional photosynthetic and UV germicidal lights at timed intervals
- > Versatile accessory platform (sold separately) accommodates flasks up to 5 L
- > Slide-out platform mechanism — provides easy and effortless access to flasks located in the front and back of the shaker/incubator
- > Built-in water reservoir humidifies chamber to reduce sample evaporation, while also protecting unit from spills, includes a drain for easy cleaning.
- > Pull-out service module allows access to all electronic and heating/cooling components, without having to unstack the units

### Description

The Innova 44 incubated and 44R with added refrigeration are stackable shakers that provide very broad temperature capabilities for culturing a wide variety of organisms in flasks up to 5 L. The cast iron triple-eccentric counterbalanced drive is specifically designed to support high speed applications and heavy workloads. Refrigeration module is built into the Innova model 44R, or can be easily added to model 44, at any time.

Technical specifications		
Model	Innova® 44	Innova® 44R
External height (with lid/door open)	119.3 cm (47 in)	119.3 cm (47 in)
Timer	0.01 – 99.59 h, continuous	0.01 – 99.59 h, continuous
Dimensions (W × D × H)	135 × 87.3 × 66 cm / 53.1 × 33.2 × 78 in	135 × 87.3 × 66 cm / 53.1 × 33.2 × 78 in
Weight w/o accessories	238 kg / 523 lb	257 kg / 566 lb
Temperature range	Ambient +5 °C to 80 °C	20 °C below ambient to 80 °C
Temperature uniformity	±0.25 °C at 37 °C	±0.25 °C at 37 °C
Available program modes	<ul style="list-style-type: none"> <li>&gt; Constant speed and temperature</li> <li>&gt; Programmable multi-steps</li> <li>&gt; RS-232 control</li> </ul>	<ul style="list-style-type: none"> <li>&gt; Constant speed and temperature</li> <li>&gt; Programmable multi-steps</li> <li>&gt; RS-232 control</li> </ul>
Memory	Non volatile with automatic power failure restart	Non volatile with automatic power failure restart
Orbit	2.5/5.1 cm (1/2 in)	2.5/5.1 cm (1/2 in)
Platform size	76×46 cm (30×18 in)	76×46 cm (30×18 in)
Speed range <sup>1)</sup>	25 – 400 rpm with 2.5 cm orbit; 25 – 300 rpm with 5.1 cm orbit or 2 stacked units; 25 – 250 rpm with 3 stacked units	25 – 400 rpm with 2.5 cm orbit; 25 – 300 rpm with 5.1 cm orbit or 2 stacked units; 25 – 250 rpm with 3 stacked units
Multi-step programming	yes	yes
Steps per program	15	15
Stored programs	4	4

<sup>1)</sup> Baffled flasks will reduce maximum speed.

**Ordering information**

Description	Order no.	Price
<b>New Brunswick™ Innova® 44</b>		
230 V/50 Hz, orbit diameter 2.5 cm (1 in)	M1282-0002	12,380.00 £
230 V/50 Hz, orbit diameter 5.1 cm (2 in)	M1282-0012	12,380.00 £
<b>New Brunswick™ Innova® 44R</b>		
230 V/50 Hz, orbit diameter 2.5 cm (1 in)	M1282-0006	15,230.00 £
230 V/50 Hz, orbit diameter 5.1 cm (2 in)	M1282-0016	15,230.00 £
<b>Photosynthetic light bank</b> , for Innova® 44R only	M1282-9922	1,237.00 £
<b>12-port gassing manifold</b> , for Innova® 44/44R	M1282-0291	605.00 £
<b>Humidity monitor</b> , for Innova® 44/44R	M1282-5011	620.00 £
<b>UV germicidal light</b> , for Innova® 44R only	M1282-9921	1,237.00 £
<b>Remote alarm</b> , for Innova® 44/44R	M1282-8038	198.00 £
<b>Aluminum platforms for Innova® 44/44R</b> , 76 x 46 cm, not interchangeable with other 76 x 46 cm platforms		
Universal platform	M1282-9904	850.00 £
125 mL Erlenmeyer flask dedicated platform	M1282-9905	1,275.00 £
250 mL Erlenmeyer flask dedicated platform	M1282-9906	1,177.00 £
500 mL Erlenmeyer flask dedicated platform	M1282-9907	1,105.00 £
1 L Erlenmeyer flask dedicated platform	M1282-9908	1,046.00 £
2 L Erlenmeyer flask dedicated platform	M1282-9909	988.00 £
2.8 L Fernbach flask dedicated platform	M1282-9910	1,046.00 £
4 L Erlenmeyer flask dedicated platform	M1282-9911	988.00 £
<b>Heavy duty 0.95 cm-thick aluminum plate platforms for Innova® 44/44R only</b> , 76 x 46 cm, not interchangeable with other 76 x 46 cm platforms. Heavy-duty platforms are recommended for shaking full loads of flasks, 1 L and larger, containing more than 20 % volume or with baffles.		
Universal platform	M1282-9915	1,099.00 £
1 L Erlenmeyer flask dedicated platform	M1282-9925	1,257.00 £
2.8 L Fernbach flask dedicated platform	M1282-9927	1,257.00 £
2 L Erlenmeyer flask dedicated platform	M1282-9926	1,191.00 £
4 L Erlenmeyer flask dedicated platform	M1282-9928	1,191.00 £
<b>Aluminum platforms for Innova® 44/44R</b> , 76 x 46 cm, not interchangeable with other 76 x 46 cm platforms		
Sticky pad platform, sticky pads sold separately	M1282-9913	690.00 £
<b>Base riser</b> , increases the height of the shaker for easier access, for Innova® 44/44R		
10.2 cm, short	M1282-0600	559.00 £
40.6 cm, tall	M1282-0700	1,110.00 £
30.5 cm, medium	M1282-0800	1,024.00 £
<b>Stacking kit</b> , for stacking one additional 44 or 44R	M1282-0500	306.00 £

✎ Ordering information for other voltage options begins on page 484

## New Brunswick™ I26/I26R



### Product features

- > Slide out platform provides easy access to all samples, including ones located in the back
- > Stack up to 3 units for maximum capacity while taking up minimal space
- > User-friendly keypad with large LED display is clearly visible and easy to set
- > Triple-eccentric counterbalanced drive and cast iron housing provides vibration and trouble free operation for years
- > Versatile accessory platform (sold separately) accommodates flasks up to 2.8 L
- > Provides the ability to calibrate the speed and temperature directly through the keypad

### Description

Stackable, incubated I26 and incubated/refrigerated I26R shakers feature cast iron Eppendorf triple-eccentric counterbalanced drive. Microprocessor controls with digital display enable easy operation and accurate setpoint regulation. A large assortment of platforms, clamps, test tube holders and other accessories allow configuration to meet your exact needs. Based on the design concepts of the Innova shakers, the I26 and I26R offer excellent performance at a value price.

Technical specifications		
Model	I26	I26R
External depth (with lid/door open)	125.4 cm (49.4 in)	125.4 cm (49.4 in)
Timer	0.1 – 99.9 h, continuous	0.1 – 99.9 h, continuous
Dimensions (W × D × H)	128.3 × 77 × 70 cm / 50.5 × 30.3 × 27.6 in	128.3 × 77 × 70 cm / 50.5 × 30.3 × 27.6 in
Weight w/o accessories	168 kg / 370 lb	186 kg / 410 lb
Temperature range	Ambient +5 °C to 60 °C	Ambient -15 °C to 60 °C
Temperature uniformity	±0.25 °C at 37 °C	±0.25 °C at 37 °C
Available program modes	> Constant speed and temperature > Timed shaking	> Constant speed and temperature > Timed shaking
Memory	Non volatile with automatic power failure restart	Non volatile with automatic power failure restart
Orbit	2.5 cm	2.5 cm
Platform size	76×46 cm (30×18 in)	76×46 cm (30×18 in)
Speed range <sup>1)</sup>	25 – 400 rpm with 1 unit; 25 – 300 rpm with 2 stacked units; 25 – 250 rpm with 3 stacked units	25 – 400 rpm with 1 unit; 25 – 300 rpm with 2 stacked units; 25 – 250 rpm with 3 stacked units

<sup>1)</sup> Baffled flasks will reduce maximum speed.

i For more information go to [www.eppendorf.com](http://www.eppendorf.com)

### Ordering information

Description	Order no.	Price
<b>New Brunswick™ I26</b> , 230 V/50 Hz, orbit diameter 2.5 cm (1 in)	M1324-0002	10,880.00 £
<b>New Brunswick™ I26R</b> , 230 V/50 Hz, orbit diameter 2.5 cm (1 in)	M1324-0006	12,740.00 £
<b>Aluminum slide-out platforms for I26 and I26R shakers</b> , 76 × 46 cm, not interchangeable with other 76 × 46 cm platforms		
Universal platform	M1324-9904	943.00 £
125 mL Erlenmeyer flask dedicated platform	M1324-9905	1,228.00 £
250 mL Erlenmeyer flask dedicated platform	M1324-9906	1,141.00 £
500 mL Erlenmeyer flask dedicated platform	M1324-9907	1,069.00 £
1 L Erlenmeyer flask dedicated platform	M1324-9908	1,011.00 £
2 L Erlenmeyer flask dedicated platform	M1324-9909	956.00 £
2.8 L Fernbach flask dedicated platform	M1324-9910	1,011.00 £
Sticky pad platform, sticky pads sold separately	M1324-9911	668.00 £
<b>Base riser</b> , increases the height of the shaker for easier access, for I26/I26R		
10.2 cm, short	M1324-0600	538.00 £
33 cm, medium	M1324-0800	989.00 £
43.2 cm, tall	M1324-0700	1,076.00 £
<b>Stacking kit</b> , for stacking one additional I26 or I26R	M1324-0500	297.00 £

✎ Ordering information for other voltage options begins on page 484

## New Brunswick™ Excella® E24/E24R



### Product features

- > Heavy-duty counterbalanced drive provides long life, vibration-free, quiet and dependable operation.
- > Versatile accessory platform (sold separately) accommodates flasks up to 2.8 L as well as test tube racks and Microplate holders
- > User-friendly keypad with large LED display is clearly visible and easy to set
- > Clear large lid provides excellent visibility minimizing the need to open the lid
- > Audible and visual alarms alert you to setpoint deviations or end of study
- > Unique acceleration/deceleration circuit prevents sudden starts and stops protecting your cells
- > Microprocessor controls precisely regulate temperature, speed and running time

### Description

The benchtop Excella E24 incubator shaker and model E24R with added refrigeration accommodate test tubes or flasks up to 2.8 liters in a tightly-sealed growth chamber featuring a clear acrylic lid for excellent visibility of all samples. A wide variety of platforms, clamps and test tube racks provide for unlimited flexibility. The Excella E24 and E24R offer field calibration of temperature and speed through the microprocessor-controlled touch pad.

Technical specifications		
Model	Excella® E24	Excella® E24R
External height (with lid/door open)	101.6 cm (40 in)	101.6 cm (40 in)
Timer	0.1 – 99.9 h	0.1 – 99.9 h
Dimensions (W × D × H)	56 × 76.2 × 61 cm / 22 × 30 × 24 in	56 × 76.2 × 61 cm / 22 × 30 × 24 in
Weight w/o accessories	60 kg / 133 lb	80 kg / 175 lb
Temperature range	Ambient +7 °C to 60 °C	15 °C below ambient to 60 °C
Temperature uniformity	± 0.5 °C at 37 °C	± 0.5 °C at 37 °C
Available program modes	> Constant speed and temperature > Timed shaking	> Constant speed and temperature > Timed shaking
Memory	Non volatile with automatic power failure restart	Non volatile with automatic power failure restart
Orbit	1.9 cm (3/4 in)	1.9 cm (3/4 in)
Platform size	46×46 cm (18×18 in)	46×46 cm (18×18 in)
Speed range <sup>1)</sup>	50 – 400 rpm	50 – 400 rpm

<sup>1)</sup> Baffled flasks will reduce maximum speed.

i For more information go to [www.eppendorf.com](http://www.eppendorf.com)

**Ordering information**

Description	Order no.	Price
<b>New Brunswick™ Excella® E24</b>		
230 V/50 Hz, orbit diameter 1.9 cm (3/4 in)	M1352-0002	5,844.00 £
<b>New Brunswick™ Excella® E24R</b>		
230 V/50 Hz, orbit diameter 1.9 cm (3/4 in)	M1352-0006	7,964.00 £
<b>Drip pan</b> , for universal platform M1250-9902	M1250-9906	189.00 £
<b>Interchangeable platforms for Innova® 2100/40/40R/42/42R, Excella® E5/E24/E24R</b> , 45.7 × 45.7 cm, phenolic resin unless otherwise stated		
Universal platform	M1250-9902	699.00 £
50 mL Erlenmeyer flask dedicated platform	M1194-9903	914.00 £
125 mL Erlenmeyer flask dedicated platform	M1194-9904	779.00 £
250 mL Erlenmeyer flask dedicated platform	M1194-9905	807.00 £
500 mL Erlenmeyer flask dedicated platform	M1194-9906	779.00 £
1 L Erlenmeyer flask dedicated platform	M1194-9907	746.00 £
2 L Erlenmeyer flask dedicated platform	M1194-9908	746.00 £
2.8 L Fernbach flask dedicated platform	M1233-9932	766.00 £
Sticky pad platform, sticky pads sold separately	M1250-9903	524.00 £
<b>Quick-change platform kit</b> , enables platform attachment without tools	M1192-9901	421.00 £
<b>Utility carrier</b> , holds glassware between rubber-cushioned cross bars	M1194-9909	658.00 £
<b>Utility tray</b> , with non-skid rubber surface	M1194-9910	599.00 £
<b>Rod kit</b> , for utility carrier (one additional rod)	M1194-9923	205.00 £
<b>Spare parts kit</b> , for E24 and E24R	M1352-6000	125.00 £

✎ Ordering information for other voltage options begins on page 484

i For more information go to [www.eppendorf.com](http://www.eppendorf.com)

# New Brunswick™ Excella® E25/E25R



## Description

The large console Excella E25 incubator shaker and model E25R with added refrigeration accommodate test tubes or flasks up to 6 liters in a tightly-sealed growth chamber featuring a large viewing window for easy viewing of samples. A wide variety of platforms, clamps and test tube racks provide for unlimited flexibility. The Excella models E25 and E25R offer field calibration of temperature and speed through the microprocessor-controlled touch pad.

## Product features

- > Heavy-duty counterbalanced drive provides long life, vibration-free, quiet and dependable operation.
- > Large platform size provides increased flexibility with the number and size of cultures (sold separately)
- > Large viewing window and internal light – for easy viewing of samples without the need to open the door
- > Microprocessor controls precisely regulate temperature, speed and running time
- > Audible and visual alarms alert you to setpoint deviations or end of study
- > Powerful fan and heater provide rapid heat up and temperature recovery after door opening

Technical specifications		
Model	Excella® E25	Excella® E25R
External height (with lid/door open)	165.1 cm (65 in)	165.1 cm (65 in)
Timer	0.1 – 99.9 h	0.1 – 99.9 h
Dimensions (W × D × H)	127 × 77 × 105.9 cm / 50 × 30.5 × 41.7 in	127 × 77 × 105.9 cm / 50 × 30.5 × 41.7 in
Weight w/o accessories	171 kg / 377 lb	191 kg / 421 lb
Temperature range	Ambient +7 °C to 60 °C	15 °C below ambient to 60 °C
Temperature uniformity	± 0.5 °C at 37 °C	± 0.5 °C at 37 °C
Available program modes	> Constant speed and temperature > Timed shaking	> Constant speed and temperature > Timed shaking
Memory	Non volatile with automatic power failure restart	Non volatile with automatic power failure restart
Orbit	2.5 cm (1 in)	2.5 cm (1 in)
Platform size	76×46 cm (30×18 in)	76×46 cm (30×18 in)
Speed range <sup>1)</sup>	50 – 400 rpm	50 – 400 rpm

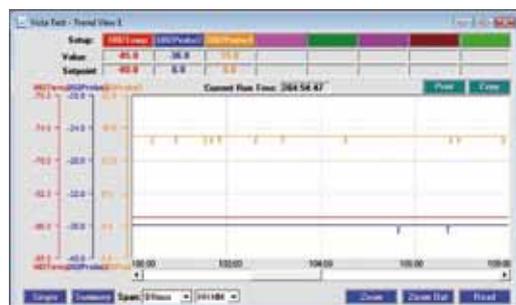
<sup>1)</sup> Baffled flasks will reduce maximum speed.

i For more information go to [www.eppendorf.com](http://www.eppendorf.com)

### Ordering information

Description	Order no.	Price
<b>New Brunswick™ Excella® E25</b> , 230 V/50 Hz, orbit diameter 2.5 cm (1 in)	M1353-0002	10,000.00 £
<b>New Brunswick™ Excella® E25R</b> , 230 V/50 Hz, orbit diameter 2.5 cm (1 in)	M1353-0006	11,500.00 £
<b>Interchangeable platforms for Innova® 2300/43/43R, Excella® E10/E25/E25R</b> , 76 × 46 cm, aluminum		
Universal platform	M1250-9920	850.00 £
50 mL Erlenmeyer flask dedicated platform	M1191-9908	1,340.00 £
125 mL Erlenmeyer flask dedicated platform	M1191-9909	1,303.00 £
250 mL Erlenmeyer flask dedicated platform	M1191-9910	1,207.00 £
500 mL Erlenmeyer flask dedicated platform	M1191-9911	1,130.00 £
1 L Erlenmeyer flask dedicated platform	AG-1	1,069.00 £
2 L Erlenmeyer flask dedicated platform	AG-2	1,054.00 £
2.8 L Fernbach flask dedicated platform	AG-28	1,069.00 £
4 L Erlenmeyer flask dedicated platform	AG-4	1,008.00 £
6 L Erlenmeyer flask dedicated platform, cannot be used with light bank	AG-6	1,035.00 £
Sticky pad platform, sticky pads sold separately	M1250-9904	690.00 £
<b>Utility tray</b> , with non-skid rubber surface	AG-00	773.00 £

## BioCommand® SFI Automated Data Logging Software



### Product features

- > Track the operational parameters of your choice with the option to design and save templates
- > Monitor multiple units from the same PC
- > Trend and archive critical data including temperature, agitation speed and gas concentration for up to 32 units simultaneously
- > Provides indications of alarm conditions identified by the product
- > Ability to email or text message alarm events

### Description

The BioCommand SFI software package is designed specifically for standard laboratory equipment including shakers, CO<sub>2</sub> incubators and ULT-Freezers. The software package allows you to track key operational information such as time, temperature, shaking speed, CO<sub>2</sub> concentrations and humidity.

### Ordering information

Description	Order no.	Price
<b>BioCommand® SFI Automated Data Logging Software</b>		
Shaker package	M1291-1000	POA
<b>Shaker cable</b> , 7.6 m	M1291-8001	116.00 £
<b>RS-232 to USB converter</b> , 4-port	P0460-7751	664.00 £
<b>RS-232 to USB converter</b> , 8-port	P0460-7750	664.00 £

✂ Ordering information for other voltage options begins on page 484



Model	Innova® 2000	Innova® 2050	Innova® 2100
Page(s)	437	438	439
Dimensions (W × D × H)	35.5 × 37 × 14.6 cm / 14 × 14.5 × 5.8 in	43 × 37 × 14.6 cm / 17 × 14.5 × 5.8 in	48 × 55.5 × 16.3 cm / 19 × 21.9 × 6.4 in
Weight w/o accessories	15 kg / 33 lb	16 kg / 35 lb	34 kg / 75 lb
Audible and visual alarms	yes	yes	yes
Balanced drive mechanism	Triple-eccentric with permanently lubricated ball bearings	Triple-eccentric with permanently lubricated ball bearings	Triple-eccentric with permanently lubricated ball bearings
cETLus and CE marked	yes	yes	yes
Benchtop (B), Under Bench (U), Floor (F) or Stackable (S)	B	B	B
Motor type	Solid state, DC brushless motor	Solid state, DC brushless motor	Solid state, DC brushless motor
Orbit	1.9 cm (3/4 in)	1.9 cm (3/4 in)	1.9 cm (3/4 in)
Platform size	33×28 cm (13×11 in)	41×31 cm (16×12 in)	46×46 cm (18×18 in)
Timer	0.1 – 99.9 h	0.1 – 99.9 h	0.1 – 99.9 h

**i** For more information go to [www.eppendorf.com](http://www.eppendorf.com)

Manufacturer's recommended retail price. All prices excl. VAT.  
 Technical specifications subject to change.



Innova® 2150	Innova® 2300	Innova® 2350	Innova® 5000
<b>440</b>	<b>441</b>	<b>442</b>	<b>443</b>
60.1 × 59.1 × 16.3 cm / 24 × 23.3 × 6.4 in	76.2 × 56.6 × 16.3 cm / 30 × 22.3 × 6.4 in	91.4 × 61 × 16.3 cm / 36 × 24 × 6.4 in	157 × 96.5 × 135 cm / 62 × 38 × 53 in
36 kg / 80 lb	48 kg / 105 lb	52 kg / 115 lb	640.1 kg / 1,410 lb
yes	yes	yes	yes
Triple-eccentric with permanently lubricated ball bearings			
yes	yes	yes	yes
B	B	B	F
Solid state, DC brushless motor			
1.9 cm (3/4 in)	2.5/5.1 cm (1/2 in)	2.5/5.1 cm (1/2 in)	5.1 cm (2 in)
61×46 cm (24×18 in)	76×46 cm (30×18 in)	91×61 cm (36×24 in)	83×68 cm (32×27 in)
0.1 – 99.9 h			

**i** For more information go to [www.eppendorf.com](http://www.eppendorf.com)

# Innova® Open Air Shakers



Includes audible and visual alarms, timer (0 – 99.9 h) with continuous operation or automatic shut-off at the end of the study

Versatile accessory platform (sold separately) accommodates flasks up to 500 mL

Enclosed electronics & mechanical components prevent internal damage from accidental spills

Speed controlled and displayed in increments of 1 rpm

## Description

For shaking in ambient conditions: on the bench, or in a warm or cold room, the Innova Platform Shakers are the instrument of choice. Dependable operation is due in large part to the Eppendorf triple-eccentric counterbalanced drive. Eppendorf offers a broad-based cast-iron support mechanism properly sized to each shaker and specifically designed to support high-speed applications and heavy workloads. The Innova Open Air platform shakers are offered in 6 different sizes offering reliable, continuous-duty shaking of test tubes and flasks up to 6 liters.

# New Brunswick™ Innova® 2000



Technical specifications	
<b>Model</b>	Innova® 2000
<b>Timer</b>	0.1 – 99.9 h
<b>Dimensions (W × D × H)</b>	35.5 × 37 × 14.6 cm / 14 × 14.5 × 5.8 in
<b>Weight w/o accessories</b>	15 kg / 33 lb
<b>Audible and visual alarms</b>	yes
<b>Balanced drive mechanism</b>	Triple-eccentric with permanently lubricated ball bearings
<b>Benchtop (B), Under Bench (U), Floor (F) or Stackable (S)</b>	B
<b>Motor type</b>	Solid state, DC brushless motor
<b>Orbit</b>	1.9 cm (3/4 in)
<b>Platform size</b>	33×28 cm (13×11 in)
<b>Speed range<sup>1)</sup></b>	25 – 500 rpm
<b>Speed control</b>	±1 rpm

<sup>1)</sup> Baffled flasks will reduce maximum speed.

## Ordering information

Description	Order no.	Price
<b>New Brunswick™ Innova® 2000</b> , platform sold separately, 220/230 V/50/60 Hz, orbit diameter 1.9 cm (3/4 in)	M1190-0002	2,390.00 £
<b>Interchangeable platforms for Innova® 2000</b> , 33 × 28 cm, stainless steel		
Universal platform	M1001-0240	383.00 £
10 mL Erlenmeyer flask dedicated platform	AG2-10	464.00 £
25 mL Erlenmeyer flask dedicated platform	M1190-9919	421.00 £
50 mL Erlenmeyer flask dedicated platform	M1190-9915	397.00 £
125 mL Erlenmeyer flask dedicated platform	M1190-9916	397.00 £
250 mL Erlenmeyer flask dedicated platform	M1190-9917	421.00 £
500 mL Erlenmeyer flask dedicated platform	M1190-9918	421.00 £
<b>Utility carrier</b> , holds glassware between rubber-cushioned cross bars	AG2-UT	564.00 £
<b>Utility tray</b> , with non-skid rubber surface	AG2-00	421.00 £
<b>Rod kit</b> , for utility carrier (one additional rod)	M1001-9920	172.00 £
<b>Capacity upgrade kit</b> , to convert a Model 2000 to a Model 2050	M1190-9910	458.00 £
<b>Temperature and speed monitoring kit</b> , for recording on an external chart recorder	M1190-9909	954.00 £

i For more information go to [www.eppendorf.com](http://www.eppendorf.com)

✎ Ordering information for other voltage options begins on page 484

# New Brunswick™ Innova® 2050



Technical specifications	
<b>Model</b>	<b>Innova® 2050</b>
<b>Timer</b>	0.1 – 99.9 h
<b>Dimensions (W × D × H)</b>	43 × 37 × 14.6 cm / 17 × 14.5 × 5.8 in
<b>Weight w/o accessories</b>	16 kg / 35 lb
<b>Audible and visual alarms</b>	yes
<b>Balanced drive mechanism</b>	Triple-eccentric with permanently lubricated ball bearings
<b>Benchtop (B), Under Bench (U), Floor (F) or Stackable (S)</b>	B
<b>Motor type</b>	Solid state, DC brushless motor
<b>Orbit</b>	1.9 cm (3/4 in)
<b>Platform size</b>	41×31 cm (16×12 in)
<b>Speed range<sup>1)</sup></b>	25 – 500 rpm
<b>Speed control</b>	±1 rpm

<sup>1)</sup> Baffled flasks will reduce maximum speed.

## Ordering information

Description	Order no.	Price
<b>New Brunswick™ Innova® 2050</b> , platform sold separately, 220/230 V/50/60 Hz, orbit diameter 1.9 cm (3/4 in)	M1190-0012	2,551.00 £
<b>Interchangeable platforms for Innova® 2050</b> , 40.6 × 30.5 cm, stainless steel		
Universal platform	M1190-9900	492.00 £
10 mL Erlenmeyer flask dedicated platform	M1190-9901	810.00 £
25 mL Erlenmeyer flask dedicated platform	M1190-9902	643.00 £
50 mL Erlenmeyer flask dedicated platform	M1190-9903	622.00 £
125 mL Erlenmeyer flask dedicated platform	M1190-9904	643.00 £
250 mL Erlenmeyer flask dedicated platform	M1190-9905	577.00 £
500 mL Erlenmeyer flask dedicated platform	M1190-9906	507.00 £
1 L Erlenmeyer flask dedicated platform	M1190-9911	492.00 £
<b>Utility carrier</b> , holds glassware between rubber-cushioned cross bars	M1190-9907	597.00 £
<b>Utility tray</b> , with non-skid rubber surface	M1190-9908	529.00 £
<b>Rod kit</b> , for utility carrier (one additional rod)	M1190-9920	172.00 £

i For more information go to [www.eppendorf.com](http://www.eppendorf.com)

✂ Ordering information for other voltage options begins on page 484

Manufacturer's recommended retail price. All prices excl. VAT.  
 Technical specifications subject to change.

# New Brunswick™ Innova® 2100



Technical specifications	
<b>Model</b>	<b>Innova® 2100</b>
<b>Timer</b>	0.1 – 99.9 h
<b>Dimensions (W × D × H)</b>	48 × 55.5 × 16.3 cm / 19 × 21.9 × 6.4 in
<b>Weight w/o accessories</b>	34 kg / 75 lb
<b>Audible and visual alarms</b>	yes
<b>Balanced drive mechanism</b>	Triple-eccentric with permanently lubricated ball bearings
<b>Benchtop (B), Under Bench (U), Floor (F) or Stackable (S)</b>	B
<b>Motor type</b>	Solid state, DC brushless motor
<b>Orbit</b>	1.9 cm (3/4 in)
<b>Platform size</b>	46×46 cm (18×18 in)
<b>Speed range<sup>1)</sup></b>	25 – 500 rpm
<b>Speed control</b>	±1 rpm

<sup>1)</sup> Baffled flasks will reduce maximum speed.

## Ordering information

Description	Order no.	Price
<b>New Brunswick™ Innova® 2100</b> , platform sold separately, 220/230 V/50/60 Hz, orbit diameter 1.9 cm (3/4 in)	M1194-0002	3,533.00 £
<b>Drip pan</b> , for universal platform M1250-9902	M1250-9906	189.00 £
<b>Interchangeable platforms for Innova® 2100/40/40R/42/42R, Excella® E5/E24/E24R</b> , 45.7 × 45.7 cm, phenolic resin unless otherwise stated		
Universal platform	M1250-9902	699.00 £
50 mL Erlenmeyer flask dedicated platform	M1194-9903	914.00 £
125 mL Erlenmeyer flask dedicated platform	M1194-9904	779.00 £
250 mL Erlenmeyer flask dedicated platform	M1194-9905	807.00 £
500 mL Erlenmeyer flask dedicated platform	M1194-9906	779.00 £
1 L Erlenmeyer flask dedicated platform	M1194-9907	746.00 £
2 L Erlenmeyer flask dedicated platform	M1194-9908	746.00 £
2.8 L Fernbach flask dedicated platform	M1233-9932	766.00 £
Sticky pad platform, sticky pads sold separately	M1250-9903	524.00 £
<b>Quick-change platform kit</b> , enables platform attachment without tools	M1192-9901	421.00 £
<b>Utility carrier</b> , holds glassware between rubber-cushioned cross bars	M1194-9909	658.00 £
<b>Utility tray</b> , with non-skid rubber surface	M1194-9910	599.00 £
<b>Rod kit</b> , for utility carrier (one additional rod)	M1194-9923	205.00 £
<b>Capacity upgrade kit</b> , to convert a Model 2100 to a Model 2150	M1194-9926	458.00 £
<b>Temperature and speed monitoring kit</b> , for recording on an external chart recorder for Innova® 2100/2150/2300/2350	M1194-9924	986.00 £

i For more information go to [www.eppendorf.com](http://www.eppendorf.com)

✂ Ordering information for other voltage options begins on page 484

# New Brunswick™ Innova® 2150



Technical specifications	
<b>Model</b>	<b>Innova® 2150</b>
<b>Timer</b>	0.1 – 99.9 h
<b>Dimensions (W × D × H)</b>	60.1 × 59.1 × 16.3 cm / 24 × 23.3 × 6.4 in
<b>Weight w/o accessories</b>	36 kg / 80 lb
<b>Audible and visual alarms</b>	yes
<b>Balanced drive mechanism</b>	Triple-eccentric with permanently lubricated ball bearings
<b>Benchtop (B), Under Bench (U), Floor (F) or Stackable (S)</b>	B
<b>Motor type</b>	Solid state, DC brushless motor
<b>Orbit</b>	1.9 cm (3/4 in)
<b>Platform size</b>	61×46 cm (24×18 in)
<b>Speed range<sup>1)</sup></b>	25 – 500 rpm
<b>Speed control</b>	±1 rpm

<sup>1)</sup> Baffled flasks will reduce maximum speed.

## Ordering information

Description	Order no.	Price
<b>New Brunswick™ Innova® 2150</b> , platform sold separately, 220/230 V/50/60 Hz, orbit diameter 1.9 cm (3/4 in)	M1194-0012	3,856.00 £
<b>Interchangeable platform for Innova® 2150</b> , 61 × 45.7 cm, phenolic resin		
Universal platform	M1194-9912	779.00 £
50 mL Erlenmeyer flask dedicated platform	M1194-9915	1,156.00 £
125 mL Erlenmeyer flask dedicated platform	M1194-9916	986.00 £
250 mL Erlenmeyer flask dedicated platform	M1194-9917	1,015.00 £
500 mL Erlenmeyer flask dedicated platform	M1194-9918	989.00 £
1 L Erlenmeyer flask dedicated platform	M1194-9919	899.00 £
2 L Erlenmeyer flask dedicated platform	M1194-9920	746.00 £
<b>Utility carrier</b> , holds glassware between rubber-cushioned cross bars	M1194-9921	746.00 £
<b>Utility tray</b> , with non-skid rubber surface	M1194-9922	698.00 £
<b>Rod kit</b> , for utility carrier (one additional rod)	M1194-9925	206.00 £
<b>Quick-change platform kit</b> , enables platform attachment without tools	M1194-9927	421.00 £
<b>Temperature and speed monitoring kit</b> , for recording on an external chart recorder for Innova® 2100/2150/2300/2350	M1194-9924	986.00 £

i For more information go to [www.eppendorf.com](http://www.eppendorf.com)

✂ Ordering information for other voltage options begins on page 484

# New Brunswick™ Innova® 2300



Technical specifications	
<b>Model</b>	Innova® 2300
<b>Timer</b>	0.1 – 99.9 h
<b>Dimensions (W × D × H)</b>	76.2 × 56.6 × 16.3 cm / 30 × 22.3 × 6.4 in
<b>Weight w/o accessories</b>	48 kg / 105 lb
<b>Audible and visual alarms</b>	yes
<b>Balanced drive mechanism</b>	Triple-eccentric with permanently lubricated ball bearings
<b>Benchtop (B), Under Bench (U), Floor (F) or Stackable (S)</b>	B
<b>Motor type</b>	Solid state, DC brushless motor
<b>Orbit</b>	2.5/5.1 cm (1/2 in)
<b>Platform size</b>	76×46 cm (30×18 in)
<b>Speed range<sup>1)</sup></b>	25 – 500 rpm
<b>Speed control</b>	±1 rpm

<sup>1)</sup> Baffled flasks will reduce maximum speed.

## Ordering information

Description	Order no.	Price
<b>New Brunswick™ Innova® 2300</b> , platform sold separately		
220/230 V/50/60 Hz, orbit diameter 2.5 cm (1 in)	M1191-0002	5,866.00 £
220/230 V/50/60 Hz, orbit diameter 5.1 cm (2 in)	M1191-0022	6,183.00 £
<b>Drip pan</b> , to catch accidental spills, for use with universal platform M1250-9920	M1250-9921	205.00 £
<b>Interchangeable platforms for Innova® 2300/43/43R/44/44R, Excella® E10/E25/E25R</b> , 76 × 46 cm, aluminum		
Universal platform	M1250-9920	850.00 £
50 mL Erlenmeyer flask dedicated platform	M1191-9908	1,340.00 £
125 mL Erlenmeyer flask dedicated platform	M1191-9909	1,303.00 £
250 mL Erlenmeyer flask dedicated platform	M1191-9910	1,207.00 £
500 mL Erlenmeyer flask dedicated platform	M1191-9911	1,130.00 £
1 L Erlenmeyer flask dedicated platform	AG-1	1,069.00 £
2 L Erlenmeyer flask dedicated platform	AG-2	1,054.00 £
2.8 L Fernbach flask dedicated platform	AG-28	1,069.00 £
4 L Erlenmeyer flask dedicated platform	AG-4	1,008.00 £
6 L Erlenmeyer flask dedicated platform	AG-6	1,035.00 £
Sticky pad platform, sticky pads sold separately	M1250-9904	690.00 £
<b>Utility tray</b> , with non-skid rubber surface	AG-00	773.00 £
<b>Quick-change platform kit</b> , enables platform attachment without tools	M1191-9904	446.00 £
<b>Capacity upgrade kit</b> , to convert a Model 2300 to a Model 2350	M1191-9905	470.00 £
<b>Temperature and speed monitoring kit</b> , for recording on an external chart recorder for Innova® 2100/2150/2300/2350	M1194-9924	986.00 £

i For more information go to [www.eppendorf.com](http://www.eppendorf.com)

Ordering information for other voltage options begins on page 484

# New Brunswick™ Innova® 2350



Technical specifications	
<b>Model</b>	Innova® 2350
<b>Timer</b>	0.1 – 99.9 h
<b>Dimensions (W × D × H)</b>	91.4 × 61 × 16.3 cm / 36 × 24 × 6.4 in
<b>Weight w/o accessories</b>	52 kg / 115 lb
<b>Audible and visual alarms</b>	yes
<b>Balanced drive mechanism</b>	Triple-eccentric with permanently lubricated ball bearings
<b>Benchtop (B), Under Bench (U), Floor (F) or Stackable (S)</b>	B
<b>Motor type</b>	Solid state, DC brushless motor
<b>Orbit</b>	2.5/5.1 cm (1/2 in)
<b>Platform size</b>	91×61 cm (36×24 in)
<b>Speed range<sup>1)</sup></b>	25 – 500 rpm
<b>Speed control</b>	±1 rpm

<sup>1)</sup> Baffled flasks will reduce maximum speed.

## Ordering information

Description	Order no.	Price
<b>New Brunswick™ Innova® 2350</b> , platform sold separately		
220/230 V/50/60 Hz, orbit diameter 2.5 cm (1 in)	M1191-0012	6,391.00 £
220/230 V/50/60 Hz, orbit diameter 5.1 cm (2 in)	M1191-0032	6,698.00 £
<b>Interchangeable platform for Innova® 2350</b> , 91.4 x 61 cm, marine plywood unless otherwise noted		
Universal platform	PTL-386	998.00 £
Universal platform, aluminum	PTL-393	616.00 £
125 mL Erlenmeyer flask dedicated platform	M1191-9912	1,696.00 £
250 mL Erlenmeyer flask dedicated platform	M1191-9913	1,667.00 £
500 mL Erlenmeyer flask dedicated platform	M1191-9914	1,477.00 £
<b>Utility tray</b> , with non-skid rubber surface	AG-21-00	904.00 £
<b>Temperature and speed monitoring kit</b> , for recording on an external chart recorder for Innova® 2100/2150/2300/2350	M1194-9924	986.00 £

i For more information go to [www.eppendorf.com](http://www.eppendorf.com)

✂ Ordering information for other voltage options begins on page 484

# New Brunswick™ Innova® 5000



Technical specifications	
<b>Model</b>	<b>Innova® 5000</b>
<b>Timer</b>	0.1 – 99.9 h
<b>Dimensions (W × D × H)</b>	157 × 96.5 × 135 cm / 62 × 38 × 53 in
<b>Weight w/o accessories</b>	640.1 kg / 1,410 lb
<b>Audible and visual alarms</b>	yes
<b>Balanced drive mechanism</b>	Triple-eccentric with permanently lubricated ball bearings
<b>Benchtop (B), Under Bench (U), Floor (F) or Stackable (S)</b>	F, 6 removable platforms
<b>Motor type</b>	Solid state, DC brushless motor
<b>Orbit</b>	5.1 cm (2 in)
<b>Platform size</b>	83×68 cm (32×27 in)
<b>Speed range<sup>1)</sup></b>	25 – 350 rpm
<b>Speed control</b>	±1 rpm

<sup>1)</sup> Baffled flasks will reduce maximum speed.

## Ordering information

Description	Order no.	Price
<b>New Brunswick™ Innova® 5000</b> , 220 V/50/60 Hz, orbit diameter 5.1 cm (2 in)	M1196-0002	24,610.00 £
<b>Interchangeable platform for Innova® 5000</b>		
Universal platform	M1196-9447	1,024.00 £
125 mL Erlenmeyer flask dedicated platform	M1196-9900	1,605.00 £
250 mL Erlenmeyer flask dedicated platform	M1196-9901	1,605.00 £
500 mL Erlenmeyer flask dedicated platform	M1196-9902	1,447.00 £
1 L Erlenmeyer flask dedicated platform	M1196-9903	1,370.00 £
2 L Erlenmeyer flask dedicated platform	M1196-9904	1,323.00 £
2.8 L Fernbach flask dedicated platform	M1196-9905	1,319.00 £
4 L Erlenmeyer flask dedicated platform	M1196-9906	1,228.00 £
6 L Erlenmeyer flask dedicated platform	M1196-9907	1,228.00 £

i For more information go to [www.eppendorf.com](http://www.eppendorf.com)

✂ Ordering information for other voltage options begins on page 484

# Racking Systems for New Brunswick™ Innova® 5050/5051



## Product features

- > Includes electrical strip for power multiple shakers
- > Maximum speed 400 rpms for 2.5 cm (1 in) orbits and 300 rpm for 5.1 cm (2 in) orbits
- > Larger flasks can be accommodated by removing adjustable-height shelves
- > Comes preassembled

## Description

Model 5050 consists of a sturdy, stainless-steel rack to hold up to 4 Innova 2300 shakers. Innova 5051 rack extension can be added to support an additional 4 shakers, bringing the total number to 8 Innova 2300 shakers.

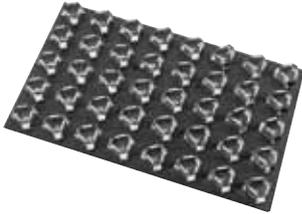
## Ordering information

Description	Order no.	Price
New Brunswick™ Innova® 5050 Rack System, 230/240 V/50/60 Hz	M1232-0101	5,294.00 £
New Brunswick™ Innova® 5051 Rack Extension, 230/240 V/50/60 Hz	M1232-0111	3,571.00 £

i For more information go to [www.eppendorf.com](http://www.eppendorf.com)

Manufacturer's recommended retail price. All prices excl. VAT.  
Technical specifications subject to change.

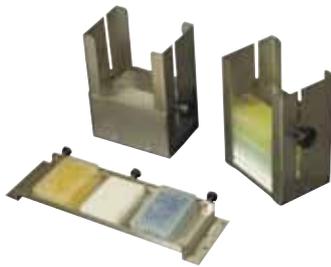
## Clamps and Accessories for Universal Platforms



Dedicated platforms come with clamps of one size pre-installed.



Flask clamp, of one-piece stainless steel, fitted with springs for stability at elevated speeds. Includes mounting screws.



Microplate Racks and Carriers mount to any universal platform and are used to secure microplates and allow for their shaking. Each rack secures the plates in place and can either be ordered for stacking the plates or laying plates flat in a single layer.



Test tube racks, small medium, and large.



Utility carries secure vessels between adjustable, cushioned rods.



Universal platform shown with accessory clamps, test tube racks and sticky tape.



Utility trays provide a non-slip surface for low-speed applications.



Sticky Pad (shown) and sticky tape replace clamps for speeds up to 250 rpm. Sticky Pad requires an anodized aluminum surface. (Not for use in water bath shakers)

## Universal Platforms and Clamps for Incubated Shakers

**Universal Platforms and Clamps for Incubated Shakers**

	Innova® 40/40R	New Brunswick™ S41i	Innova® 42/42R	Innova® 43/43R	Innova® 44/44R
	M1250-9902	M1334-9920	M1250-9902	M1250-9920	M1282-9904
10 mL Erlenmeyer flasks	109		109	183	187
25 mL Erlenmeyer flasks	64		64	92	93
50 mL Erlenmeyer flasks	45		45	92	91
125 mL Erlenmeyer flasks	21	20	21	39	39
250 mL Erlenmeyer flasks	18	16	18	30	30
500 mL Erlenmeyer flasks	14	12	14	18	24
1 L Erlenmeyer flasks	8	10	8	12	14
2 L Erlenmeyer flasks	5	4	5	8	8
2 L Lauber Thompson	4	3	4	6	6
2.8 L Fernbach flasks	4	3	4	6	6
3 L Erlenmeyer flasks		3			
4 L Erlenmeyer flasks			4	6	6
5 L Erlenmeyer flasks			4	6	6
6 L Erlenmeyer flasks			2	4	
Microplate rack	8		8	16	16
Microplate rack	2		2	4	4
Test tube rack, small	5		5	9	9
Test tube rack, medium	5		5	9	9
Test tube rack, large	4		4	7	7
Platform size	46x46 cm (18x18 in)	36x61 cm (14x24 in)	46x46 cm (18x18 in)	76x46 cm (30x18 in)	76x46 cm (30x18 in)

**Dedicated Platforms and Clamps for Incubated Shakers**

	Innova® 40/40R		New Brunswick™ S41i		Innova® 42/42R		Innova® 43/43R	
	Clamps	Order no.						
50 mL Erlenmeyer flasks	64	M1194-9903	64		64	M1194-9903	108	M1191-9908
125 mL Erlenmeyer flasks	34	M1194-9904	34	M1334-9921	34	M1194-9904	60	M1191-9909
250 mL Erlenmeyer flasks	25	M1194-9905	25	M1334-9922	25	M1194-9905	40	M1191-9910
500 mL Erlenmeyer flasks	16	M1194-9906	16	M1334-9923	16	M1194-9906	24	M1191-9911
1 L Erlenmeyer flasks	9	M1194-9907	9	M1334-9924	9	M1194-9907	15	AG-1
2 L Erlenmeyer flasks	5	M1194-9908	5	M1334-9925	5	M1194-9908	12	AG-2
2.8 L Fernbach flasks				M1334-9926	4	M1233-9932	6	AG-28
3 L Erlenmeyer flasks								
4 L Erlenmeyer flasks			3	M1334-9927	4	M1233-9930	6	AG-4
6 L Erlenmeyer flasks							4	AG-6
Sticky platform		M1250-9903				M1250-9903		M1250-9904
Platform size	46x46 cm (18x18 in)		36x61 cm (14x24 in)		46x46 cm (18x18 in)		76x46 cm (30x18 in)	

I26/I26R	Excella® E24/E24R	Excella® E25/E25R	Clamp	Clamp	
M1324-9904	M1250-9902	M1250-9920	Order no.	Dimensions (W x H)	Price
187	109	183	ACE-10S	31 x 26 mm	16.50 £
93	64	92	M1190-9004	38 x 21 mm	17.40 £
93	45	92	M1190-9000	51 x 26 mm	18.40 £
39	21	39	M1190-9001	66 x 36 mm	19.30 £
30	18	30	M1190-9002	79 x 48 mm	27.50 £
24	14	18	M1190-9003	100 x 52 mm	32.60 £
12	8	12	ACE-1000S	120 x 63 mm	40.70 £
8	5	8	ACE-2000S	152 x 71 mm	64.10 £
6	4	6	M1190-9005	168 x 112 mm	98.50 £
6	4	6	ACFE-2800S	198 x 66 mm	81.50 £
			ACE-3000S	189 x 128 mm	74.40 £
		6	ACE-4000S	196 x 95 mm	73.30 £
		6	ACE-5000S	222 x 145 mm	79.50 £
		4	ACE-6000S	225 x 96 mm	87.80 £
16	8	16	M1289-0700		285.00 £
4	2	4	TTR-221		283.00 £
9	5	9	see page 451		
9	5	9	see page 451		
7	4	7	see page 451		
76x46 cm (30x18 in)	46x46 cm (18x18 in)	76x46 cm (30x18 in)			

Innova® 44/44R		I26/I26R		Excella® E24/E24R		Excella® E25/E25R	
Clamps	Order no.						
				64	M1194-9903	108	M1191-9908
60	M1282-9905			34	M1194-9904	60	M1191-9909
40	M1282-9906	40	M1324-9906	25	M1194-9905	40	M1191-9910
24	M1282-9907	24	M1324-9907	16	M1194-9906	24	M1191-9911
15	M1282-9908	15	M1324-9908	9	M1194-9907	15	AG-1
12	M1282-9909	12	M1324-9909	5	M1194-9908	12	AG-2
6	M1282-9910	6	M1324-9910			6	AG-28
6	M1282-9911					6	AG-4
						4	AG-6
	M1282-9913		M1324-9911		M1250-9903		M1250-9904
76x46 cm (30x18 in)		76x46 cm (30x18 in)		46x46 cm (18x18 in)		76x46 cm (30x18 in)	

## Universal Platforms and Clamps for Innova Open Air Shakers

Universal Platforms and Clamps for Innova Open Air Shakers

	Innova® 3100	Innova® 2000	Innova® 2050	Innova® 2100
	M1231-9930	M1001-0240	M1190-9900	M1250-9902
10 mL Erlenmeyer flasks	59	60	86	109
25 mL Erlenmeyer flasks	35	20	32	64
50 mL Erlenmeyer flasks	18	15	32	45
125 mL Erlenmeyer flasks	18	11	16	21
250 mL Erlenmeyer flasks	8	6	10	18
500 mL Erlenmeyer flasks	6	4	8	14
1 L Erlenmeyer flasks	4			8
2 L Erlenmeyer flasks	2			5
2 L Lauber Thompson				4
2.8 L Fernbach flasks				4
3 L Erlenmeyer flasks				
4 L Erlenmeyer flasks				4
5 L Erlenmeyer flasks				4
6 L Erlenmeyer flasks				2
Microplate rack		3	8	8
Microplate rack			2	2
Test tube rack, small		3	5	5
Test tube rack, medium			5	5
Test tube rack, large			4	4
Platform size	31x42 cm (12x16.5 in)	33x28 cm (13x11 in)	41x31 cm (16x12 in)	46x46 cm (18x18 in)

Dedicated Platforms and Clamps for Innova Open Air Shakers

	Innova® 3100		Innova® 3100 (half platform)		Innova® 2000		Innova® 2050	
	Clamps	Order no.	Clamps	Order no.	Clamps	Order no.	Clamps	Order no.
10 mL Erlenmeyer flasks					60	AG2-10	86	M1190-9901
25 mL Erlenmeyer flasks					32	M1190-9919	48	M1190-9902
50 mL Erlenmeyer flasks	31	M1231-9933	13	AG7-50	20	M1190-9915	35	M1190-9903
125 mL Erlenmeyer flasks	22	M1231-9934	8	AG7-125	12	M1190-9916	20	M1190-9904
250 mL Erlenmeyer flasks	13	M1231-9935	5	AG7-250	8	M1190-9917	12	M1190-9905
500 mL Erlenmeyer flasks	8	M1231-9936			6	M1190-9918	8	M1190-9906
1 L Erlenmeyer flasks	6	M1231-9937					6	M1190-9911
2 L Erlenmeyer flasks	2	M1231-9938						
2.8 L Fernbach flasks								
4 L Erlenmeyer flasks								
6 L Erlenmeyer flasks								
Sticky platform						M1190-0300		
Platform size		31x42 cm (12x16.5 in)				33x28 cm (13x11 in)		41x31 cm (16x12 in)

Innova® 2150	Innova® 2300	Innova® 2350	Innova® 5000	Clamp	Clamp	
M1194-9912	M1250-9920	PTL-386	M1196-9447	Order no.	Dimensions (W x H)	Price
	183		264	ACE-10S	31 x 26 mm	16.50 £
	92		143	M1190-9004	38 x 21 mm	17.40 £
63	92		143	M1190-9000	51 x 26 mm	18.40 £
35	39	75	72	M1190-9001	66 x 36 mm	19.30 £
24	30	50	42	M1190-9002	79 x 48 mm	27.50 £
20	18	30	33	M1190-9003	100 x 52 mm	32.60 £
12	12	24	17	ACE-1000S	120 x 63 mm	40.70 £
6	8	15	12	ACE-2000S	152 x 71 mm	64.10 £
5	6	12	8	M1190-9005	168 x 112 mm	98.50 £
5	6	12		ACFE-2800S	198 x 66 mm	81.50 £
				ACE-3000S	189 x 128 mm	74.40 £
5	6	10	8	ACE-4000S	196 x 95 mm	73.30 £
4	6	8	6	ACE-5000S	222 x 145 mm	79.50 £
3	4		6	ACE-6000S	225 x 96 mm	87.80 £
16	16	16	16	M1289-0700		285.00 £
4	4	4	4	TTR-221		283.00 £
9	9	9	9	see page 451		
9	9	9	9	see page 451		
7	7	7	7	see page 451		
61x46 cm (24x18 in)	76x46 cm (30x18 in)	91x61 cm (36x24 in)	83x68 cm (32x27 in)			

Innova® 2100		Innova® 2150		Innova® 2300		Innova® 2350		Innova® 5000	
Clamps	Order no.								
64	M1194-9903	80	M1194-9915	108	M1191-9908				
34	M1194-9904	48	M1194-9916	60	M1191-9909	96	M1191-9912	99	M1196-9900
25	M1194-9905	35	M1194-9917	40	M1191-9910	70	M1191-9913	64	M1196-9901
16	M1194-9906	20	M1194-9918	24	M1191-9911	40	M1191-9914	42	M1196-9902
9	M1194-9907	12	M1194-9919	15	AG-1			23	M1196-9903
5	M1194-9908	8	M1194-9920	12	AG-2			14	M1196-9904
	M1233-9932			6	AG-28			9	M1196-9905
				6	AG-4			9	M1196-9906
				4	AG-6			8	M1196-9907
	M1250-9903				M1250-9904				
	46x46 cm (18x18 in)		61x46 cm (24x18 in)		76x46 cm (30x18 in)		91x61 cm (36x24 in)		83x68 cm (32x27 in)

## Universal Platforms and Clamps for Excella Open Air Shakers

Universal Platforms and Clamps for Excella Open Air Shakers

	Excella® E1	Excella® E2	Excella® E5	Excella® E10	Clamp	Clamp	
	M1001-0240	M1001-0240	M1250-9902	M1250-9920	Order no.	Dimensions (W x H)	Price
10 mL Erlenmeyer flasks	60	60	109	183	ACE-10S	31 x 26 mm	16.50 £
25 mL Erlenmeyer flasks	20	20	64	92	M1190-9004	38 x 21 mm	17.40 £
50 mL Erlenmeyer flasks	15	15	45	92	M1190-9000	51 x 26 mm	18.40 £
125 mL Erlenmeyer flasks	11	11	21	39	M1190-9001	66 x 36 mm	19.30 £
250 mL Erlenmeyer flasks	6	6	18	30	M1190-9002	79 x 48 mm	27.50 £
500 mL Erlenmeyer flasks	4	4	14	18	M1190-9003	100 x 52 mm	32.60 £
1 L Erlenmeyer flasks			8	12	ACE-1000S	120 x 63 mm	40.70 £
2 L Erlenmeyer flasks			5	8	ACE-2000S	152 x 71 mm	64.10 £
2 L Lauber Thompson			4	6	M1190-9005	168 x 112 mm	98.50 £
2.8 L Fernbach flasks			4	6	ACFE-2800S	198 x 66 mm	81.50 £
3 L Erlenmeyer flasks					ACE-3000S	189 x 128 mm	74.40 £
4 L Erlenmeyer flasks			4	6	ACE-4000S	196 x 95 mm	73.30 £
5 L Erlenmeyer flasks			4	6	ACE-5000S	222 x 145 mm	79.50 £
6 L Erlenmeyer flasks			2	4	ACE-6000S	225 x 96 mm	87.80 £
Microplate rack	3	3	8	16	M1289-0700		285.00 £
Microplate rack			2	4	TTR-221		283.00 £
Test tube rack, small	3	3	5	9	see page 451		
Test tube rack, medium			5	9	see page 451		
Test tube rack, large			4	7	see page 451		
Platform size	33x28 cm (13x11 in)	33x28 cm (13x11 in)	46x46 cm (18x18 in)	76x46 cm (30x18 in)			

Dedicated Platforms and Clamps for Excella Open Air Shakers

	Excella® E1		Excella® E2		Excella® E5		Excella® E10	
	Clamps	Order no.	Clamps	Order no.	Clamps	Order no.	Clamps	Order no.
10 mL Erlenmeyer flasks	60	AG2-10	60	AG2-10				
25 mL Erlenmeyer flasks	32	M1190-9919	32	M1190-9919				
50 mL Erlenmeyer flasks	20	M1190-9915	20	M1190-9915	64	M1194-9903	108	M1191-9908
125 mL Erlenmeyer flasks	12	M1190-9916	12	M1190-9916	34	M1194-9904	60	M1191-9909
250 mL Erlenmeyer flasks	8	M1190-9917	8	M1190-9917	25	M1194-9905	40	M1191-9910
500 mL Erlenmeyer flasks	6	M1190-9918	6	M1190-9918	16	M1194-9906	24	M1191-9911
1 L Erlenmeyer flasks					9	M1194-9907	15	AG-1
2 L Erlenmeyer flasks					5	M1194-9908	12	AG-2
2.8 L Fernbach flasks						M1233-9932	6	AG-28
4 L Erlenmeyer flasks							6	AG-4
6 L Erlenmeyer flasks							4	AG-6
Sticky platform						M1250-9903		M1250-9904
Platform size		33x28 cm (13x11 in)		33x28 cm (13x11 in)		46x46 cm (18x18 in)		76x46 cm (30x18 in)

# Clamps and Accessories for Universal Platforms

Accessories		
Description	Order no.	Price
<b>Clamp</b> , for 1 L media bottles	ACSB-1000S	85.60 £
<b>Angled Test Tube Rack Holder</b> , for user-supplied test tube racks and microplates	TTR-210	283.00 £
<b>Spacer Bar for TTR-210</b>	TTR-215	94.90 £
<b>Microplate rack</b> , for single layer of five plates	TTR-221	283.00 £
<b>Microplate rack</b> , stack three deepwell or nine standard plates	M1289-0700	285.00 £
<b>Sticky Tape</b> , 500 × 4.1 cm (16.4 feet × 1.6 in) roll	M1250-9600	248.00 £
<b>Sticky Pad</b> , 20 × 20 cm (8 × 8 in) 1	M1250-9700	70.40 £
<b>Drip pan</b> , for universal platform M1250-9902	M1250-9906	189.00 £
<b>Drip pan</b> , to catch accidental spills, for use with universal platform M1250-9920	M1250-9921	205.00 £

Test Tube Racks			
Diameter	Tubes/rack	Order no.	Price
<b>Test tube rack, large</b>			
8–11 mm	80	M1289-0100	285.00 £
12–15 mm	60	M1289-0200	285.00 £
15–18 mm	42	M1289-0300	285.00 £
18–21 mm	30	M1289-0400	285.00 £
22–26 mm	22	M1289-0500	285.00 £
26–30 mm	20	M1289-0600	285.00 £
<b>Test tube rack, medium</b>			
8–11 mm	60	M1289-0010	285.00 £
12–15 mm	44	M1289-0020	285.00 £
15–18 mm	31	M1289-0030	285.00 £
18–21 mm	23	M1289-0040	285.00 £
22–26 mm	16	M1289-0050	285.00 £
26–30 mm	16	M1289-0060	285.00 £
<b>Test tube rack, small</b>			
8–11 mm	48	M1289-0001	285.00 £
12–15 mm	34	M1289-0002	285.00 £
15–18 mm	24	M1289-0003	285.00 £
18–21 mm	18	M1289-0004	285.00 £
22–26 mm	13	M1289-0005	285.00 £
26–30 mm	12	M1289-0006	285.00 £

# Biological Shaker Performance Plans

## Preventive Maintenance

Biological Shaker Performance Plans components include a choice of preventive maintenance protocols designed to check, validate and to promote continuous and stable shaker performance, optimizing instrument conformity with programmed culturing parameters.

## Certification Service

Installation Qualification (IQ) and Operational Qualification (OQ) certification services ensure your Quality Management requirements are fulfilled, providing you with qualified assurance that your biological shaker is functioning correctly, in accordance with manufacturers' specifications.

Performance Plans	ESSENTIAL CHECK
<b>Order Number</b>	0082 080.003
<b>External Checks &amp; Maintenance</b>	
Check installation environment	■
Check electrical/gas <sup>1)</sup> supply and fittings	
Check condition/operation of any door/ lid open sensors	
Check security of doors/lids, handles, door struts <sup>1)</sup> and hinges	
<b>Internal Equipment &amp; Fittings</b>	
Check security of shaker mechanism; lubricate non-sealed bearings, as appropriate <sup>1)</sup>	
Check shaker drive motor	
Check condition of shaker drive belt; adjust belt tension as necessary	
Clean and check condenser <sup>1)</sup>	
<b>Validation &amp; Metrology</b>	
Validation and adjustment of operating parameters to within Eppendorf specifications	■
<b>Documentation</b>	
Issue preventive maintenance Check List (signed document)	■
Dated service sticker to shaker to confirm Eppendorf service	■
Provide IQ Report and Certificate	
Provide OQ Report and Certificate	
<b>Supporting Information</b>	
Contract period	one year
Number of routine preventive service visits included	one
Cost of repairs/parts replacement outside scope of preventive maintenance visit (where Eppendorf product warranty has expired)	not included
<b>Order number for combined Installation &amp; Operational Qualification Service (IQ/OQ):</b> <b>0082 080.009</b>	

<sup>1)</sup> Where feature is present <sup>2)</sup> Additionally, if you require a Customized Service we will be very pleased to discuss your requirements.

**epServices**  
for premium performance

**Service features**

- > Eppendorf quality standards
- > Eppendorf original spare parts

**Long-term benefits**

- > Improves reliability and consistency
- > Long lifetime of instruments

For more information go to [www.eppendorf.com/epServices](http://www.eppendorf.com/epServices).  
In selected countries only.



ADVANCED MAINTENANCE	PREMIUM SERVICE	Installation Qualification (IQ)	Operational Qualification (OQ)
0082 080.004	0082 080.005	0082 080.007	0082 080.008
■	■	■	■
■	■	■	■
■	■		
■	■		
■	■		
■	■		
■	■		
■	■		
■	■		
■	■		
■	■		
■	■	■	■
■	■	■	■
■	■		■
■	■		■
one year	one year	n/a	n/a
one	one	n/a	n/a
not included	discount on parts labor, travel time <sup>2)</sup>	n/a	n/a

SERVICE PRODUCTS

# S41i Incubator Shaker Performance Plans

## Preventive Maintenance

To ensure consistent, reproducible results and to protect your precious cultures from undesirable variables, we offer a range of maintenance services.

## Certification Service

For your Quality Management requirements we also offer certification services that include Installation Qualification (IQ) and Operational Qualification (OQ) certification, to ensure optimal instrument performance and stability and accuracy of culturing parameters.

Performance Plans	BASIC CHECK
<b>Order Number</b>	0082 050.003
<b>External Checks &amp; Maintenance</b>	
Check installation environment	■
Check electrical/gas supply and fittings	
Replace in-line CO <sub>2</sub> filter and auto-zero filter	
<b>Internal Equipment &amp; Fittings</b>	
Check security of shaker platform(s) and flask holders	
Check security of incubator shelf/shelves and racking system	
Replace platform support post boot seals	
Check condition of humidity trays	
Check condition of shaker drive belt	
Check condition of chamber CO <sub>2</sub> and temperature sensors	■
<b>Validation &amp; Metrology</b>	
Validation and adjustment of operating parameters to within Eppendorf specifications	■
<b>Documentation</b>	
Issue preventive maintenance Check List (signed document)	■
Attach dated service sticker to S41i to confirm Eppendorf service	■
Provide IQ Report and Certificate	
Provide OQ Report and Certificate	
<b>Supporting Information</b>	
Contract period	one year
Number of routine preventive service visits included	one
Cost of repairs/parts replacement outside scope of preventive maintenance visit (where Eppendorf product warranty has expired)	not included
<b>Order number for combined Installation &amp; Operational Qualification Service (IQ/OQ):</b>	
<b>0082 050.009</b>	

<sup>1)</sup> Please contact your local Eppendorf Service representative for details of discounts and/or any potential additional charges applying. Additionally, if you require a Customized Service we will be very pleased to discuss your requirements.

**epServices**  
for premium performance

**Service features**

- > Eppendorf customer care and quality commitment
- > Genuine quality-inspected Eppendorf parts
- > Certified service reports and advisory service labels

**Long-term benefits**

- > Reliable system performance and culturing results over the entire system lifetime
- > GLP compliant documentation
- > Optimized service
- > Optimized yield
- > Reliable Results



For more information go to [www.eppendorf.com/epServices](http://www.eppendorf.com/epServices).  
In selected countries only.

STANDARD MAINTENANCE	PREMIUM SERVICE	Installation Qualification (IQ)	Operational Qualification (OQ)
0082 050.004	0082 050.005	0082 050.007	0082 050.008
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<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>		
one year	one year	n/a	n/a
one	one	n/a	n/a
not included	discount on parts, labor & travel time <sup>1)</sup>	n/a	n/a

# Customized Solutions



The name Eppendorf stands for highest quality and reliability. Well-known companies trust in our expertise in the developing and manufacturing of high-tech laboratory products when it comes to meeting the high standards of individual market segments such as diagnostics or quality control. Eppendorf keeps developing the existing product range in cooperation with its customers to meet their specific applications and needs.

- > Customized Consumables
- > Customized Instruments

## Customized Plates, Tips and Instruments



Dozens of modifications of customized Eppendorf automatic pipette tips can be found: conductive and non-conductive, special tray colors, dimensions and material.

Further options are special surface coatings, filter characteristics and stackable tips. Additional types of tips for automation are conceivable.



Customized Solutions are Eppendorf products that have been tailored to the individual requirements of major customers. A line of Customized Solutions is already available for consumables.

For increased convenience we print your company name plus identification of the product on the plate. Our OEM offers includes further options, as for example a special degree of purity "customized clean".

For more information go to [www.eppendorf.com](http://www.eppendorf.com)

OEM-components/products are sold exclusively to companies who sell these goods on to third parties in conjunction with their own products or as a component of their kits. Technical specifications subject to change.



The range of Eppendorf automated workstations provides an open OEM platform for many liquid handling applications by

- > Flexibility of positions
- > Technology of magnetic separation
- > GxP software



We offer OEM PCR cyclers for any application including diagnostic use

- > Silver or aluminum block
- > With or without gradient function
- > Flexlid for a wide spectrum of consumables

The flexibility is also reflected by the wide range of accessories and consumables. Be it 0.2 mL PCR tubes or 50 mL tubes, plates with 96 to 384 wells or a variety of tip products.

Customization according to your needs is our business.

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## Order Numbers for Different Mains Voltage Versions



The following products are available in the listed mains voltage versions. For mains voltage versions for which no separate order number is listed (code number –), the valid order numbers

are also those listed in the first column or in the product description. The versions marked n.a. are not available. Order-related production is marked with o.r.p.

Power supply	Europe	UK/HKG	Australia	China	Japan	Argentina	ROW
Centrifuge 5418 R, standard rotor	5401 000.013	5401 000.064	5401 000.080	5401 000.099	5401 000.030	5401 000.056	5401 000.021
Centrifuge 5418 with standard rotor	5418 000.017	5418 000.068	5418 000.084	5418 000.092	5418 000.033	5418 000.050	5418 000.025
Centrifuge 5424 R, with standard rotor (foil version)	5404 000.014	5404 000.065	5404 000.081	5404 000.090	5404 000.030	5404 000.057	5404 000.022
Centrifuge 5424 R, with standard rotor (knob version)	5404 000.413	5404 000.464	5404 000.480	5404 000.499	5404 000.430	5404 000.456	5404 000.421
Centrifuge 5424 R, without rotor (foil version)	5404 000.219	5404 000.260	5404 000.286	5404 000.294	n.a.	5404 000.251	5404 000.227
Centrifuge 5424 R, without rotor (knob version)	5404 000.618	5404 000.669	5404 000.685	5404 000.693	5404 000.634	5404 000.650	5404 000.626
Centrifuge 5424 with standard rotor (foil version)	5424 000.010	5424 000.061	5424 000.088	5424 000.096	5424 000.045	5424 000.053	5424 000.029
Centrifuge 5424 with standard rotor (knob version)	5424 000.410	5424 000.460	5424 000.487	5424 000.495	5424 000.436	5424 000.452	5424 000.428
Centrifuge 5424 without rotor (foil version)	5424 000.215	5424 000.266	5424 000.282	5424 000.290	5424 000.240	5424 000.258	5424 000.223
Centrifuge 5424 without rotor (knob version)	5424 000.614	5424 000.665	5424 000.681	5424 000.690	5424 000.630	5424 000.657	5424 000.622
Centrifuge 5427 R	5409 000.012	5409 000.063	5409 000.080	5409 000.098	5409 000.039	5409 000.055	5409 000.020
Centrifuge 5427 R + rotor FA 45-12-17	5409 000.632	5409 000.667	5409 000.683	5409 000.691	n.a.	5409 000.659	5409 000.624
Centrifuge 5427 R + rotor FA 45-30-11	5409 000.535	5409 000.560	5409 000.586	5409 000.594	5409 000.519	5409 000.511	5409 000.527
Centrifuge 5427 R + rotor FA 45-48-11	5409 000.217	5409 000.268	5409 000.284	5409 000.292	5409 000.233	5409 000.250	5409 000.225
Centrifuge 5430 R with standard rotor (foil version)	5428 000.015	5428 000.066	5428 000.082	5428 000.090	5428 000.031	5428 000.058	5428 000.023
Centrifuge 5430 R with standard rotor (knob version)	5428 000.414	5428 000.465	5428 000.481	5428 000.490	5428 000.430	5428 000.457	5428 000.422
Centrifuge 5430 R without rotor (foil version)	5428 000.210	5428 000.260	5428 000.287	5428 000.295	5428 000.236	5428 000.252	5428 000.228
Centrifuge 5430 R without rotor (knob version)	5428 000.619	5428 000.660	5428 000.686	5428 000.694	5428 000.635	5428 000.651	5428 000.627

Power supply	Europe	UK/HKG	Australia	China	Japan	Argentina	ROW
Centrifuge 5430 with standard rotor (foil version)	5427 000.216	5427 000.267	5427 000.283	5427 000.291	5427 000.232	5427 000.259	5427 000.224
Centrifuge 5430 with standard rotor (knob version)	5427 000.410	5427 000.461	5427 000.488	5427 000.496	5427 000.437	5427 000.453	5427 000.429
Centrifuge 5430 without rotor (foil version)	5427 000.011	5427 000.062	5427 000.089	5427 000.097	5427 000.038	5427 000.054	5427 000.020
Centrifuge 5430 without rotor (knob version)	5427 000.615	5427 000.666	5427 000.682	5427 000.690	5427 000.631	5427 000.658	5427 000.623
Centrifuge 5702 + rotor A-4-38 & 15/50 mL adapter	5702 000.329	5702 000.361	5702 000.388	5702 000.396	n.a.	5702 000.353	5702 000.345
Centrifuge 5702 R + rotor A-4-38 & 15/50 mL adapter	5703 000.420	5703 000.462	5703 000.489	5703 000.497	n.a.	5703 000.454	5703 000.470
Centrifuge 5702 R Bundle A-4-38+VT	5703 000.322	5703 000.365	5703 000.381	5703 000.390	n.a.	5703 000.357	5703 000.349
Centrifuge 5702 R without rotor	5703 000.012	5703 000.063	5703 000.080	5703 000.098	5703 000.039	5703 000.055	5703 000.047
Centrifuge 5702 RH without rotor	5704 000.016	5704 000.067	5704 000.083	5704 000.091	5704 000.032	5704 000.059	5704 000.040
Centrifuge 5702 without rotor	5702 000.019	5702 000.060	5702 000.086	5702 000.094	5702 000.043	5702 000.051	5702 000.817
Centrifuge 5804 + rotor A-4-44 & 15/50 mL adapter	5804 000.323	5804 000.366	5804 000.382	5804 000.390	o. r. p.	5804 000.358	5804 000.374
Centrifuge 5804 + rotor S-4-72 & 15/50 mL adapter	5804 000.528	5804 000.560	5804 000.587	5804 000.595	o. r. p.	5804 000.552	5804 000.544
Centrifuge 5804 R + rotor A-4-44 & 15/50 mL adapter	5805 000.327	5805 000.360	5805 000.386	5805 000.394	o. r. p.	5805 000.351	5805 000.378
Centrifuge 5804 R + rotor S-4-72 & 15/50 mL adapter	5805 000.629	5805 000.661	5805 000.688	5805 000.696	o. r. p.	5805 000.653	5805 000.645
Centrifuge 5804 R without rotor	5805 000.017	5805 000.068	5805 000.084	5805 000.092	n.a.	5805 000.050	n. a.
Centrifuge 5804 without rotor	5804 000.013	5804 000.064	5804 000.080	5804 000.099	n.a.	5804 000.056	5804 000.170
Centrifuge 5810 + rotor A-4-62 & 15/50 mL adapter	5810 000.327	5810 000.360	5810 000.386	5810 000.394	5810 000.378	5810 000.351	5810 000.378
Centrifuge 5810 + rotor A-4-81 & 15/50 mL adapter	5810 000.424	5810 000.467	5810 000.483	5810 000.491	o. r. p.	5810 000.459	5810 000.475
Centrifuge 5810 + rotor S-4-104 & 15/50 mL adapter	5810 000.521	5810 000.564	5810 000.580	5810 000.599	o. r. p.	5810 000.556	5810 000.548

## Order Numbers for Different Mains Voltage Versions

Power supply	Europe	UK/HKG	Australia	China	Japan	Argentina	ROW
Centrifuge 5810 + rotor S-4-104 & adapter for round bottom tubes 13/16 mm	5810 000.629	5810 000.661	5810 000.688	5810 000.696	o. r. p.	5810 000.653	5810 000.670
Centrifuge 5810 R + rotor A-4-62 & 15/50 mL adapter	5811 000.320	5811 000.363	5811 000.380	5811 000.398	o. r. p.	5811 000.355	5811 000.371
Centrifuge 5810 R + rotor A-4-81 & 15/50 mL adapter	5811 000.428	5811 000.460	5811 000.487	5811 000.495	o. r. p.	5811 000.452	5811 000.479
Centrifuge 5810 R + rotor S-4-104 & 15/50 mL adapter	5811 000.622	5811 000.665	5811 000.681	5811 000.690	o. r. p.	5811 000.657	5811 000.649
Centrifuge 5810 R + rotor S-4-104 & adapter for round bottom tubes 13/16 mm	5811 000.827	5811 000.860	5811 000.886	5811 000.894	o. r. p.	5811 000.851	5811 000.843
Centrifuge 5810 R without rotor	5811 000.010	5811 000.061	5811 000.088	5811 000.096	n.a.	n.a.	n.a.
Centrifuge 5810 without rotor	5810 000.017	5810 000.068	5810 000.084	5810 000.092	n.a.	5810 000.050	5810 000.190
Centrifuge 5920R	5948 000.018	5948 000.069	5948 000.085	5948 000.093	n.a.	5948 000.050	5948 000.026
Concentrator plus basic device	5305 000.100	5305 000.169	5305 000.185	5305 000.193	5305 000.142	5305 000.150	n. a.
Concentrator plus complete system	5305 000.304	5305 000.363	5305 000.380	5305 000.398	5305 000.347	5305 000.355	5305 000.371
Concentrator plus complete system (without rotor)	5305 000.509	5305 000.568	5305 000.584	5305 000.592	5305 000.541	5305 000.550	5305 000.576
Concentrator plus complete system with junction (without rotor)	5305 000.703	5305 000.762	5305 000.589	5305 000.797	5305 000.746	5305 000.754	5305 000.770
epMotion® 96	5069 000.012	5069 000.020	5069 000.039	5069 000.047	o. r. p.	5069 000.055	o. r. p.
epMotion® 5070	5070 000.280	o. r. p.					
epMotion® 5070f	5070 000.281	o. r. p.					
epMotion® 5075l	5075 000.301	o. r. p.					
epMotion® 5075t	5075 000.302	o. r. p.					
epMotion® 5075v	5075 000.303	o. r. p.					
epMotion® 5075vt	5075 000.304	o. r. p.					
epMotion® 5075m	5075 000.305	o. r. p.					
epMotion® M5073	5073 000.205	5073 000.221	5073 000.230	5073 000.248	5073 000.507	5073 000.256	5073 000.213
epMotion® M5073c	5073 000.400	o. r. p.	o. r. p.	o. r. p.	5073 000.515	o. r. p.	o. r. p.
epMotion® P5073	5073 000.000	5073 000.227	5073 000.035	5073 000.043	5073 000.019	5073 000.051	5073 000.019
epMotion® P5073c	5073 000.302	o. r. p.					
Eppendorf BioPhotometer® D30	6133 000.001	6133 000.028	6133 000.036	6133 000.044	6133 000.010	6133 000.052	6133 000.010
Eppendorf BioSpectrometer® basic	6135 000.009	6135 000.025	6135 000.033	6135 000.041	6135 000.017	6135 000.050	6135 000.050

Power supply	Europe	UK/HKG	Australia	China	Japan	Argentina	ROW
Eppendorf BioSpectrometer® fluorescence	6137 000.006	6137 000.022	6137 000.030	6137 000.049	6137 000.014	6137 000.057	6137 000.014
Eppendorf BioSpectrometer® kinetic	6136 000.002	6136 000.029	6136 000.037	6136 000.045	6136 000.010	6136 000.053	6136 000.053
Eppendorf Eporator®	4309 000.019	4309 000.035	4309 000.051	4309 000.060	4309 000.027	4309 000.078	n.a.
Eppendorf PiezoXpert®	5194 000.016	5194 000.032	5194 000.059	5194 000.067	5194 000.024	5194 000.075	n.a.
Eppendorf PlateReader AF2200	6141 000.002	6141 000.029	6141 000.037	6141 000.045	6141 000.010	6141 000.053	6141 000.010
Eppendorf ThermoMixer® C	5382 000.015	5382 000.031	5382 000.066	5382 000.074	5382 000.023	5382 000.082	5382 000.023
Eppendorf ThermoMixer® F0.5	5386 000.010	5386 000.036	5386 000.060	5386 000.079	5386 000.028	5386 000.087	5386 000.028
Eppendorf ThermoMixer® F1.5	5384 000.012	5384 000.039	5384 000.063	5384 000.071	5384 000.020	5384 000.080	5384 000.020
Eppendorf ThermoMixer® F2.0	5387 000.013	5387 000.030	5387 000.064	5387 000.072	5387 000.021	5387 000.080	5387 000.021
Eppendorf ThermoMixer® FP	5385 000.016	5385 000.032	5385 000.067	5385 000.075	5385 000.024	5385 000.083	5385 000.024
Eppendorf ThermoStat™ C	5383 000.019	5383 000.035	5383 000.060	5383 000.078	5383 000.027	5383 000.086	5383 000.027
Eppendorf µCuvette® G1.0 & Eppendorf BioSpectrometer® basic	6135 000.904	6135 000.906	6135 000.907	6135 000.908	6135 000.905	6135 000.909	6135 000.905
Eppendorf µPlate G0.5 & Eppendorf PlateReader AF2200	6141 000.908	6141 000.910	6141 000.911	6141 000.912	6141 000.909	6141 000.913	6141 000.909
Eppendorf FemtoJet® 4x programmable microinjector with external pressure supply	5253 000.017	5253 000.033	5253 000.050	5253 000.068	5253 000.025	5253 000.076	n.a.
Eppendorf FemtoJet® 4i programmable microinjector with integrated pressure supply	5252 000.013	5252 000.030	5252 000.056	5252 000.064	5252 000.021	5253 000.076	n.a.
Eppendorf InjectMan® 4	5192 000.019	5192 000.035	5192 000.043	5192 000.051	5192 000.027	5192 000.060	–
Eppendorf Mastercycler® nexus	6333 000.014	6333 000.049	6333 000.065	6333 000.073	6333 000.030	n.a.	6333 000.081
Eppendorf Mastercycler® nexus eco	6332 000.010	6332 000.045	6332 000.061	6332 000.070	6332 000.037	n.a.	6332 000.088
Eppendorf Mastercycler® nexus gradient	6331 000.017	6331 000.041	6331 000.068	6331 000.076	6331 000.033	n.a.	6331 000.084
Eppendorf Mastercycler® nexus flat	6335 000.011	6335 000.046	6335 000.062	6335 000.070	6335 000.038	6335 000.089	6335 000.038
Eppendorf Mastercycler® nexus flat eco	6330 000.013	6330 000.048	6330 000.064	6330 000.072	6330 000.030	6330 000.080	6330 000.030
Eppendorf Mastercycler® nexus GSX1	6345 000.010	6345 000.044	6345 000.060	6345 000.079	6345 000.036	6345 000.087	6345 000.036

## Order Numbers for Different Mains Voltage Versions

Power supply	Europe	UK/HKG	Australia	China	Japan	Argentina	ROW
Mastercycler® nexus GSX1e	6347 000.017	6347 000.041	6347 000.068	6347 000.076	6347 000.033	6347 000.084	6347 000.033
Mastercycler® nexus SX1e	6348 000.010	6348 000.045	6348 000.061	6348 000.070	6348 000.037	6348 000.088	6348 000.037
Mastercycler® nexus X1	6346 000.013	6346 000.048	6346 000.064	6346 000.072	6346 000.030	6346 000.080	6346 000.030
Mastercycler® nexus GX2	6336 000.015	6336 000.040	6336 000.066	6336 000.074	n.a.	6336 000.082	6336 000.023
Mastercycler® nexus GX2e	6338 000.012	6338 000.047	6338 000.063	6338 000.071	n.a.	6338 000.080	6338 000.020
Mastercycler® nexus X2	6337 000.019	6337 000.043	6337 000.060	6337 000.078	6337 000.027	6337 000.086	n.a.
Mastercycler® nexus X2e	6339 000.016	6339 000.040	6339 000.067	6339 000.075	n.a.	6339 000.083	6339 000.024
Mastercycler® pro 384, manual, with Control Panel	6324 000.516	6324 000.540	6324 000.567	6324 000.575	6324 000.532	n.a.	6324 000.524
Mastercycler® pro 384, manual	6324 000.010	6324 000.044	6324 000.060	6324 000.079	6324 000.036	n.a.	6324 000.028
Mastercycler® pro S, manual	6325 000.013	6325 000.048	6325 000.064	6325 000.072	6325 000.030	n.a.	6325 000.021
Mastercycler® pro S, manual, with Control Panel	6325 000.510	6325 000.544	6325 000.560	6325 000.579	6325 000.536	n.a.	6325 000.528
Mastercycler® pro, manual	6321 000.019	6321 000.043	6321 000.060	6321 000.078	6321 000.035	n.a.	6321 000.027
Mastercycler® pro, with Control Panel	6321 000.515	6321 000.540	6321 000.566	6321 000.574	6321 000.531	n.a.	6321 000.523
MiniSpin® plus with standard rotor	5453 000.011	5453 000.062	5453 000.089	5453 000.097	n.a.	n.a.	n.a.
MiniSpin® with standard rotor	5452 000.018	5452 000.069	5452 000.085	5452 000.093	n.a.	n.a.	n.a.
MixMate®	5353 000.014	5353 000.030	5353 000.073	5353 000.081	n.a.	n.a.	5353 000.022
Thermal Printer DPU-S445, serial printer, incl. power supply unit	6135 011.000	-	-	-	-	-	6131 010.000
TransferMan® 4 m	5191 000.015	5191 000.031	-	-	5191 000.023	-	-
TransferMan® 4 r	5193 000.012	5193 000.039	5193 000.047	5193 000.055	5193 000.020	5193 000.063	-

Power supply	230 V, 50 Hz	120 V, 60 Hz	208–230 V, 60 Hz	120–220 V, 60 Hz
<b>Freezers</b>				
CryoCube™ F570	F570300001	F570200005	F570400005	n.a.
CryoCube™ F570h	F570320001	F570220005	n.a.	n.a.
CryoCube™ FC660	F660300001	n.a.	F660400005	n.a.
CryoCube™ FC660h	F660320001	n.a.	F660420005	n.a.
HEF® U410, Upright Freezer	U9260-0008	U9260-0007	n.a.	n.a.
HEF® U570, Upright Freezer	U9270-0008	U9270-0007	n.a.	n.a.
HEF® C660, Chest Freezer	U9250-0008	n.a.	U9250-0007	n.a.
U725-G, Green Upright Freezer				
Air-Cooled	U9440-0005	n.a.	n.a.	n.a.
Water-Cooled	U9440-0004	n.a.	n.a.	n.a.
Innova® U101, Upright Freezer	U9420-0001	U9420-0000	n.a.	n.a.
Innova® U360, Upright Freezer	U9425-0001	U9425-0000	n.a.	n.a.
Innova® U535, Upright Freezer	U9430-0001	U9430-0000	U9430-0002	n.a.
Innova® U725, Upright Freezer	U9440-0001	n.a.	U9440-0002	n.a.
Innova® C585, Chest Freezer	U9400-0001	U9400-0000	U9400-0002	n.a.
Innova® C760, Chest Freezer	U9410-0001	n.a.	U9410-0002	n.a.
Premium U410, Upright Freezer	U9260-0001	U9260-0000	U9260-0002	n.a.
Premium U570, Upright Freezer	U9270-0001	U9270-0000	U9270-0002	n.a.
Premium U700, Upright Freezer	R9280-0003	R9280-0000	R9280-0002	n.a.
Premium C660, Chest Freezer	U9250-0001	n.a.	U9250-0002	o. r. p.
CO <sub>2</sub> Back-up, Innova Freezers	U9043-0004	n.a.	n.a.	U9043-0002
LN <sub>2</sub> Back-up, Innova Freezers	U9044-0004	n.a.	n.a.	U9044-0002
CO <sub>2</sub> Back-up, Premium Freezers	U9043-0008	n.a.	n.a.	U9043-0006
LN <sub>2</sub> Back-up, Premium Freezers	U9044-0008	n.a.	n.a.	U9044-0006



## Order Numbers for Different Mains Voltage Versions

Power supply	230 V, 50 Hz	120 V, 60 Hz	100 V, 60 Hz	100 V, 50 Hz
<b>Shakers</b>				
<b>Innova® 40, Incubator Shaker</b>				
1.9 cm orbit	M1299-0082	M1299-0080	M1299-0081	M1299-0083
2.5 cm orbit	M1299-0092	M1299-0090	M1299-0091	M1299-0093
<b>Innova® 40R, Incubated/Refrigerated Shaker</b>				
1.9 cm orbit	M1299-0086	M1299-0084	M1299-0085	M1299-0087
2.5 cm orbit	M1299-0096	M1299-0094	M1299-0095	M1299-0097
<b>Innova® 42, Stackable Incubator Shaker</b>				
1.9 cm orbit	M1335-0002	M1335-0000	M1335-0001	M1335-0003
2.5 cm orbit	M1335-0012	M1335-0010	M1335-0011	M1335-0013
<b>Innova® 42R, Stackable Incubator/Refrigerated Shaker</b>				
1.9 cm orbit	M1335-0006	M1335-0004	M1335-0005	M1335-0007
2.5 cm orbit	M1335-0016	M1335-0014	M1335-0015	M1335-0017
<b>Innova® 43, Stackable Incubator Shaker</b>				
2.5 cm orbit	M1320-0002	M1320-0000	M1320-0001	M1320-0003
5.1 cm orbit	M1320-0012	M1320-0010	M1320-0011	M1320-0013
<b>Innova® 43R, Stackable Incubator/Refrigerated Shaker</b>				
2.5 cm orbit	M1320-0006	M1320-0004*	M1320-0005*	M1320-0007
5.1 cm orbit	M1320-0016	M1320-0014*	M1320-0015*	M1320-0017
<b>Innova® 44, Stackable Incubator Shaker</b>				
2.5 cm orbit	M1282-0002	M1282-0000	M1282-0001	M1282-0003
5.1 cm orbit	M1282-0012	M1282-0010	M1282-0011	M1282-0013
<b>Innova® 44R, Stackable Incubator/Refrigerated Shaker</b>				
2.5 cm orbit	M1282-0006	M1282-0004	M1282-0005	M1282-0007
5.1 cm orbit	M1282-0016	M1282-0014	M1282-0015	M1282-0017
<b>I 26, Stackable Incubator Shaker</b>				
2.5 cm orbit	M1324-0002	M1324-0000	M1324-0001	M1324-0003

Power supply	230 V, 50 Hz	120 V, 60 Hz	100 V, 60 Hz	100 V, 50 Hz
<b>I 26R, Stackable Incubator/Refrigerated Shaker</b>				
2.5 cm orbit	M1324-0006	M1324-0004	M1324-0005	M1324-0007
<b>Excella® 24, Incubator Shaker</b>				
1.9 cm orbit	M1352-0002	M1352-0000	M1352-0001	M1352-0003
<b>Excella 24R, Incubated/Refrigerated Shaker</b>				
1.9 cm orbit	M1352-0006	M1352-0004	M1352-0005	M1352-0007
<b>Excella 25, Incubator Shaker</b>				
2.5 cm orbit	M1353-0002	M1353-0000	M1353-0001	M1353-0003

Power supply	230 V, 50 Hz	230 V, 50/60 Hz	220/230 V, 50/60 Hz	230/240 V, 50/60 Hz	240 V, 50/60 Hz
<b>Shakers</b>					
<b>Excella® 25, Incubator Shaker</b>					
2.5 cm orbit	M1353-0002	n.a.	n.a.	n.a.	n.a.
<b>Excella® 25R, Incubated/Refrigerated Shaker</b>					
2.5 cm orbit	M1353-0006	n.a.	n.a.	n.a.	n.a.
<b>Excella® E10, Open Air Shaker</b>					
2.5 cm orbit	n.a.	M1351-0001	n.a.	n.a.	n.a.
<b>Excella® E5, Open Air Shaker</b>					
1.9 cm orbit	n.a.	M1355-0001	n.a.	n.a.	n.a.
<b>Excella® E2, Open Air Shaker</b>					
1.9 cm orbit	n.a.	M1350-0001	n.a.	n.a.	n.a.
<b>Excella® E1, Open Air Shaker</b>					
1.9 cm orbit	n.a.	M1354-0001	n.a.	n.a.	n.a.
<b>Innova® 2000, Open Air Shaker</b>					
1.9 cm orbit	n.a.	n.a.	M1190-0002	n.a.	M1190-0003
<b>Innova® 2050, Open Air Shaker</b>					
1.9 cm orbit	n.a.	n.a.	M1190-0012	n.a.	M1190-0013
<b>Innova® 2100, Open Air Shaker</b>					
1.9 cm orbit	n.a.	n.a.	M1194-0002	n.a.	M1194-0003
<b>Innova® 2150, Open Air Shaker</b>					
1.9 cm orbit	n.a.	n.a.	M1194-0012	n.a.	M1194-0013

## Order Numbers for Different Mains Voltage Versions

Power supply	230 V, 50 Hz	230 V, 50/60 Hz	220/230 V, 50/60 Hz	230/240 V, 50/60 Hz	240 V, 50/60 Hz
<b>Innova® 2300, Open Air Shaker</b>					
2.5 cm orbit	n.a.	n.a.	M1191-0002	n.a.	M1191-0003
5.1 cm orbit	n.a.	n.a.	M1191-0022	n.a.	M1191-0023
<b>Innova® 2350, Open Air Shaker</b>					
2.5 cm orbit	n.a.	n.a.	M1191-0012	n.a.	M1191-0013
5.1 cm orbit	n.a.	n.a.	M1191-0032	n.a.	M1191-0033
<b>Innova® 5000, Multi-Tier Shaker</b>					
5.1 cm orbit	n.a.	n.a.	M1196-0002	n.a.	M1196-0003
Innova® 5050, Rack System	n.a.	n.a.	o. r. p.	M1232-0101	o. r. p.
Innova® 5051, Rack Extension	n.a.	n.a.	o. r. p.	M1232-0111	o. r. p.

Power supply	120 V, 60 Hz	120 V, 50/60 Hz	100/120 V, 50/60 Hz	100 V, 60 Hz	100 V, 50 Hz	100 V, 50/60 Hz
<b>Shakers</b>						
<b>Excella® 25, Incubator Shaker</b>						
2.5 cm orbit	M1353-000	n.a.	n.a.	M1353-0001	M1353-0003	n.a.
<b>Excella® 25R, Incubated/Refrigerated Shaker</b>						
2.5 cm orbit	M1353-0004	n.a.	n.a.	n.a.	M1353-0005	M1353-0007
<b>Excella® E10, Open Air Shaker</b>						
2.5 cm orbit	n.a.	n.a.	M1351-0000	n.a.	n.a.	n.a.
<b>Excella® E5, Open Air Shaker</b>						
1.9 cm orbit	n.a.	n.a.	M1355-0000	n.a.	n.a.	n.a.
<b>Excella® E2, Open Air Shaker</b>						
1.9 cm orbit	n.a.	n.a.	M1350-0000	n.a.	n.a.	n.a.
<b>Excella® E1, Open Air Shaker</b>						
1.9 cm orbit	n.a.	M1354-0000	n.a.	n.a.	n.a.	n.a.
<b>Innova® 2000, Open Air Shaker</b>						
1.9 cm orbit	n.a.	M1190-0000	n.a.	n.a.	n.a.	M1190-0001
<b>Innova® 2050, Open Air Shaker</b>						
1.9 cm orbit	n.a.	M1190-0010	n.a.	n.a.	n.a.	M1190-0011
<b>Innova® 2100, Open Air Shaker</b>						
1.9 cm orbit	n.a.	M1194-0000	n.a.	n.a.	n.a.	M1194-0001

Power supply	120 V, 60 Hz	120 V, 50/60 Hz	100/120 V, 50/60 Hz	100 V, 60 Hz	100 V, 50 Hz	100 V, 50/60 Hz
<b>Innova® 2150, Open Air Shaker</b>						
1.9 cm orbit	n.a.	M1194-0010	n.a.	n.a.	n.a.	M1194-0011
<b>Innova® 2300, Open Air Shaker</b>						
2.5 cm orbit	n.a.	M1191-0000	n.a.	n.a.	n.a.	M1191-0001
5.1 cm orbit	n.a.	M1191-0020	n.a.	n.a.	n.a.	M1191-0021
<b>Innova® 2350, Open Air Shaker</b>						
2.5 cm orbit	n.a.	M1191-0010	n.a.	n.a.	n.a.	M1191-0011
5.1 cm orbit	n.a.	M1191-0030	n.a.	n.a.	n.a.	M1191-0031
<b>Innova® 5000, Multi-Tier Shaker</b>						
5.1 cm orbit	n.a.	M1196-0000	n.a.	n.a.	n.a.	M1196-0001
Innova® 5050, Rack System	n.a.	n. a.	M1232-0100	n.a.	n.a.	n.a.
Innova® 5051, Rack Extension	n.a.	n. a.	M1232-0110	n.a.	n.a.	n.a.

## Order Numbers for Different Mains Voltage Versions

Power supply	Europe	UK/HKG	Australia	China	ROW
<b>Galaxy® CO<sub>2</sub> Incubators</b>					
<b>Galaxy® 170R</b>					
Galaxy® 170R Standard	C017301001	C017301002	C017301003	C017301004	C017201005
Galaxy® 170R 1-19 % O <sub>2</sub> Control	C017321001	C017321002	C017321003	C017321004	C017221005
Galaxy® 170R High-Temp Disinfection	C017311001	C017311002	C017311003	C017311004	C017211005
Galaxy® 170R High-Temp Disinfection, 4-Split Inner Door	C017314001	C017314002	C017314003	C017314004	C017214005
Galaxy® 170R High-Temp Disinfection, 1-19 % O <sub>2</sub> Control	C017331001	C017331002	C017331003	C017331004	C017231005
<b>Galaxy® 170R High-Temp Disinfection, 1-19 % O<sub>2</sub> Control, 4-Split Inner Door</b>	C017334001	C017334002	C017334003	C017334004	C017234005
Galaxy® 170R 4-Split Inner Door	C017304001	C017304002	C017304003	C017304004	C017204005
Galaxy® 170R 8-Split Inner Door	C017308001	C017308002	C017308003	C017308004	C017208005
<b>Galaxy® 170R 1-19 % O<sub>2</sub> Control, 4-Split Inner Door</b>	C017324001	C017324002	C017324003	C017324004	C017224005
Galaxy® 170R 1-19 % O <sub>2</sub> Control, 8-Split Inner Door	C017328001	C017328002	C017328003	C017328004	C017228005
Galaxy® 170R High-Temp Disinfection, 0.1-19 % O <sub>2</sub> Control	C017311041	C017311042	C017311043	C017311044	C017211045
Galaxy® 170R High-Temp Disinfection, 0.1-19 % O <sub>2</sub> Control, 4-Split Inner Door	C017314041	C017314042	C017314043	C017314044	C017214045
Galaxy® 170R High-Temp Disinfection, 0.1-19 % O <sub>2</sub> Control, 4-Split Inner Door, Copper Chamber	C017314051	C017314052	C017314053	C017314054	C017214055
Galaxy® 170R High-Temp Disinfection, 0.1-19 % O <sub>2</sub> Control, 4-Split Inner Door, Humidity Package	C017314061	C017314062	C017314063	C017314064	C017214065
Galaxy® 170R High-Temp Disinfection, 0.1-19 % O <sub>2</sub> Control, 8-Split Inner Door	C017318041	C017318042	C017318043	C017318044	C017218045
Galaxy® 170R High-Temp Disinfection, 1-19 % O <sub>2</sub> Control, Humidity Package	C017331011	C017331012	C017331013	C017331014	C017231015
Galaxy® 170R High-Temp Disinfection, 1-19 % O <sub>2</sub> Control, Copper Chamber	C017331021	C017331022	C017331023	C017331024	C017231025
Galaxy® 170R High-Temp Disinfection, 1-19 % O <sub>2</sub> Control, Humidity Package, Copper Chamber	C017331031	C017331032	C017331033	C017331034	C017231035
Galaxy® 170R High-Temp Disinfection, 1-19 % O <sub>2</sub> Control, 4-Split Inner Door, Humidity Package	C017334011	C017334012	C017334013	C017334014	C017234015
Galaxy® 170R High-Temp Disinfection, 1-19 % O <sub>2</sub> Control, 4-Split Inner Door, Copper Chamber	C017334021	C017334022	C017334023	C017334024	C017234025
Galaxy® 170R High-Temp Disinfection, 1-19 % O <sub>2</sub> Control, 4-Split Inner Door, Humidity Package, Copper Chamber	C017334031	C017334032	C017334033	C017334034	C017234035
Galaxy® 170R High-Temp Disinfection, 1-19 % O <sub>2</sub> Control, 8-Split Inner Door	C017338001	C017338002	C017338003	C017338004	C017238005
Galaxy® 170R High-Temp Disinfection, 1-19 % O <sub>2</sub> Control, 8-Split Inner Door, Humidity Package	C017338011	C017338012	C017338013	C017338014	C017238015
Galaxy® 170R High-Temp Disinfection, 1-19 % O <sub>2</sub> Control, 8-Split Inner Door, Humidity Package, Copper Chamber	C017338031	C017338032	C017338033	C017338034	C017238035
Galaxy® 170R High-Temp Disinfection, 1-95 % O <sub>2</sub> Control	C017311071	C017311072	C017311073	C017311074	C017211075
Galaxy® 170R High-Temp Disinfection, 1-95 % O <sub>2</sub> Control, 4-Split Inner Door	C017314071	C017314072	C017314073	C017314074	C017214075
Galaxy® 170R High-Temp Disinfection, 1-95 % O <sub>2</sub> Control, 4-Split Inner Door, Humidity Package	C017314091	C017314092	C017314093	C017314094	C017214095
Galaxy® 170R High-Temp Disinfection, 1-95 % O <sub>2</sub> Control, 4-Split Inner Door, Copper Chamber	C017314081	C017314082	C017314083	C017314084	C017214085
Galaxy® 170R High-Temp Disinfection, 1-95 % O <sub>2</sub> Control, 8-Split Inner Door	C017318071	C017318072	C017318073	C017318074	C017218075
Galaxy® 170R High-Temp Disinfection, Humidity Package	C017311011	C017311012	C017311013	C017311014	C017211015
Galaxy® 170R High-Temp Disinfection, Copper Chamber	C017311021	C017311022	C017311023	C017311024	C017211025

Power supply	Europe	UK/HKG	Australia	China	ROW
Galaxy® 170R High-Temp Disinfection, Humidity Package, Copper Chamber	CO17311031	CO17311032	CO17311033	CO17311034	CO17211035
Galaxy® 170R High-Temp Disinfection, 4-Split Inner Door, Humidity Package	CO17314011	CO17314012	CO17314013	CO17314014	CO17214015
Galaxy® 170R High-Temp Disinfection, 4-Split Inner Door, Copper Chamber	CO17314021	CO17314022	CO17314023	CO17314024	CO17214025
Galaxy® 170R High-Temp Disinfection, 4-Split Inner Door, Humidity Package, Copper Chamber	CO17314031	CO17314032	CO17314033	CO17314034	CO17214035
Galaxy® 170R High-Temp Disinfection, 8-Split Inner Door	CO17318001	CO17318002	CO17318003	CO17318004	CO17218005
Galaxy® 170R High-Temp Disinfection, 8-Split Inner Door, Humidity Package	CO17318011	CO17318012	CO17318013	CO17318014	CO17218015
Galaxy® 170R High-Temp Disinfection, 8-Split Inner Door, Humidity Package, Copper Chamber	CO17318031	CO17318032	CO17318033	CO17318034	CO17218035
Galaxy® 170S					
Galaxy® 170S Standard	CO17101001	CO17101002	CO17101003	CO17101004	CO17001005
Galaxy® 170S High-Temp Disinfection	CO17111001	CO17111002	CO17111003	CO17111004	CO17011005
Galaxy® 170S High-Temp Disinfection, 4-Split Inner Door	CO17114001	CO17114002	CO17114003	CO17114004	CO17014005
Galaxy® 170S Standard, 4-Split Inner Door	CO17104001	CO17104002	CO17104003	CO17104004	CO17004005
Galaxy® 48R					
Galaxy® 48R Standard	CO48300001	CO48300002	CO48300003	CO48300004	CO48200005
Galaxy® 48R 1-19 % O <sub>2</sub> Control	CO48320001	CO48320002	CO48320003	CO48320004	CO48220005
Galaxy® 48R High-Temp Disinfection	CO48310001	CO48310002	CO48310003	CO48310004	CO48210005
Galaxy® 48R High-Temp Disinfection, 1-19 % O <sub>2</sub> Control	CO48330001	CO48330002	CO48330003	CO48330004	CO48230005
Galaxy® 48R 2-Split Inner Door	CO48312001	CO48312002	CO48312003	CO48312004	CO48212005
Galaxy® 48R High-Temp Disinfection, 0.1-19 % O <sub>2</sub> Control	CO48310041	CO48310042	CO48310043	CO48310044	CO48210045
Galaxy® 48R High-Temp Disinfection, 0.1-19 % O <sub>2</sub> Control, Humidity Package	CO48310061	CO48310062	CO48310063	CO48310064	CO48210065
Galaxy® 48R High-Temp Disinfection, 0.1-19 % O <sub>2</sub> Control, 2-Split Inner Door	CO48312041	CO48312042	CO48312043	CO48312044	CO48212045
Galaxy® 48R High-Temp Disinfection, 0.1-19 % O <sub>2</sub> Control, 2-Split Inner Door, Humidity Package	CO48312061	CO48312062	CO48312063	CO48312064	CO48212065
Galaxy® 48R High-Temp Disinfection, 1-19 % O <sub>2</sub> Control, 2-Split Inner Door	CO48332001	CO48332002	CO48332003	CO48332004	CO48232005
Galaxy® 48R High-Temp Disinfection, 1-19 % O <sub>2</sub> Control, 2-Split Inner Door, Humidity Package	CO48332011	CO48332012	CO48332013	CO48332014	CO48232015
Galaxy® 48R High-Temp Disinfection, 1-95 % O <sub>2</sub> Control	CO48310071	CO48310072	CO48310073	CO48310074	CO48210075
Galaxy® 48R High-Temp Disinfection, 1-95 % O <sub>2</sub> Control, Humidity Package	CO48310091	CO48310092	CO48310093	CO48310094	CO48210095
Galaxy® 48R High-Temp Disinfection, 1-95 % O <sub>2</sub> Control, 2-Split Inner Door	CO48312071	CO48312072	CO48312073	CO48312074	CO48212075
Galaxy® 48R High-Temp Disinfection, 1-95 % O <sub>2</sub> Control, 2-Split Inner Door, Humidity Package	CO48312091	CO48312092	CO48312093	CO48312094	CO48212095

**Power supply****230 V, 50/60 Hz****120 V, 50/60 Hz****Tissue culture roller drums**

TC-7

M1053-4005

M1053-4004

TC-8

M1053-5005

M1053-5004

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## Disclaimer

epMotion M5073, M5073c and 5075m

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## Trademark Information:

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## US Patents Eppendorf Group

Product	Patent number
BioBLU® 5p,	US 8,522,996
BioBLU® 5c,	
BioBLU® 14c,	
BioBLU® 50c	
BioFlo® 510, BioFlo® 610,	US 8,292,591
BioFlo® PRO	
Centrifuge 5415 R	US 6,866,621
Centrifuge 5418, 5418 R	US 6,866,621
Centrifuge 5424, 5424 R	US 6,866,621
Centrifuge 5430, 5430 R	US 6,866,621
Centrifuge 5702 swing-bucket rotor	US 6,746,391
Centrifuge 5702, 5702 R, 5702 RH	US 6,866,621

## Product

Product	Patent number
Combitips plus®	US 8,813,584
Electrofusion Buffers	US 7,157,257
Electroporation Buffer	US 7,157,257
Electroporator Model 2510	US 6,103,084
epMotion® 5073; epMotion® 5075	US 8,377,396
epMotion® 5075 VAC	US 6,666,978
Eppendorf BioSpectrometer® Family	US 8,464,171
Eppendorf Reference® 2	US 7,674,432
	US 8,297,134
Eppendorf Reference® 2 multi channel	US 7,673,532
Eppendorf Reference® 2 single channel	US 7,434,484
≤ 1,000 µL	
Eppendorf Reference® 2 multi channel	
Eppendorf Research® plus	US 7,674,432
	US 8,133,453
	US 8,297,134
Eppendorf Research® plus ≤ 1,000 µL	US 7,434,484
Eppendorf Research® plus multi channel	US 7,673,532
Eppendorf Xplorer®/ Eppendorf Xplorer® plus	US 6,499,365
	US 6,778,917
	US 7,585,468
	US 7,674,432
	US 7,694,592
	US 8,028,592
	US 8,096,198
	US 8,632,735
Eppendorf Xplorer®/Eppendorf Xplorer® plus	US 7,673,532
multi channel	
Eppendorf Xplorer®/Eppendorf Xplorer® plus	US 7,434,484
single channel ≤ 1,000 µL	
Eppendorf Xplorer®/Eppendorf Xplorer® plus	
multi channel <1,250 µL	
epPoints®	US 8,762,198
Gradient block for Mastercycler Family	US 6,767,512
	US 7,074,367
gripping tool for epMotion® 5070;	US 7,462,327
epMotion® 5075	
Mastercycler® pro Family	US 8,492,137
	US 8,722,394
Mastercycler® pro Family;	US 8,322,918
Mastercycler® nexus Family	
	US 8,722,394
MicroDissector	US 6,673,086
MixMate®	US 7,575,363
	US 8,550,696
Multipette®/Repeater family	US 8,114,361
Multipette®/Repeater M4	US 8,408,079
Multipette®/Repeater M4,	US 5,573,729
Multipette®/Repeater plus	
	US 5,591,408
Multipette®/Repeater stream/Xstream	US 6,499,365
	US 6,778,917
	US 7,585,468
	US 7,731,908
Multiporator®	US 6,008,038

Product	Patent number	Trademark	Status	Owner
Optical sensor epMotion®;		Combitips plus	®	Eppendorf AG
epMotion® 5070, 5057 - all types	US 6,819,437	condens.protect	®	Eppendorf AG
PCR Cooler	US 6,616,897	ConvexAccess	™	Eppendorf AG
PCR tubes 0,2 mL	US 5,863,791	CryoCube	™	Eppendorf AG
PCR tubes stripes 0,2 mL	US 5,863,791	DASbox	®	DASGIP Information and Process Technology GmbH
Pipetting tool for epMotion®	US 8,377,396			
Twin Tip-Holder	US 6,159,199			
twin.tec PCR Plates	US 6,340,589			
	US 7,347,977			
	US 7,767,153	DASGIP	®	DASGIP Information and Process Technology GmbH
Universal block, Mastercycler®, Mastercycler® gradient	US 6,210,958			
Uvette®	US 6,249,345			
		DASware	®	DASGIP Information and Process Technology GmbH
		Easypet	®	Eppendorf AG
		ep Dualfilter T.I.P.S.	®	Eppendorf AG
		EpBlue	™	Eppendorf AG
		epGreen	®	Eppendorf AG
		epMotion	®	Eppendorf AG
		Eppendorf	®	Eppendorf AG
		Eppendorf µCuvette	®	Eppendorf AG
		Eppendorf Advantage	™	Eppendorf AG
		Eppendorf	®	Eppendorf AG
		BioPhotometer	®	Eppendorf AG
		Eppendorf	®	Eppendorf AG
		BioPhotometer plus	®	Eppendorf AG
		Eppendorf	®	Eppendorf AG
		BioSpectrometer	®	Eppendorf AG
		Eppendorf Combitips	®	Eppendorf AG
		Eppendorf EasyCon	™	Eppendorf AG
		Eppendorf Eporator	®	Eppendorf AG
		eppendorf In touch with life	®	Eppendorf AG
		Eppendorf Kit rotor	®	Eppendorf AG
		Eppendorf LoBind	®	Eppendorf AG
		Eppendorf MagSep	™	Eppendorf AG
		Eppendorf PerfectPiston	®	Eppendorf AG
		Eppendorf	®	Eppendorf AG
		PhysioCare Concept	®	Eppendorf AG
		Eppendorf PiezoXpert	®	Eppendorf AG
		Eppendorf Plate	®	Eppendorf AG
		Eppendorf Plates	™	Eppendorf AG
		Eppendorf Quality	™	Eppendorf AG

US Design Patents		
Product	Patent number	
Eppendorf Xplorer®	US D0674913	
Eppendorf Plates®	US D0601713	
	US D0601714	
Eppendorf ThermoMixer®	US D0569988	
Multipette® stream and Multipette® Xstream	US D0548358	
ep Dualfilter T.I.P.S.®	US D0679826	
ep T.I.P.S.®	US D0465853	
Eppendorf Research®	US D0375798	
Centrifuge Rotor PCR	US D0441873	
Uvette®	US D0437419	
Eppendorf Centrifuge	US D0413676	
Eppendorf Combitips®	US D0384162	
	US D0384163	
	US D0387426	
	US D0706946	

Trademarks Eppendorf Group		
Trademark	Status	Owner
AIBENDE	®	Eppendorf AG
BioBLU	®	Eppendorf AG
BioCommand	®	Eppendorf, Inc.
BioFlo	®	Eppendorf, Inc.
Biomaster	®	Eppendorf AG
BioPhotometer	™	Eppendorf AG
Biopur	®	Eppendorf AG
cellferm-pro	®	DASGIP Information and Process Technology GmbH
CelliGen	®	Eppendorf, Inc.
CellTram	®	Eppendorf AG
Combilong	®	Eppendorf AG
Combitips	®	Eppendorf AG
Combitips advanced	®	Eppendorf AG

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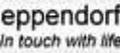
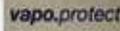
Trademark	Status	Owner	Trademark	Status	Owner
Eppendorf QuickLock	®	Eppendorf AG	g-Safe	®	Eppendorf AG
Eppendorf QuickRelease	™	Eppendorf AG	In touch with life	®	Eppendorf AG
Eppendorf Reference	®	Eppendorf AG	InjectMan	®	Eppendorf AG
Eppendorf Research	®	Eppendorf AG	Innova	®	Eppendorf, Inc.
Eppendorf Research pro	®	Eppendorf AG	Isotherm-System	®	Eppendorf AG
Eppendorf SmartBlock	™	Eppendorf AG	Masterclear	®	Eppendorf AG
Eppendorf SpectraZoom	®	Eppendorf AG	Mastercyclor	®	Eppendorf AG
Eppendorf ThermoMixer	®	Eppendorf AG	Mastertip	®	Eppendorf AG
Eppendorf ThermoMixer 1.5 mL	®	Eppendorf AG	Maxipettor	®	Eppendorf AG
Eppendorf ThermoMixer plates	®	Eppendorf AG	Microloader	™	Eppendorf AG
Eppendorf ThermoStat	™	Eppendorf AG	Minispin	®	Eppendorf AG
Eppendorf ThermoStat expert	®	Eppendorf AG	MixMate	®	Eppendorf AG
Eppendorf ThermoTop	®	Eppendorf AG	Multipette	®	Eppendorf AG
Eppendorf Top Buret	™	Eppendorf AG	Multipette smart	®	Eppendorf AG
Eppendorf Tubes	®	Eppendorf AG	Multipette stream	®	Eppendorf AG
Eppendorf twin.tec	®	Eppendorf AG	Multipette Xstream	®	Eppendorf AG
Eppendorf Varitips	®	Eppendorf AG	Multiporator	®	Eppendorf AG
Eppendorf Xplorer	®	Eppendorf AG	Nanotip	®	Eppendorf AG
Eppi	™	Eppendorf AG	New Brunswick	™	Eppendorf AG
epPoints	®	Eppendorf AG	OptiTrack	®	Eppendorf AG
epServices for premium performance	®	Eppendorf AG	PhysioCare Concept	®	Eppendorf AG
epT.I.P.S.	®	Eppendorf AG	Picaso	®	Eppendorf AG
Excella	®	Eppendorf, Inc.	Pipet Helper	®	Eppendorf AG
FastTemp pro	®	Eppendorf AG	Plug 'n' Prep	®	Eppendorf AG
fedbatch-pro	®	DASGIP Information and Process Technology GmbH	RecoverMax	®	Eppendorf AG
FemtoJet	®	Eppendorf AG	Repeater	®	Eppendorf AG
Femtotips	®	Eppendorf AG	Safe-Twist	®	Eppendorf AG
flexlid	®	Eppendorf AG	Silence   Speed   Simplicity	®	Eppendorf AG
Flex-Tube	®	Eppendorf AG	SpectraZoom	®	Eppendorf AG
Galaxy	®	Eppendorf, Inc.	SplashProtect	™	Eppendorf AG
Geloader	®	Eppendorf AG	STAGBIO	®	Eppendorf AG
			ThermoMixer	®	Eppendorf AG
			TransferMan	®	Eppendorf AG
			TransferTip	®	Eppendorf AG
			Transjector	®	Eppendorf AG
			UVette	®	Eppendorf AG
			Vacufuge	®	Eppendorf North America
			vapo.protect	®	Eppendorf AG
			vapoprotect	®	Eppendorf AG
			Varipette	®	Eppendorf AG
			Varispenser	®	Eppendorf AG

Trademark	Status	Owner
Vaudaux	◉	Vaudaux-Eppendorf AG
Vaudaux Eppendorf	◉	Vaudaux-Eppendorf AG

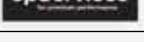
**Figurative marks / 3D marks**

Trademark	Status	Owner
	◉	Eppendorf AG
	◉	Eppendorf AG
	◉	Eppendorf AG
	◉	Eppendorf AG
	◉	Eppendorf AG
	◉	Eppendorf AG
	◉	Eppendorf AG
	◉	Eppendorf AG
	◉	Eppendorf AG
	◉	Eppendorf AG
	◉	Eppendorf AG

Trademark	Status	Owner
	◉	Eppendorf AG
	◉	Eppendorf AG (USPTO)
	◉	Eppendorf AG
	◉	Eppendorf AG
	◉	Eppendorf AG
	◉	Eppendorf AG
	◉	Eppendorf AG
	◉	Eppendorf AG
	◉	Eppendorf AG
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	◉	Eppendorf AG
	◉	Eppendorf AG

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## Figurative marks / 3D marks

Trademark	Status	Owner
	®	Eppendorf AG
	®	Eppendorf AG
	®	Eppendorf AG
	®	Eppendorf AG
	®	Eppendorf AG
	®	Eppendorf AG
	®	Eppendorf AG
	®	Eppendorf AG
	®	Eppendorf AG
	®	Eppendorf AG
	®	Eppendorf AG

## Further Trademarks

Trademark	Status	Owner
AddThis	®	Addthis Inc.
Adidas	®	Adidas AG
Adobe	®	Adobe Systems Inc.
Adobe Flash	®	Adobe Systems Inc.
Adobe logo	®	Adobe Systems Inc.
Allen Bradley	™	Rockwell Automation Inc.
Amazon	®	Amazon Europe Holding Tech. SCS
American Express	®	The American Express Company
Android	™	Google Inc.
Apple	®	Apple Inc.

Trademark	Status	Owner
Axio	®	Carl-Zeiss-Stiftung DBA Carl Zeiss
Axiovert	®	Carl-Zeiss-Stiftung DBA Carl Zeiss
Biochrom	®	Harvard Apparatus, Inc
BIODISCOVERY	®	BioDiscovery, Inc.
Bio-Rad	®	Bio-Rad Laboratories
BioSpec	®	Secomam & Societe d'etudes et de construction
Centriprep	®	Millipore Corporation
Centronics	®	Centronics Data Computer
CompactLogix	™	Rockwell Automation Inc.
Cryotube	®	Vanguard International, Inc.
Cryovial	®	Simport Plastiques Corporation
Diaphot	®	Nikon Inc
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