

General Purpose, Simple to Use Polarimeter

sugar

pharmaceutical

chemical

education

cosmetics

flavours

fragrances

essences



Bellingham + Stanley Ltd.
Quality Scientific Instruments

ADP410 Polarimeter

Featuring:

- Dual scale
- Temperature display
- Optical Density display
- Temperature compensation
- LED/Interference filter
- RS232 (print/PC)
- Bright LED display
- Easy operation

Optional Accessories:

- Flow tubes
- Water-jacketed tubes
- Slotted lids
- Quartz control plates
- Printers



ADP410 instrument with Polarimeter tube in place.



ADP410 instrument display panel.

The ADP410 is a dual scale, fully automatic polarimeter designed for use in many applications that require measurement of optical rotation.

The instrument is housed in a rugged chemical resistant case making it suitable for use in factory environments as well as in the laboratory. Standard, jacketed and flow type tubes may be used, possibly requiring the use of specially suited slotted lids.

Operation is very simple by way of four graphically identified push buttons including scale and compensation selection, zero calibration and the displaying of optical density and temperature. Results are shown on a bright LED display and may be printed via an RS232 interface.

Temperature compensation can be achieved from a single sensor, which can measure either the temperature within the sample chamber or, when placed in the centre-filling arm of the measurement tube, the temperature of the actual sample.

The sample reading value and optical density are alternately displayed by repeatedly pressing the READ key. The instrument can be checked and calibrated using quartz control plates by accessing the span facility in the setup menu. If a sample is too dark, the instrument will display an error message.

An LED and narrow band interference filter provides illumination of the sample and requires no maintenance.

Specifications

| | Angular (°A) | ISS (°Z) |
|------------|--------------|--------------|
| Range | -90 to +90 | -225 to +225 |
| Resolution | 0.01 | 0.01 |
| Accuracy | ±0.02 | ±0.05 |

| | |
|--------------------------|-----------------------------------|
| Light Source | LED/Interference filter (589.3nm) |
| Beam Diameter | 4 mm |
| Max. Tube length | 220 mm |
| Reading Time | 15 seconds |
| Temperature | 5-40 °C |
| Temperature Compensation | None, sugar, quartz |
| Optical Density Range | 0.0 to 2.0 OD |

Order Code **Description**

| | |
|--------|---|
| 37-10 | ADP410 digital polarimeter supplied with one centre filling tube (200mm), instruction manual and certificate of conformity. |
| 34-20 | Quartz control plate 34 °A / 100 °Z |
| 34-21 | Quartz control plate 5 °A / 15 °Z |
| 37-009 | Slotted lid for 200mm centre fill tube with water jacket |
| 37-010 | Slotted lid for 100mm centre fill tube with water jacket |
| 37-011 | Slotted lid for 200mm flow type tube with water jacket |
| 37-012 | Slotted lid for 100mm flow type tube with water jacket |

Bellingham + Stanley Ltd pursues a policy of continuous product development and improvement, and, as such, information given on this Data Sheet may be updated or withdrawn without notice.



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