



983

Small hot plate, 35°C to 350°C

The small hot plate 983 is a lightweight portable calibration system designed for surface mounted sensors. The temperature range is from 35°C to 350°C, which is set by an advanced, but easy to use temperature controller. The sensor to be tested is simply placed on the surface, for higher accuracy a calibrated surface sensor can be placed alongside and the two compared.

- Low cost portable hot plate
- Stable to $\pm 0.1^{\circ}\text{C}$
- PC interface and software

Description

The small hot plate 983 is a lightweight portable calibration system designed for surface mounted sensors. The flat surface plate is made from precision-machined Aluminium. The sensor to be tested is simply placed on the surface, for higher accuracy a calibrated surface sensor can be placed alongside and the two compared.

Good thermal contact is ensured by the flat disc that is recessed to allow the optional use of a heat transfer paste or fluid. Uniform heat distribution is achieved with a flat spiral heater clamped to an integrating block below the surface of the plate. The typical accuracy that can be achieved is 1°C but this will be influenced by the type of sensor to be calibrated.

The internal control sensor is located immediately below the plate's surface.

A protective cover that can fit over the block is included along with a comprehensive handbook.

The temperature range is from 35°C to 350°C, which is set by an advanced, but easy to use temperature controller. The controller has 0.01 resolution below 100°C (0.1°C above 100°C).

Specifications

| | |
|--------------------|---|
| Temperature range | 35°C to +350°C |
| Stabilization time | 10 min |
| Cooling time | 350°C to 100°C: 125 min |
| Heating time | 50°C to 350°C: 20 min |
| Uncertainties | Dependant on sensors and method of use $\pm 1^\circ\text{C}$ typical |
| Calibration volume | Flat plate 71 mm diameter |

General specifications

| | |
|---------------------|--|
| Size | 115 x 230 x 225 mm |
| Weight | 3.9 kg |
| Display | Resolution: 0.01 to 99.99 and 0.1 to 100.0 / 350.0 Units: °C, °F, K |
| Power supply | 100 / 115 V (50/60 Hz) or 200 / 230 V (50/60 Hz) 200 Watts |
| Communication ports | RS 232 |

Models and accessories

Instrument:

983 Surface sensor calibrator, 35°C to 350°C

Delivered in standard with:

- Protective cover
- Cal Notepad software
- Serial communication cable
- User manual
- Traceable certificate
- Please specify supply voltage required at the order: 100 / 115 V (50/60 Hz) or 200 / 230 V (50/60 Hz)

Packing information:

Size 115 x 230 x 225 mm

Weight without packing 3.9 kg