

# Surface Sensor Calibrator Small Hot Plate

- Low Cost Portable Hot Plate
- PC Interface and Software
- Stable to  $\pm 0.1^\circ\text{C}$

The Isotech Small Hotplate is a lightweight portable calibration system purpose designed for surface mounted sensors. The flat surface plate is made from precision-machined aluminum. 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  $1^\circ\text{C}$  but this will be influenced by the type of sensor to be calibrated.

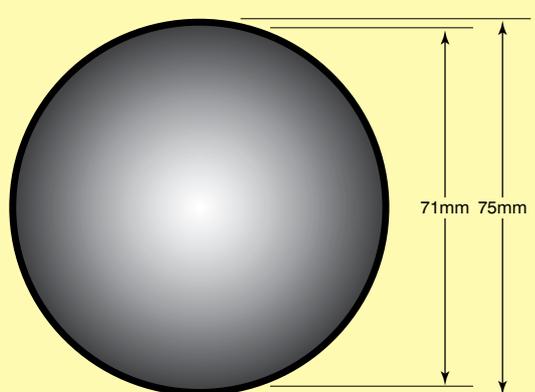
The internal control sensor is located immediately below the plate's surface.

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

The temperature range is from  $35^\circ\text{C}$  to  $350^\circ\text{C}$ , which is set by an advanced, but easy to use temperature controller. The controller has 0.01 resolution below  $100^\circ\text{C}$  ( $0.1^\circ$  above  $100^\circ$ ). A PC interface is included as standard along with an RS232 converter lead and Windows software.



**Notes:**  
*A similar model but with a black high emissivity surface is available.*  
*Many of the dry block calibrators featured within this book have accessories available for surface sensor calibration.*



Model	983 Small Hot Plate
Temperature Range	$35^\circ\text{C}$ to $350^\circ\text{C}$
Stabilisation Time	10 minutes
Cools from	$350^\circ\text{C}$ to $100^\circ\text{C}$ in 125 minutes
Heats from	$50^\circ\text{C}$ to $350^\circ\text{C}$ in 20 minutes
Uncertainties	Dependant on sensors and method of use $1^\circ\text{C}$ typical
Calibration volume	Flat Plate 71mm diameter
Display Resolution	0.01 to 99.99 0.1 100 to 350.0 PC can display 0.01 across whole range with the software included
Units	$^\circ\text{C}$ , $^\circ\text{F}$ , K
Power	100 to 115V (50 / 60 Hz) or 200 to 230V (50 / 60 Hz) 200 Watts
Dimensions	Height 115mm Width 230mm Depth 225mm
Weight	3.9kg
<b>How to Order</b>	<b>983 Small Hot Plate</b> Please specify voltage required