

IR-500 BLACK BODY CALIBRATOR

- Ideal for checking the accuracy of infrared thermometers
- Wide temperature range 50 to 500 °C

The IR-500 Black Body Calibrator is a stable heat source for checking the calibration of infrared digital thermometers that require regular temperature calibration checks or validation. The unit features an easy to read LED display, and controls the black body surface temperature over the range of 50 to 500 °C. It reaches an upper temperature of 500 °C in about 40 minutes.

Simply set the verification temperature on the digital display of the IR-500 Calibrator, allow time to stabilise and then point your infrared thermometer at the Ø58 mm black body. Compare the temperature readings on the IR-500 Calibrator display and the infrared thermometer under test, and the difference is the error. The isothermal Ø58 mm black body target is manufactured to an emissivity of approximately 0.95, which is ideal for most industrial infrared thermometers.

For increased accuracy checks, use a Reference thermometer (see page 99 for more details), insert the fixed Ø3.3 mm precision PT100 probe into the pre drilled calibration well. UK power lead included.



LED Display

Specification	IR-500 Black Body Calibrator
Range	50 to 500 °C
Resolution	0.1 °C/ °F
Accuracy	±1 °C below 100 °C ±2 °C from 100 to 200 °C ±3 °C from 200 to 500 °C
Heating time	40 minutes to max
Cooling time	30 minutes max to 100 °C
Emissivity	0.95
Target size	Ø58 mm
Power	110 volt AC, 3A or 230 volt AC (±10%), 1.5A
Dimensions	114 x 180 x 233 mm
Weight	2.682 kilograms
FREE traceable certificate of calibration included	

Order code Description

822-400 IR-500 Black Body Calibrator

*It is possible to achieve a higher level of accuracy, better than ±0.5 °C if the IR-500 Calibrator is used in conjunction with a certified Reference Thermometer (see page 99 for details).