

TEMPERATURE CALIBRATOR

TECHNICAL DATA



FEATURES

- For calibrating non-contact infrared thermometers up to 500°C (932°F)
- Temperature controlled black-body target with a diameter of 2.25" (57mm)
- Wide field of view to compensate for optical variations in individual infrared thermometers
- Simply set the desired temperature in increments of 0.1°, wait for the calibrator to attain equilibrium, point the infrared thermometer at the target, and measure the radiated energy
- Contact RTD reference well is located directly behind the blackbody target to assure even higher accuracies of $\pm 0.1^\circ\text{C}$

ORDERING INFORMATION

BX-500 Infrared Temperature Calibrator
CERTIDW1 NIST Calibration Certificate
BX-500-NIST..... Temperature Calibrator & NIST

SPECIFICATIONS

Temperature Range: 50.0 to 500.0°C (122.0 to 932.0°F)
Resolution: 0.1°C (0.1°F)
Accuracy: $\pm 0.8^\circ\text{C}$ ($\pm 1.6^\circ\text{F}$): $\leq 100^\circ\text{C}$ (212°F);
 $\pm 1.6^\circ\text{C}$ ($\pm 3.2^\circ\text{F}$): 100 to $\leq 200^\circ\text{C}$ (212 to 392°F);
 $\pm 2.8^\circ\text{C}$ ($\pm 5.6^\circ\text{F}$): 200 to $\leq 500^\circ\text{C}$ (392 to $\leq 932^\circ\text{F}$)
Stability: $\pm 0.1^\circ\text{C}$ ($\pm 0.2^\circ\text{F}$): $\leq 100^\circ\text{C}$ (212°F);
 $\pm 0.2^\circ\text{C}$ ($\pm 0.4^\circ\text{F}$): 100 to $\leq 350^\circ\text{C}$ (212 to 662°F);
 $\pm 0.4^\circ\text{C}$ ($\pm 0.8^\circ\text{F}$): 350 to $\leq 500^\circ\text{C}$ (662 to $\leq 932^\circ\text{F}$)
Target Emissivity: Fixed at 0.95
Cooling Time: 45 minutes to 100°C (122°F)
Heating Time: 40 minutes to maximum
Aperture Diameter: 57mm
Power Supply: 1.25A/110VAC ($\pm 10\%$), 2.5A
Dimensions: 180 x 114 x 233mm
Weight: 3 kg

Contact:
Industrial Process Measurement, Inc.
3910 Park Avenue, Unit 7
Edison, NJ 08820
732-632-6400
support@instrumentation2000.com
<http://www.instrumentation2000.com>