

## 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

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