

BBS120-TE

Black Body Calibration Source

Overview



Description

The infrared calibration source BBS120 is well suited for calibration and examination of infrared radiation thermometers and infrared cameras in temperature ranges from $-15\text{ }^{\circ}\text{C}$ to $120\text{ }^{\circ}\text{C}$.

A serial interface RS-485 (optional USB adapter) enables the control of the black body via PC. Digital PID controller and precision platinum resistance thermometer Pt100 provides excellent accuracy and stability. Dry air or nitrogen prevents condensation at low operating temperatures.

Technical data

Type	BBS120
Temperature range	$-15\text{ }^{\circ}\text{C}$ to $120\text{ }^{\circ}\text{C}$ ($5\text{ }^{\circ}\text{F}$ to $248\text{ }^{\circ}\text{F}$) ¹
Aperture diameter	50 mm
Emissivity	0.98 ± 0.01
Uncertainty	$\pm 0.5\text{ K}$
Control stability	0.2 K
Display resolution	0.1 K
Heat up time	8 min
Temperature sensor	Pt100 Class A
Controller	PID
Interface	RS-485 (optional USB adapter)
Dimensions	235 mm \times 311 mm \times 316 mm
Weight	appr. 8 kg (18 lbs)
Power supply	115/230 V AC, 200 VA

¹ Specifications for ambient temperature $23\text{ }^{\circ}\text{C}$