

# BBS110

## Blackbody Calibration Source

The Process Sensors blackbody calibration source model BBS110 is well suited for calibration and verification of non-contact infrared thermometers, thermal imaging cameras, FPA (focal plane arrays), and spectrometers in the temperature range from -15 °C to 110 °C.

A serial interface RS485 (optional USB adapter) enables the control of the black body via a PC. Digital PID controller and precision platinum resistance thermometer Pt100 provide for excellent accuracy and stability. An integrated purge fitting for dry air or nitrogen reduces condensation on the emitter plate at low operating temperatures. The BBS110 offers fast slew rates, high emissivity and uniformity.



TECHNICAL DATA	
Model	BBS110
Temperature range	-15°C to 110°C <sup>1</sup>
Emitter diameter	2 in. (50mm)
Emissivity	0.98 ± 0.01
Uncertainty	± 0.5°C
Stability	0.2°C
Temperature resolution	0.1°C
Heat slew rate	8 minutes from ambient to -15°C to 110°C
Source non uniformity	±0.1°C for 1.8" (45mm) of center diameter at 37°C
Temperature sensor	Pt100 Class A
Controller	PID
Operating ambient temperature	-5°C to 40°C (40°F - 104°F)
Interface	RS485 (optional USB adapter)
Dimensions (WxHxD)	12" x 8.1" x 14.2" (300mm x 205mm x 350mm)
Weight	22 lbs (approx 10 kg)
Power requirements	115/230 VAC, 300 watts max.

<sup>1</sup>Specification for ambient temperature 23°C. Technical details & product appearance are subject to change without notice