









## PROCESS SENSORS BLACKBODY CALIBRATION SOURCES

PSC offers a unique selection of precise, high performance Blackbody Calibration Sources for calibrating and verifying temperature of pyrometers, thermal imaging systems, spectrophotometers, heat flux meters and UFPA detectors. Process Sensors Blackbody Calibration Sources are all about precision. Our precision blackbodies exhibit high emissivity, high uniformity and high-resolution capability. They are extremely stable and offer many unique features including large apertures and fast slew rates.

The innovative design and precision features of each blackbody is the direct result of partnership with our parallel manufacture of infrared thermometers and thermal imaging camera systems. State of the art design teams work in tandem to craft instruments known for their high quality, outstanding value and long-term reliability.

The PSC line of blackbody sources has overall capability from subzero -15°C to 1700°C and includes models that are distinguished by their size, portability or other unique and versatile features. All PSC calibration sources are designed to provide the highest emissivity possible and are traceable to worldwide standard calibration laboratory specifications.

BBS1700	BBS1500-40	BBS1050 COMPACT	BBS1200 COMPACT
			
<p>High emissivity bench type design stabilizes temperature reading to within 0.5°C. For high accuracy calibration of IR thermometers, thermal imaging cameras and FPA detectors.</p>	<p>High accuracy with a large aperture for on-site precision calibration or testing in laboratory conditions. Fast responding heat time reaches operating temperature within 40 minutes of power-up.</p>	<p>Compact, two-piece design for automated calibration configuration. Light weight and portable. Offers excellent stability and high uniformity. Eight aperture sizes increase versatility.</p>	<p>Compact, two-piece design for automated calibration configuration. Light weight and portable. Offers excellent stability and high uniformity. Eight aperture sizes increase versatility.</p>
<p>572° to 3092°F (300° to 1700°C) 1" (25mm) aperture +0.99 emissivity</p>	<p>932° to 2732°F (500° to 1500°C) 1.57" (40mm) aperture +0.993 emissivity</p>	<p>122° to 1922°F (50° to 1050°C) Choice of 8 aperture sizes +0.99 emissivity</p>	<p>122° to 2192°F (50° to 1200°C) Choice of 8 aperture sizes +0.99 emissivity</p>
BBS100-TE	BBS400	BBS150-EX-TE8	BBS500-EX
			
<p>Light-weight (8 lbs.) and portable, with the versatility of multiple operating modes and software. Fast Slew rates of 0.10°C/S, -0.08°C/S, and high emissivity/uniformity over a 4 inch aperture area.</p>	<p>Excellent homogeneity, high precision, and long-term stability in a compact lower cost one-piece design. Temperature resolution to 0.1°C and large round aperture size.</p>	<p>Extended area, two-piece design thermoelectric blackbody source with 8 inch aperture, high emissivity / uniformity for calibration of Thermal Imaging cameras, IR pyrometers &amp; detectors. Used as field targets for the military.</p>	<p>Extended area blackbody source with separate controller for use as a standard radiation source for calibrating other laboratory sources, detectors, or other IR devices requiring calibration with a standard.</p>
<p>32° to 212°F (0° to 100°C) 4" (100mm) aperture 0.98 ± 0.01 emissivity</p>	<p>41° to 752°F (Amb. +5° to 400°C) 5" (128mm) aperture 0.95 ± 0.01 emissivity</p>	<p>41° to 302°F (5° to 150°C) 8" x 8" (200mm x 200mm) 0.96 ± 0.02 emissivity</p>	<p>40° to 932°F (Amb. +5° to 500°C) 12" x 12" (304mm x 304mm) 0.96 ± 0.02 emissivity</p>