

BL673 PORTABLE BLACKBODY CALIBRATION SOURCE



The BL673 is a portable blackbody calibration source utilizing a digital indicating temperature from -20°C to 125°C . A precision platinum RTD temperature sensor is embedded in the blackbody emitter, providing high accuracy and repeatability.

The BL673 is as easy to use as "point and shoot." Simply set the desired blackbody temperature from the convenient front panel control buttons, wait a few minutes for equilibrium, and point the gun at the target. The radiated energy from the blackbody is measured by your IR thermometer. Simply compare its readings to the display on the blackbody and record the difference.

FEATURE

- Ideal for most of IR Guns!
- Subzero -20°C to $+125^{\circ}\text{C}$
- 65 mm aperture diameter end closed tube
- Emissivity is better than 0.995
- Fast Heat Up & Cool Down Times
- 0.15°C high temperature stability
- Light weight yet rugged design for portability
- Nitrogen purge connection available
- External reference sensor input

TYPICAL APPLICATION

- Infrared temperature sensors
- Infrared thermal imaging systems
- Spectrographic analyzers
- Spectral radiometers
- Heat flux meter

SPECIFICATION

Temperature range	-20°C to 125°C
Aperture diameter	65 mm
Heated emitter shape	End closed tube
Emissivity	> 0.995
Display resolution	0.01°C ($<100^{\circ}\text{C}$); 0.1°C ($>100^{\circ}\text{C}$)
Control stability (10min)	0.1°C
Temperature uniformity	0.15°C
Display accuracy	0.5°C
Warm up time (ambient temperature $< 25^{\circ}\text{C}$)	20 minutes from ambient to 125°C ; 30 minutes from ambient to -20°C
Control method	Digital PID controller with readout
Temperature sensor	Precision Platinum RTD
Tube depth	110mm from entrance to target
Power supply	220VAC, 350VA (110VAC is option)
Interface	RS485
Calibration band	8um-14um spectral band
Dimension	300mm(H)x 200mm(W)x 280mm(D)
Net weight	Approx. 8.3 kg

SCOPE OF DELIVERY

- BL673 Portable blackbody calibration source
- Power cord (need to confirm the plug type in advance)
- User manual

OPTIONAL ACCESSORIES

- Accredited calibration certificate (P/N: 9000-673)
- Customize range -23°C to 155°C , (P/N: BL673-X)

ORDERING MODEL NUMBER

- BL673-110V
- BL673-220V

REFERENCE STANDARD

- ✓ IEC/TS 62492-1-2008: Industrial process control devices -Radiation thermometers. Part 1: Technical data for radiation thermometers
- ✓ ASTM E2847-2013: Standard practice for calibration and accuracy verification of wideband infrared thermometers
- ✓ ASTM E1256-2011a: Standard Test Methods for radiation thermometers (Single waveband type)
- ✓ OIML D24 (1996): Total radiation pyrometers
- ✓ JCG 856-2015: Verification regulation of radiation thermometers