

# BL675D DUAL BLACKBODY CALIBRATION SOURCE



The BL675D Dual Cavity Blackbody Calibration Source is easy to use, and makes calibration of infrared pyrometers with multiple temperature ranges faster than ever before by combining a hot and cold side in one unit.

The calibrators are simple to set and control. Merely input the desired Black Body temperature on the convenient front panel control buttons, let the unit reach the set temperature, wait a few moments to ensure stability, aim, and shoot. The radiated energy from the Black Body is measured by operator's IR thermometer. Compare the IR thermometer reading to the display on the controller and record the difference.

## FEATURE

- Ideal for simple 2-point calibrations.
- Ultra-High uniformity and stability
- 0.995 emissivity
- Fast Heat Up & Cool Down Times
- Built-in temperature correction function
- Rugged & Lightweight
- New Feature: Reference sensor input

## APPLICATION

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

## SPECIFICATION

	Low Range	High Range
Temperature range	-15° C ~ 100° C	50° C ~ 500° C
Display resolution	0.01° C	0.1° C
Aperture size	65mm	50mm
Distance to target	130mm	160mm
Emissivity	Better than 0.995	
Stability (10 min)	0.1° C or 0.1%rd (whichever is greater)	
Uniformity	0.15° C or 0.15%rd (whichever is greater)	
Heat cavity shape	End closed tube	
Cool down time	30 minutes from ambient to -15° C	
Heat up time	60 minutes from ambient to 500° C	
Control method	Digital PID controller with readout	
Temperature sensor	Precision platinum RTD	
Power supply	220VAC, 850WA (110VAC is optional)	
Interface	RS485	
Dimension	435mm(D) x 390mm(W) x 200mm(H)	
Net weight	15 kg approx.	

## 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
- ✓ JJG 856-2015: Verification regulation of radiation thermometers

## SCOPE OF DELIVERY

- BL675D Dual blackbody calibration source
- Power code (need to confirm the plug type in advance)
- User manual

## OPTIONAL ACCESSORIES

- ISO17025 calibration certificate (P/N: 9000-675D)

## ORDERING MODEL NUMBER

- BL675D-220V
- BL675D-110V