

BL677A BENCHTOP BLACKBODY CALIBRATION SOURCE



The BL677A is a benchtop blackbody calibration source utilizing a digital indicating temperature ambient 50 °C to 700 °C (122F to 1292F). A precision platinum RTD temperature sensor is embedded in the blackbody emitter, providing high accuracy and repeatability. The temperature controller uses the industry standard PID algorithms to control the emitter temperature to within 0.1°C of the set points.

The black body emitter mechanism uses a resistive heating device that provides a long life, short stabilization times, and stable temperature control.

FEATURE

- Temperature range 50°C to 700°C
- Emissivity is better than 0.995
- 65 mm big aperture diameter is compliance with most of D:S
- 0.1°C high temperature control stability
- 0.15°C high temperature uniformity
- End closed tube heated emitter shape
- Built-in temperature correction function

TYPICAL APPLICATION

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

SPECIFICATION

Temperature range	50°C to 700°C (122F to 1292F)
Aperture diameter	65 mm
Heated emitter shape	End closed tube
Emissivity	better than 0.995
Display resolution	0.1°C
Stability (10min)	0.1°C or 0.1%RD (whichever is great)
Uniformity	0.15°C or 0.15%RD (whichever is great)
Distance to target surface	240 mm
Control method	Digital PID controller
Temperature sensor	Precision platinum RTD
Power supply	220V AC, 1500 VA (110VAC is optional)
Heat up time	< 1 hour ambient to 700°C
Calibration method	Pyrometric standard calibration
Calibration band	8um-14um spectral band
Dimension	260mm (W) x 480mm (D) x 430mm (H)
Net weight	15 kg approx.

SCOPE OF DELIVERY

- BL677A Blackbody Calibration Source
- Power cord
- User manual
- Factory calibration report
- Protective case

OPTIONAL ACCESSORIES

- Accredited calibration certificate (P/N: 9000-677)

ORDERING MODEL NUMBER

- BL677A-220V
- BL677A-110V