

BL677 Portable Infrared Calibration Source/ Black Body



The BL677 is a portable 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 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
- Radio meters
- 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
Control stability (10min)	0.1°C or 0.1%t (whichever is great)
Temperature uniformity	0.15°C or 0.15%t (whichever is great)
Distance from tube to target surface	250 mm
Control method	Digital PID controller
Temperature sensor	Precision platinum RTD
Power supply	220V AC, 1500 VA
Interface	RS232
Heat up time	< 1 hour ambient to 700°C
Calibration method	Pyrometric standard calibration
Dimension w/o holder	360mm x 260mm x 400mm
Net weight	Appr. 15 kg

SCOPE OF DELIVERY

- Infrared calibration source /Black body
- Power cord with adapter
- User manual
- Factory calibration report

OPTIONAL ACCESSORIES

- Handheld Carrying case (P/N: 1570)
- Accredited calibration certificate (P/N: 9000-677)
- RS485 into RS232 adapter (P/N: 1621)
- 110V AC convert (P/N: 1620)

ORDERING MODEL NUMBER

- BL677-R700B