

# BL670 Portable Blackbody Calibration Source



The BL670 is a small size blackbody calibration source utilizing a digital indicating temperature ambient temperature + 5°C to 50°C. 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 ranges + 5°C to 50°C
- Target size is 70mm x 70mm
- Emissivity is 0.97 ± 0.01
- Accuracy is better than ± 0.1°C
- Control stability is ± 0.05°C per hour
- Heat up time is 2-10 minutes depends
- Built-in temperature correction function

## REAR VIEW



## TYPICAL APPLICATION

- Ambient temperature compensation for thermal imager camera

## SPECIFICATION

Temperature range	Ambient temperature +5°C to 50°C
Aperture size	70 mm * 70mm
Emissivity	0.97± 0.02
Display accuracy	± 0.1°C; (uncertainty is 0.3°C. k=2)
Display resolution	0.01°C
Control stability	< 0.05°C after 1 hour
Blackbody uniformity	< 0.2°C
Heat cavity shape	Plat Plate
Heat up time	2-10 minutes from ambient to 37°C
Control method	PID
Temperature Sensor	Pt100 class A
Power Supply	100-220V AC, 50/60Hz
Interface (optional)	RS485
Dimension w/o tripod	125mm (W) x 128mm(H) x 180mm(D)
Net Weight	Approx. 2 kg

## SCOPE OF DELIVERY

- BL670 Portable infrared calibrator with carrying bag
- Power adapter as standard 110-240V AC
- Factory calibration report

## OPTIONAL ACCESSORIES

- Accredited calibration certificate (P/N:9000-670)
- RS485 interface function (P/N:2231)
- Tripod with carrying bag (P/N:67X-TP)



## ORDERING MODEL NUMBER

- NM-BL670-X