

# **BL670 Blackbody Ambient Temperature Calibrator**



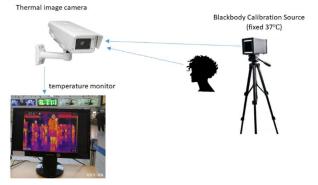
The BL670 ambient temperature calibrator is a small size blackbody calibration source utilizing a digital indicating temperature ambient temperature + 5°C to 50°C. A precision platinum RTD temperature sensor is embedded in the blackbody emitter, providing high accuracy and repeatability. The temperature 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 30°C to 50°C
- Target size is 72mm x 72mm
- Emissivity is 0.97 ± 0.02
- Accuracy is better than 0.1°C
- Control stability is 0.1°C after 10 minutes
- Heat up time is 2-10 minutes depends
- Built-in temperature correction function

## **TYPICAL APPLICATION**

 Ambient temperature compensation for thermal imager camera



## SPECIFICATION

Temperature range	30℃ to 50℃
Aperture size	72 mm * 72mm
Emissivity	0.97± 0.02
Display accuracy	0.1°C; (uncertainty is 0.3°C. k=2)
Display resolution	0.01°C
Control stability	< 0.1°C after 10 minutes
Blackbody uniformity	< 0.2℃
Heat cavity shape	Plat Plate
Heat up time	2-10 minutes from ambient to 37°C
Control method	PID auto control
Temperature Sensor	Pt100 class A
Power Supply	DC24V, 90W
Interface (optional)	RS485
Working temperature	0°C to 40°C
Working humidity	<90%RH (no condensation)
Dimension w/o tripod	110mm (W) x 110mm(H) x 180mm(D)
Net Weight	Approx. 2 kg

#### **REAR SIDE VIEW**



#### SCOPE OF DELIVERY

- BL670 Blackbody Calibrator
- Power adapter 110-240VAC to DC24V

#### **OPTIONAL ACCESSORIES**

- RS485 interface function (P/N:2231)
- Tripod with carrying bag (P/N:67X-TP)

#### **ORDERING MODEL NUMBER**

■ BL670