TEMPSENS

LBBCH SP

Low temperature Extended area black body

Extended Area Black Body

Wide Temperature Range

LBBCH SP offer a temperature range from 0 °C to 150 °C

Large emissive area

LBBCH SP has the large emitting surface area precise temperature control with good uniformity. It is available in the customize sizes.

High Emissivity

The LBBCH SP Exceptionally high emissivity of 0.98 ± 0.02.

Accuracy and performance

The LBBCH SP is high stable unit that also provides excellent calibration accuracy with stability 10 mK

This TEC based black body extremely quick to reach various temperatures, i.e. heats up room temp to maximum in 15 minutes and cools down to minimum temperature in 20 minutes. This saves time and increases productivity.

Easy to use

LBBCH SP has inbuilt PID controller or can be provided separately that shows real time display of the surface and set temperature

Computer Interface

The communication port (RS232/ USB) enables communication with selected LBBCH SP calibrators for automation calibration and documentation thus it made documentation easy. Remote control via Ethernet link, Rs232 or USB port.

Extended area black body is defined by the large emitting surface area precise temperature control with good uniformity. Tempsens make Blackbodies are state of the art, highly accurate and stable with different standard sizes and temperature ranges. The LBBCH SP Series Extended Area black bodies are low temperature infrared reference sources operating either in absolute or differential mode. This Black body series featuring the very high stability, they are particularly well adapted for the characterization and performance validation of a very wide range of IR Sensors, such as high resolution cameras for Thermography and long range thermal imagers. Essentially the black body emits a known amount of energy for an infinite number of wavelengths. This enables to draw the expected black body radiation curve for a given temperature. Temperature is accurately controlled by High accurate PID self tuning controller.

With the Tempsens make Compact Extended Area Black body Temperature Calibrator, you have chosen an extremely effective instrument which we hope will live up to all your expectations. This is a fast, timesaving, and reliable true industrial temperature calibrator designed for on-site use.

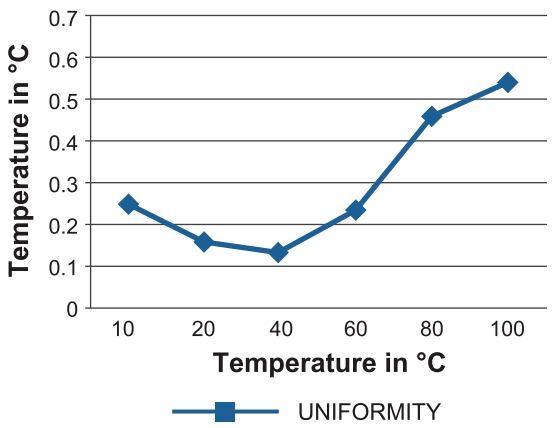
During the past several years, we have acquired extensive knowledge of industrial temperature calibration. This expertise is reflected in our products which are all designed for daily use in an industrial environment.

SPECIFICATION

Source Type	Extended area blackbody
Emissive area	100mm x 100 mm (4" x 4")
Absolute Temperature range (For ambient temp. = 20°C)	0°C to +150°C
Emissivity	0.98±0.02
Temperature Uniformity	≤ 0.02°C at ambient temperature
Temperature sensor measurement accuracy	0.03°C
Temperature Stability	10mK
Operating Temp.	0°C to 50°C
Head Operating Ambient Temp	-20°C to -70°C
Settling Time	≤ 30sec at 2mK
Opening Voltage	240 VAC 50 Hz
Set Point and Readout Resolution	0.001°C
Interface	Ethernet, RS232, GPIB/IEEE488 interface
Software	Display in real-time the temperature of the blackbody. To save and export measurements of blackbody temperature. Monitoring blackbody's status in real time
Calibration certificate	Vendor should provide the calibration certificate with the equipment.
Test Report	Test report of equipment from OEM should be provided by Vendor

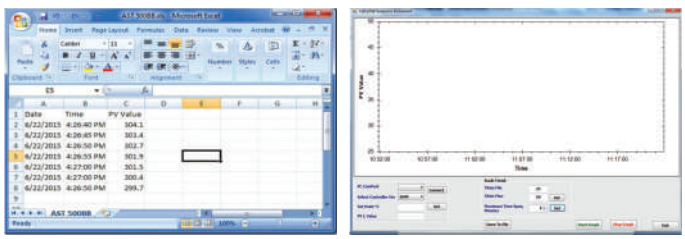
*1 at 80% of emissive area

GRAPHICAL REPRESENTATION



ACCESSORIES

SOFTWARE



- CalSoft including for setting bath temperature and monitoring the PV. Graphical representations of PV/TIME with 2 hours data logging.

MASTER SENSOR (OPTIONAL)

- Master pyrometer

A250+
Range : 210°C - 3000°C

A250 FOPL
Range : 250°C - 2500°C

A150
Range : 75°C - 700°C

AL30
Range : 210°C - 3000°C

- NABL accredited calibration certificate - 3 point (Optional)
- Operational Manual

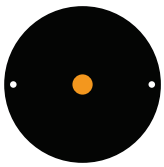
TARGET WHEEL (OPTIONAL)

Target wheel is one of basic block in Electro-optical testing System. Target wheel systems used for Exchange of active target at collimator focal plane and accurately position multiples targets in front of Black body source. These motorized target wheels are available in several standard and customizable models to accommodate different sizes, Numbers and types of Targets.

INFRARED TARGETS (OPTIONAL)

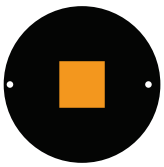

Aim cross Target


4 bar Target


Pinhole target


Slit target


Edge target


Square target

TEMPSENS manufactures a wide range of targets for electro-optical testing systems. These targets accurately radiate visible light sources coming from a distance to test the performance of the thermal imaging system.

Types of targets Available

- Slit targets for MTF testing.
- Square targets for NETD and SiTF.
- Four Bar targets for MRTD testing.
- Cross targets for alignment and bore sighting.
- Pinholes are used for MDTD & line-sight, bore-sight testing.

CARRY CASE (ONLY FOR LBB11CH MODEL)

Tempsens makes customized carry case is a rugged, safe perfectly designed to carry our new Extended Area Black Body calibrator and different accessories.

TEMPSENS

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