

Extended Area Black Body

-20 °C to 100 °C

Wide Temperature Range

LBBCH SP offer a temperature range from -20°C to 100 °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 0.95 ± 0.02 & extremely quick to reach various temperatures, i.e. heats up from room temp to +100 °C in 15 minutes.

Accuracy and performance

The LBBCH SP is high stable unit that also provides excellent calibration accuracy with stability $\pm 0.01^\circ\text{C}$.

Computer Interface

The communication port (USB) enables communication with selected LBBCH SP calibrator.

LBBCH (-20 to 100°C)

Low temperature Extended area black body



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. 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 the user to draw the expected black body radiation curve for a given temperature. The temperature is set and controlled by a self tuned PID controller with automatic super fine adjustment.

SPECIFICATION

Parameter	LBBCH SP
Emissive area	50 x 50 mm ²
Temperature range (Standard*)	-20°C to 100°C
Emissive area uniformity (1)	±0.5°C @ 50°C or better
Emissivity	0.95±0.02
Stability	±0.02°C or better
Heating Time	15 Min
Cooling Time	20 Min
Display resolution	0.01°C
Method of control	Digital self tuned PID Controller
Head dimensions H x W x D (mm ²)	420(W) X 280(H) X 230(D) mm
Weight	15 kg
Power required	230 VAC or 110 VAC 50/60 Hz 500 W
PC interface	USB
Operating temperature range (head)	10°C to +23°C

*At 23°C Ambient

*1 at 80% of emissive area

ACCESSORIES

- Master Pyrometer (Optional)
- Calsoft Software
- Operational Manual
- Carry Case (Only for LBB11CH Model)
- NABL accredited calibration certificate (Optional)

