

Extended Area Black Body

Wide Temperature Range

LBBCH SP offer a temperature range from -25 °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 0.99 ± 0.01 .

Accuracy and performance

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

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.

LBBCH (-25 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. Tempensens 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 Tempensens 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.

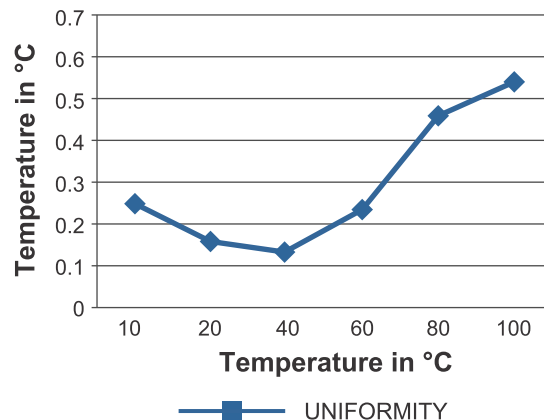
SPECIFICATION

Parameter	LBBCH SP
Emissive area	50 x 50 mm ²
Temperature range (Standard)*	-25°C to 100°C
Emissive area uniformity(1)	±0.2°C @ 50°C or better
Emissivity	0.98±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 W x H x D (mm ³)	300(W) X 320(H) X 190(D) mm
Weight	15 kg
Max. power consumption	500 W
Power supply	230 VAC, 1 ph. 50 Hz
Operating temperature range (head)	10°C to +25°C

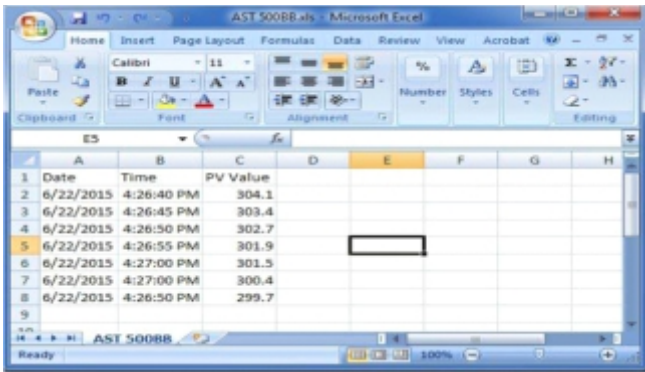
*At 23°C Ambient

*1 at 80% of emissive area

GRAPHICAL REPRESENTATION



SOFTWARE



	A	B	C	D	E	F	G	H
1	Date	Time	PV Value					
2	6/22/2015	4:26:40 PM	304.1					
3	6/22/2015	4:26:45 PM	303.4					
4	6/22/2015	4:26:50 PM	302.7					
5	6/22/2015	4:26:55 PM	301.9					
6	6/22/2015	4:27:00 PM	301.5					
7	6/22/2015	4:27:00 PM	300.4					
8	6/22/2015	4:26:50 PM	299.7					
9								



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

ACCESSORIES

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

