

Extended Area Black Body

Wide Temperature Range

LBBH offer a wide temperature range from 50 °C to 500 °C

Large emissive area

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

High Emissivity

The LBBH Exceptionally high emissivity of 0.98 ± 0.02 .

extremely quick to reach various temperatures, i.e. heats up room temp to +500 °C in 45 minutes. This saves time and increases productivity.

Accuracy and performance

The LBBH is high stable unit that also provides excellent calibration accuracy with stability $\pm 0.01^\circ\text{C}$ at 500°C.

Easy to use

LBBH 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 enables communication with selected LBBH calibrators for automation calibration and documentation thus it made documentation easy. Remote control via Ethernet link, Rs232.

LBBH

High temperature Extended area black body



Extended area Black body is defined by the large emitting surface area precise temperature control with good uniformity. The blackbody is designed to provide infrared radiation as an ideal blackbody emitter. Because of the large uniform surface area the body called extended area black body. These data ensure high accuracy for the calibration of thermal imagers over their full field of view, the non-uniformity correction of infrared cameras, the simultaneous test of several sensors during manufacturing process the measurement of the size of source effect on cameras. We separately provide high accurate programmable controller with black body source. High accuracy chamber have designed separately. The temperature of furnace is set or changes by the 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.

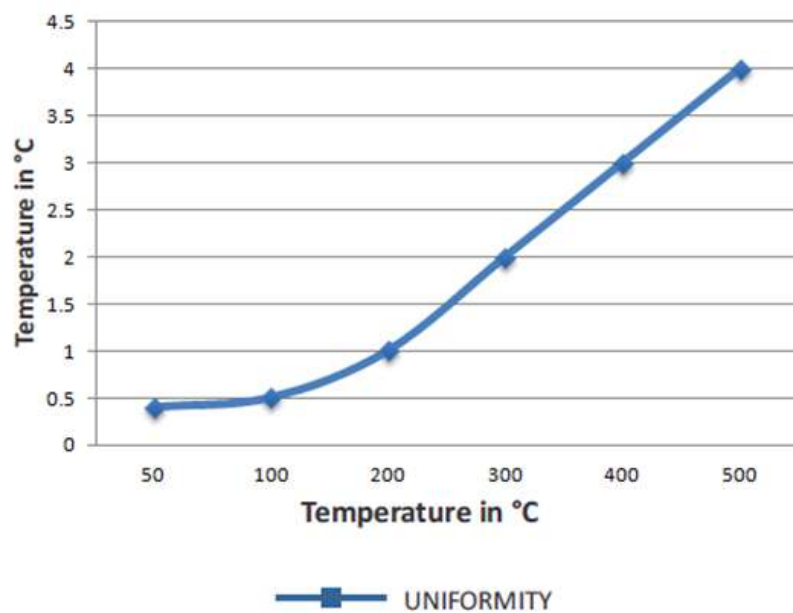
During the past several years, we have acquired extensive knowledge of industrial temperature calibration. This expertise is reflected in our products which are all designed for daily use in an industrial environment.

SPECIFICATIONS

Parameter	LBB11H	LBB22H	LBB33H
Emissive area	100x100 mm ²	200x200 mm ²	300x300 mm ²
Temperature range	50 to 500 °C		
Emissive area uniformity(1)	±2 at 40°C	±3 at 400 °C	±4 at 400 °C
Emissivity	0.98±0.02	0.98±0.02	0.98±0.02
Stability	±0.1°C		
Temperature measurement Accuracy	±0.5°C		
Method of control	Digital self tuned PID Controller		
Display resolution	0.1°C		
Warm-up time from ambient to T _{max}	30 min	45 min	60 min
Head dimensions W x H x D (mm ³)	300 x 320 x 190 mm	550 x 550 x 260 mm	550 x 550 x 260 mm
Head weight	20 kg	25 kg	30 kg
Max. power consumption	2000 W	3000 W	5000 W
Power supply	230 VAC, 1 ph. 50 Hz	230 VAC, 1 ph. 50 Hz	230 VAC, 1 ph. 50 Hz
Remote control	Ethernet, RS-232	Ethernet, RS-232	Ethernet, RS-232
Operating temperature range (head)	-10°C to +50°C	-10°C to +50°C	-10°C to +50°C

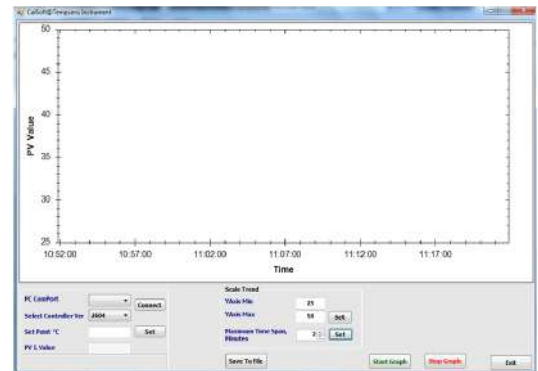
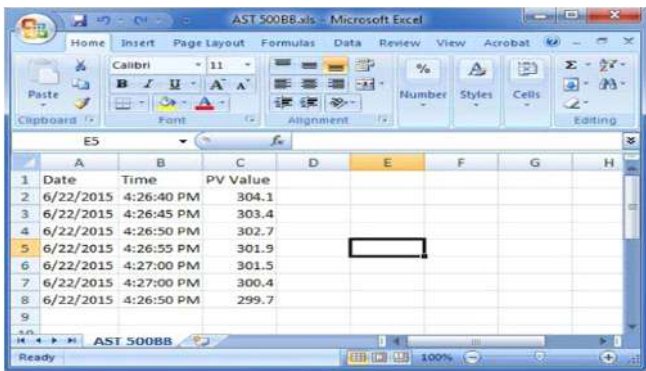
*1 at 80% of emissive area

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



- NABL accredited calibration certificate - 3 point
- Operational Manual

CARRY CASE



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