

## Extended Area Black Body

50°C to 500°C

### 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, more than 500x500mm is also available on request

### High Emissivity

The LBBH Exceptionally high emissivity of  $0.95 \pm 0.02$ , extremely quick to reach various temperatures, i.e. heats up from room temp to +500 °C in 45 minutes.

### 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.

## 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.

## SPECIFICATIONS

Parameter	LBB11H	LBB22H	LBB33H
Emissive area	100x100 mm	200x200 mm	300x300 mm
Temperature range	50 to 500°C		
Emissive area uniformity (1)	±2 at 400°C	±3 at 400°C	±4 at 400°C
Emissivity	0.95±0.02	0.95±0.02	0.95±0.02
Stability	±0.1°C		
Method of control	Digital self tuned PID Controller		
Display resolution	0.1°C		
Warm-up time from ambient to T <sub>max</sub>	30 min	45 min	60 min
Head dimensions H x W x D (mm <sup>3</sup> )	420 X 280 X 230 mm	520 x 480 x 300 mm	720 x 645 x 400 mm
Head weight	15 kg	30 kg	45 kg
Power supply	230 VAC or 110 VAC 50/60 Hz 1 KW	230 VAC or 110 VAC 50/60 Hz 3 KW	230 VAC or 110 VAC 50/60 Hz 5 KW
Operating temperature range (head)	15°C to 30°C	15°C to 30°C	15°C to 30°C

\*1 at 80% of emissive area

## ACCESSORIES

- Master Pyrometer (Optional)
- Operational Manual
- Carry Case (Only for LBB11H Model)
- NABL accredited calibration certificate (Optional)

