



FEATURES

- NIST Traceable Calibration
- Absolute Temperature Accuracy of $\pm 0.1^{\circ}\text{C}$
- Temperature Stability of $\pm 0.1^{\circ}\text{C}$
- Emissivity (Average) > 0.970 (3-5.5 μm), >0.950 (8-14 μm)
- Uniformity: 95% of Set ΔT from Ambient or 0.1°C ,
 Whichever is Greater Over 90% of Emitting Surface Area
- Ethernet Communication Interface
- 0°C to 90°C Absolute Temperature
- 8" Square Aperture Emitting Surface Size
- Max Power Consumption of 500 Watts
- IRWindows™ Lite Asset Control Software

OVERVIEW

Santa Barbara Infrared's MB Series blackbodies are absolute only temperature, "set and forget" infrared calibration systems. They are designed to support single or multiple non uniformity correction (NUC) test requirements. A user can quickly establish the blackbody temperature setpoint between 0°C and 90°C by using the rear mounted touch screen or through an Ethernet connection.

The setpoint temperature is stored in non volatile memory allowing the blackbody to resume the most recent setpoint upon start up. The rear display notifies the operator of the current blackbody temperature and status. The simple interface and ability to resume the last set point upon startup make SBIR's MB Series blackbodies ideal for automated production systems where minimal interaction with the reference is desired.

APERTURE SIZE & TEMPERATURE RANGE

Model	Emitting Surface Size	Temp. Range 0°C to 90°C Absolute
MB-08	8" x 8"	X

Solutions

for Every EO Test Requirement

30 S. Calle Cesar Chavez, Suite D • Santa Barbara, Ca. 93103
 ph (805) 965-3669 • fax (805) 963-3858 • <http://www.sbir.com>

SYSTEM SPECIFICATIONS

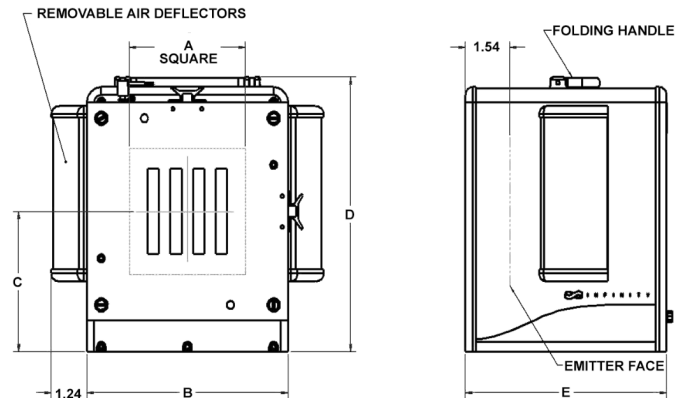
Temperature Range.....	0°C to 90°C at 20°C ambient temperature
Emissivity (Average).....	95% of Set Δ T from Ambient or 0.1°C, Whichever is Greater Over 90% of Emitting Surface Area
Emitting Aperture Size.....	8 inch square
Uniformity.....	96% of set ΔT or 0.05°C, whichever is greater over 90% of emitting surface area
Absolute Accuracy.....	±0.1°C
Stability.....	±0.1°C
Setpoint Resolution.....	0.1°C
Approximate Heating Rate ¹	+0.2°C/sec (at 25°C)
Approximate Cooling Rate ¹	-0.1°C/sec (at 25°C)

GENERAL SPECIFICATIONS

Operating Temperature.....	10°C to 40°C
Storage Temperature.....	-20°C to 70°C
Relative Humidity.....	5% to 95%, non-condensing
Maximum Power Consumption.....	500 W
Approximate Blackbody Weight.....	MB-08 - 40 lbs.

DIMENSIONS

Model	(inches)				
	A Aperture	B Width	C Optical Center Line	D Height	E Depth
MB-08	8.04	11.00	6.50	12.83	7.00



ORDER INFORMATION

Please contact the SBIR sales team at (805) 965-3669 to ensure proper part number and to receive a quotation.

Notes: 1. Slew rates can vary depending on environmental conditions as well as initial blackbody temperature in relation to commanded temperature setpoint.

* Specifications are subject to change without prior notice

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