

» SR - 33

Integrated Compact Extended Area Blackbody



The SR-33 series is a compact absolute Infrared radiation source that combines the emitter head and the controller in an all-in-one housing design.

The NIST traceable SR-33 is ideally suited for applications such as NUC for thermal imagers, scientific and industrial measurements that require reference sources, on-site calibrations.

The SR-33 is lightweight, portable, user friendly, and includes a high brightness LCD display. Its durable construction makes it an ideal choice for field operation, as well as, industrial and scientific environments. It is cost effective and space efficient, freeing up space in your work area.

Temperature control is achieved using removable sensors that can easily be replaced by the user in just minutes. Replacing the sensors with factory-supplied sensors is a simple procedure that recalibrates the system for another full year. Users who prefer to perform the calibrations by themselves may do so with our CK-800R calibration kit

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» FEATURES

- ▶ Superior resolution
- ▶ Excellent uniformity
- ▶ Portable, compact and lightweight
- ▶ Easy to operate by a single user
- ▶ Easy to use in field conditions
- ▶ Communication via USB or RS232
- ▶ 4" and 7" standard square aperture sizes available
- ▶ Calibration is valid for 24 months
- ▶ Certificate of calibration traceable to NIST
- ▶ Removable sensor technology

» SPECIFICATIONS

Model:	SR-33-4	SR-33-7
Emitter Size, in.	4x4	7x7
Absolute Temperature Range, °C	0 to 100	5 to 100
Set Point & Read Out Resolution, °C	0.01	0.01
Uniformity, °C	0.01	0.01
Temperature Accuracy, °C	0.05	0.05
Stability, °C	0.01	0.01
Emissivity	0.97 ± 0.02	0.97 ± 0.02
Settling Time (for 1°C change), min.	1.5	1.5
Slew Rate, °C/Sec	0.5	0.5
Operating voltage:	90-240VAC, 50/60 Hz	90-240VAC, 50/60 Hz
Operating temperature: °C	0 to 50	0 to 50
Dimensions mm (W x L x H):	161 x 190 x 301 (including handle)	150 x 218 x 341 (including handle)
Weight, kg	7	13

Notes:

1. Uniformity values are for a $\pm 1^\circ\text{C}$ step from ambient temp @ 80% of the central area. For other temperatures multiply ΔT .
2. Accuracy is referenced to a NIST calibrated CI-Systems master sensor.
3. Settling time is to 0.01°C from the required value.
4. Includes refrigerator (power consumption: 3500 W)
5. GPIB Optional