

» SR-33N

Integrated Compact Extended Area Blackbody



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

The SR-33N is lightweight, portable, user friendly, and includes a high-brightness LCD display. Its durable construction makes it an ideal choice for operation in a variety of environments – in the field, in industrial and scientific environments. It is cost effective and compact, 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 a new set of factory-supplied sensors is a simple procedure that recalibrates the system for another full year. Users who prefer to perform the calibrations themselves may do so with our CK-800 calibration kit.

» FEATURES

- ▶ High emissivity
- ▶ High uniformity
- ▶ High resolution
- ▶ Portable, compact and lightweight
- ▶ Easily operated by a single user
- ▶ Easy to use in field conditions
- ▶ RS232 communication
- ▶ 4" and 7" standard square aperture sizes available
- ▶ Calibration is valid for 24 months
- ▶ NIST-traceable calibration
- ▶ Removable sensor technology



SR-33N LCD display

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» SPECIFICATIONS

Model:	SR-33N-4A	SR-33N-7A
Emitter size, in	4 x 4	7 x 7
Absolute Temp. range, °C	5 to 100	5 to 100
Set point & readout resolution, °C	0.01	0.01
Uniformity, °C (1)	0.01	0.01
Temperature Accuracy, °C (2)	0.05	0.05
Stability, °C	0.01	0.01
Emissivity	0.98 ± 0.02	0.98 ± 0.02
Settling time, (for 1°C change), minutes	1.5	1.5
Communication Ports	RS232	RS232
Power Consumption, W	200	500
Operating Voltage, VAC	90-240 (50/60 Hz)	90-240 (50/60 Hz)
Operating Temperature, °C	0 to 50	0 to 50
Size (Height x Width x Depth), cm	27x19x17 (including handle)	32x23x19 (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 by 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.



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