

» SR-800N-HT

High Temperature Extended Area Blackbody



The SR-800N-HT is a high temperature, absolute extended area blackbody IR calibration source, providing excellence in stability, accuracy and high uniformity.

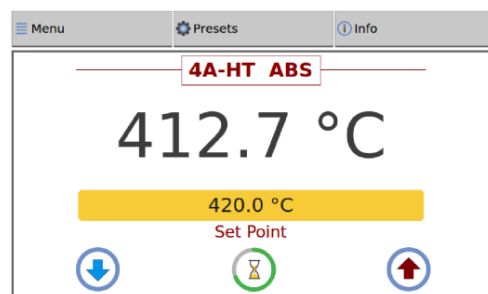
It is an extremely reliable calibration source with the flexibility required for testing a broad range of IR-based systems.

CI Systems' exceptionally effective emissivity of HT blackbodies is achieved with radiometric correction within the range $3\mu\text{m}$ to $12\mu\text{m}$.

Optional Super High Emissivity is available with **ACTAR Ultra Black™** coating.

» FEATURES

- ▶ High emissivity
- ▶ High uniformity
- ▶ NIST-traceable calibration
- ▶ Radiometric correction mode
- ▶ Long-term temperature stability
- ▶ Computerized and fully automatic calibration
- ▶ Interchangeability between head and controller
- ▶ Configurable resolution and stabilization window
- ▶ 19" rack-mount kit included
- ▶ Remote control software included



*SR-800N-HT Blackbody Controller's
Intuitive touch screens*

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» SPECIFICATIONS

Model: SR-800N-	4A-HT	8A-HT	12A-HT	35A-HT
Standard Performance :				
Emitter size, inches	4 x 4	8 x 8	12 x 12	35 x 35
Absolute temperature range, °C	50 to 600	50 to 600	50 to 600	50 to 250
Set point & readout resolution, °C	0.1			
Temperature Accuracy, °C	0.5			
Settling time, min.	< 15			
Stability, °C (3)	±0.25			
Warm-up time from ambient to T-Max, minutes	60			
Uniformity (4)	0.006 x T			
Emissivity (5)	0.97 ±0.03			
Communication Ports	Ethernet, RS232 (GPIO optional)			
Operating Temperature, °C	0 to 50			
Power Consumption, W	1,100	4,200	9,200	-
Operating Voltage, VAC (6):	110, 1 Phase or 220, 1 Phase	110, 3 Phase (7) or 220, 1 Phase	110, 3 Phase or 220, 3 Phase	-
Mechanical Sizes (8):				
Blackbody Head Size, HxWxD, cm	31x24x23	40x37x23	58x49x23	140x115x30
Blackbody Head Weight, kg	7.2	18.4	41.8	300
Controller Size (19" Rack, 3U), HxWxD, cm	15x34x35			
Controller Weight, kg	10			
Optional High Emissivity Coating:				
Emissivity (with ACTAR Ultra Black™ coating)	>0.98 (at 3-10 μm)			-
Absolute temperature range, °C	50 to 300			-

Notes:

- 1) All values are valid at an ambient temperature of 25°C, and in a non-condensing environment
- 2) All values are valid above 100°C
- 3) Stability value after 15 minutes
- 4) Uniformity value was measured on 80% of Central Area
- 5) Emissivity value after radiometric correction. For improved emissivity without radiometric correction, please see optional High Emissivity Coating.
- 6) All models 50/60Hz
- 7) 1-phase option is available, with temperature range 50 to 550°C
- 8) All mechanical sizes are approximate. Please contact CI Systems for an ICD drawing with the accurate sizes.
- 9) Specifications are subject to change without notice

» ABBREVIATIONS

A	Absolute Blackbody model
HT	High Temperature
BB	Blackbody
Temp.	Temperature
HE	High Emissivity
HxWxD	Height x Width x Depth
Max.	Maximum
Rack.	Rack mountable

» ORDERING INFORMATION

Model: SR-800N - 1 A - HT - 2 - 3 - 4

- 1) Emitter Size option (4 / 8 / 12 / 35)
- 2) Coating option (Standard / High Emissivity)
- 3) Operating Voltage option (110 / 220)
- 4) Phase option (1ph / 3ph)

Examples:

SR-800N-4A-HT-Standard-220v

SR-800N-8A-HT-Standard-110v-1ph (GPIO)



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