

# » 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.

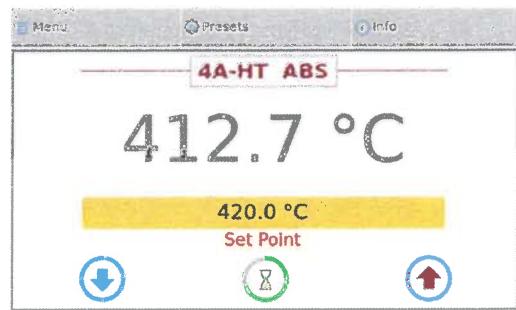
It is an extremely reliable calibration source with the flexibility required for testing a broad range of IR-based systems.

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



 **SYSTEMS**

# » SR-800N-HT

## High Temperature Extended Area Blackbody

### » SPECIFICATIONS

Model: SR-800N-	4A-HT	8A-HT	12A-HT	35A-HT
<b>Standard Performance :</b>				
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 (GPIB 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	-
<b>Mechanical Sizes (8):</b>				
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	
<b>Optional High Emissivity Coating:</b>				
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 (GPIB)

Distribution in the UK & Ireland



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