ARTISAN®
TECHNOLOGY GROUP

Your **definitive** source for quality pre-owned equipment.

**Artisan Technology Group**
(217) 352-9330 | sales@artisantg.com | artisantg.com

**Full-service, independent repair center**
with experienced engineers and technicians on staff.

**We buy your excess, underutilized, and idle equipment**
along with credit for buybacks and trade-ins.

**Custom engineering**
so your equipment works exactly as you specify.

- Critical and expedited services
- In stock / Ready-to-ship
- Leasing / Rentals / Demos
- ITAR-certified secure asset solutions

**Expert team | Trust guarantee | 100% satisfaction**

All trademarks, brand names, and brands appearing herein are the property of their respective owners.

Find the *CI Systems SR800R-7A-LT* at our website: *Click HERE*

# » SR - 800R

## Extended Area Blackbody ControlMaster

CI Systems' advanced architecture ControlMaster SR-800R sets a new standard for accuracy and uniformity in extended area blackbodies. Temperature measurement and calibration are both performed in the radiation head itself and then transferred digitally to the controller. The result is a more accurate,stable and flexible system that gives reliable NIST-traceable results.



Temperature control is achieved using removable sensors that can easily be replaced by the user in just minutes. Our factory-supplied replacement sensors provide an effective and efficient method for recalibrating the system, for an additional 12 months of service. Alternatively, customers may recalibrate the blackbody with our optional CK-800R calibration kit.

### » SUPERIOR PERFORMANCE

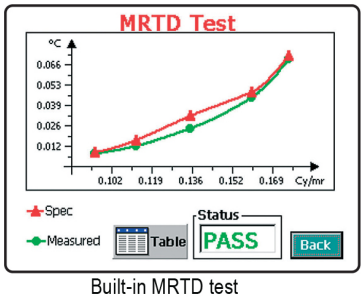
- Superior accuracy
- mK resolution
- High uniformity
- Wide range of temperatures
- High resolution color display
- Built-in MRTD testing for added efficiency
- Built-in tests to shorten maintenance time
- 2" to 40" standard emitters. Other dimensions are available upon request
- Low acoustical noise

### » IMPROVED EASE OF USE

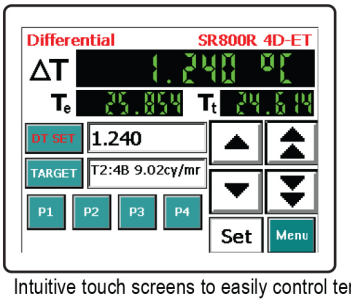
- Calibrated radiation heads independent of the controller
- Quick and convenient annual calibration by removable sensor replacement
- Configurable resolution and stability window
- Ability to control up to four motorized devices
- Ethernet, GPIB and RS232 communication ports, USB Communication by Serial Adaptor
- Large color LCD display
- Touch screen user interface
- Nitrogen inlet for inert atmosphere on all LT models
- Compact and portable controller
- 19" rack mount kit included
- Windows CE operating system

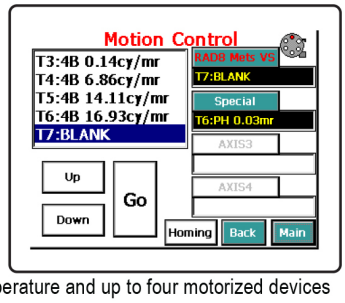
### » CERTIFICATIONS

- NIST-traceable calibration
- Certified to MIL-T-28800D, CE, and FCC




Built-in MRTD test




Intuitive touch screens to easily control temperature and up to four motorized devices

CI SYSTEMS
www.ci-systems.com

Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com

# » SR - 800R

## Extended Area Blackbody

## » SPECIFICATIONS

| SR-800 Model | | 2D/A | 4D/A | 7D/A | 8 D/A | 12 D/A | 14 D/A | 20 D/A | 40 D/A |
|---|---|---|---|---|---|---|---|---|---|
| Aperture | | 2" diameter | 4"x4" | 7"x7" | 8"x8" | 12"x12" | 14"x14" | 20"x20" | 40"x40" |
| Absolute temp. range | | 0°C to 125°C | | 5°C to 90°C | 0°C to 100°C | 10°C to 80°C | | | |
| Differential temp. range | | -25°C to 100°C | | -20°C to 65°C | -25°C to 75°C | -15°C to 55°C | | | |
| Set point & readout resolution | | 0.001°C | | | | | | | |
| Uniformity[1] | | ± 0.005ºC | ± 0.01ºC | | | | ± 0.015ºC | | ± 0.03ºC |
| Temperature accuracy[2] : | Absolute | 0.007°C @ 0<T<50°C<br>0.015°C @ 0>T>50°C | | | | | | | |
| | Differential | 0.008°C @ ΔT<±25°C<br>0.015°C @ ΔT>±25°C | | | | | | | |
| Stability | | ± 0.003°C @ ΔT< ±10°C | | | | | | | |
| Emissivity | | 0.97± 0.02 | | | | | | | |
| Settling time [3] | | 30 Sec | | | | | | | |
| Slew rate (max) | | 0.5°C/sec | 0.33°C/sec | 0.22°C/sec | 0.17°C/sec | 0.14°C/sec | 0.1°C/sec | | |
| Power consumption | | 200w | 200w | 250w | 1000w | 1200w | 2400w | 4500w | 6000w |
| Head size HxDxW (mm) | | Ø 65x95 | 161x190x201 | 224x225x265 | 280x170x335 | 357x230x415 | 410x170x480 | 570x170x640 | 1280x1600x760 |
| Head weight | | 1 kg | 5 kg | 10 kg | 15 kg | 25 kg | 36 kg | 65 kg | 450kg |
| Controller dimensions (mm) [8] | | 342x310x133 mm, 3U | | | | | 450x600x175 mm, 4U | | 11U |
| Controller weight | | 10kg | | | | | 20kg | 25kg | 60 kg |

## » OPTIONS

| SR-800 Model | | | 2D/A | 4D/A | 7D/A | 8 D/A | 12 D/A | 14 D/A | 20 D/A |
|---|---|---|---|---|---|---|---|---|---|
| ET - Extended Temp. | Absolute temp. range | | 0°C to 175°C | | | 0°C to 125°C | | 5°C to 150°C | |
| | Differential temp. range | | -25°C to 150°C | | | -25°C to 100°C | | -20°C to 125°C | |
| LT- Low Temp.[6] | Absolute temp. range | | --- | --- | -40°C to 150°C | | | --- | --- |
| | Differential temp. range | | --- | --- | -65°C to 125°C | | | --- | --- |
| WTR - Wide Temp. Range [7] | Absolute temp. range | | --- | -20°C to 175°C | | | -20ºC to 150ºC | -20ºC to 150ºC | --- |
| | Differential temp. range | | --- | -45°C to 150°C | | | --- | --- | --- |
| HE - High Emissivity [4] | Emissivity | | 0.99±0.01 | | | | | --- | --- |
| Environmental chamber [5] | CH-STD | Chamber temp. | -30°C to 70°C | | | | | | |
| | | Abs. temp. range | -40°C to 80°C | | | | | | |
| | | Dif. t emp. range | -10°C to 40°C | | | | | | |
| | CH-ET | Chamber temp. | 40°C to 80°C | | | | | | |
| | | Abs. temp. range | -40°C to 150°C | | | | | | |
| | | Dif. t emp. range | -20°C to 150°C | | | -20°C to 100°C | -15°C to 100°C | | |
| | CH-LT[6] | Chamber temp. | --- | -40°C to 80°C | | | | --- | --- |
| | | Abs. temp. range | --- | -40°C to 150°C | | | | --- | --- |
| | | Dif. t emp. range | --- | -70°C to 125°C | | | | --- | --- |
| | Accuracy [2] | | 0.01°C x ΔT or 0.05°C whichever is greater | | | | | | |
| | Stability | | 0.01°C x ΔTor 0.05°C whichever is greater | | | | | | |

## » GENERAL SPECIFICATIONS

Storage temperature: -20°C to 70°C

Operating voltage: 95 to 240 VAC, 50/60 Hz

Operating temperature:0°C to 50°C

**Notes:**

1. Uniformity values are for a ±1°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. Setting time is to 0.01°C from the requiered value.
4. Cannot be used with HU option
5. Sensor is not removable
6. Includes refrigerator (power consumption: 3500W)
7. WTR 4" Head is in a 7" form factor
8. 40" controller is mounted in a 11U rackmount cabinet. It includes a PDU and Power Supply

- Differential temperature range is limited upon to absolute temperature range
- All values are valid at 22°C and in a non-condensing environment.
- Total system uncertainty: 0.02°C @ ΔT<±25°C, 0.03°C @ ΔT>±25°C
- Typical yearly drift is 0.02°C

Specifications are subject to change without notice.

Specifications are subject to change without prior notice

Cat. No. 607-7000J March 2016

CI SYSTEMS
www.ci-systems.com

**CI Systems USA**
Tel: +1-805-520-2233
Fax: +1-805-520-2234
info@cisystemsinc.com

**CI Systems France**
Tel: +33-1-48-19-97-97
Fax: +33-1-48-19-97-99
info@ci-systems.fr

**CI Systems Ltd.**
Tel: +972-4-6448888/0
Fax: +972-4-6543570
market@ci-systems.com

Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com

**Artisan Technology Group** is an independent supplier of quality pre-owned equipment

## Gold-standard solutions

Extend the life of your critical industrial, commercial, and military systems with our superior service and support.

## We buy equipment

Planning to upgrade your current equipment? Have surplus equipment taking up shelf space? We'll give it a new home.

## Learn more!

Visit us at **artisantg.com** for more info on price quotes, drivers, technical specifications, manuals, and documentation.

Artisan Scientific Corporation dba Artisan Technology Group is not an affiliate, representative, or authorized distributor for any manufacturer listed herein.

We're here to make your life easier. How can we help you today?

(217) 352-9330 | sales@artisantg.com | artisantg.com

ARTISAN® TECHNOLOGY GROUP