

# SR-40

High Temperature High Uniformity Blackbody



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The SR40 cavity blackbody is a high uniformity, high temperature radiation source.

Its unique uniformity is excellent for Focal Plane Array (FPA) systems. Starring array systems require a highly uniform source due to their large number of detectors.

The SR40's special design significantly enhances temperature uniformity throughout the effective aperture.

The SR40 blackbody temperature calibration is computerized and fully automatic.

The calibration is traceable to NIST.

## FEATURES

- High uniformity
- High temperature accuracy
- High temperature stability
- High emissivity
- NIST traceable
- IEEE-488 bus
- Rapid warm-up and cool-down

## OPTIONS

- Motorized aperture wheel (RAD)
- Filter wheel - manual (MF), motorized (RFD)
- Customized aperture wheel
- Variable frequency radiation modulator (SR60 Chopper)
- RS232, RS422

## SPECIFICATIONS

Cavity Diameter:	1" (0.25" and 0.5" are available)
Temperature Range:	50°C - 500°C
Aperture Wheel:	0.8, 1.6, 3.2, 6.4, 9.5, 12.7, 15.9, 22.2 mm aperture diameter
Emissivity:	0.999±0.001
Set Point Resolution:	±0.1°C
Temperature Accuracy:	±0.5°C
Temperature Stability:	±0.02°C
Cavity uniformity:	±0.3°C (at 300°C, over the entire aperture of 1")
Temperature Sensor:	RTD; Precision Platinum Resistance Thermometer
Computer Control:	IEEE-488 (GPIB)
Power Supply:	220/115VAC, 50/60 Hz
Power Consumption:	300W

### Temperature Controller

Dimensions (WxDxH):	440x430x133mm (17.3"x16.9"x5.2"), 19" Rack mountable
Weight:	15 kg (33lb) approx.
Environmental:	Per MIL-T-28800D type III, class 5, style F
Operating ambient temperature:	0°C to 50°C



DS SR40.DOC Cat. No. 607-9940 Rev 2.0

Note: Data System specifications are subject to change.  
Higher performance specifications available upon request.

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