

## IS50A-1KW-RSI

Water-cooled integrating sphere detector for laser power measurement up to 1000 W.



### PRODUCT FAMILY KEY FEATURES

#### FASTEST RESPONSE

With its silicon sensor, the integrating sphere is as fast as a photodiode.

#### HIGH AVERAGE POWER

Measure up to 1000 W of continuous power.

#### RESISTANT COATING

Our proprietary coating is designed to be strong. Its damage thresholds are orders of magnitude higher than any other "white" coatings on the market.

#### PRECISE CALIBRATION

The IS detectors have a NIST-traceable calibration for their entire calibrated spectral range. Temperature compensation completes the calibration to give you the most accurate and stable measurements.

#### CHOICE OF OUTPUT

The IS detectors are available with two output options:

- INTEGRA with USB output (-INT)
- INTEGRA with RS-232 output (-IDR)

#### COMPATIBLE STAND

[STAND-S-443-C](#)

## SPECIFICATIONS

### MEASUREMENT CAPABILITIES

Maximum average power (continuous)	1000 W
Noise equivalent power <sup>1</sup>	10 $\mu$ W
Spectral range	340 - 1100 nm
Typical rise time	0.2 sec
Linearity with power	$\pm 1$ %
Sphere inner diameter	100 mm $\varnothing$
Maximum incidence angle	$\pm 10^\circ$
Maximum divergence	10° (half-angle)
Power Calibration Uncertainty	$\pm 5.0$ % (405 - 499 nm) $\pm 3.5$ % (500 - 1063 nm) $\pm 2.5$ % (1064 nm)

1. At 1070 nm. Nominal value. Actual value depends on environmental electromagnetic interference and wavelength.

### DAMAGE THRESHOLDS

Maximum average power density <sup>1</sup>	5 kW/cm <sup>2</sup>
Maximum energy density <sup>2</sup>	400 mJ/cm <sup>2</sup>

1. At 1064 - 1070 nm, CW. May vary with wavelength and average power.  
2. At 1064 - 1070 nm, 7 ns. May vary with wavelength and pulse width.

### PHYSICAL CHARACTERISTICS

Aperture diameter	50 mm
Dimensions	127H x 140W x 115D mm
Weight	4 kg

### ORDERING INFORMATIONS

IS50A-1KW-RSI	205483
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## INTERESTED IN THIS PRODUCT?

GET A QUOTE

Find your local sales representative at [gentec-eo.com/contact-us](https://gentec-eo.com/contact-us)