



## IS50A-1KW-RMT-D0

High-power joulemeter for laser energy measurement up to 1 kW average power.



### PRODUCT FAMILY KEY FEATURES

#### CUSTOM-BUILT

Contact us with your requirements for a version tailored to your needs

#### HIGH AVERAGE POWER

The water-cooled joulemeters can handle high average powers.

#### 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.

#### CHOICE OF OUTPUT

The IS-RMT detectors are available with four output options:

- Smart DB15 connector containing all the calibration data
- INTEGRA with USB output (-INT)
- INTEGRA with RS-232 output (-IDR)
- INTEGRA with USB output and external trigger (-INE)

#### COMPATIBLE STAND

[STAND-D-443](#)

## SPECIFICATIONS

### MEASUREMENT CAPABILITIES

Spectral range	0.19 - 2.5 $\mu\text{m}$
Typical rise time	30 $\mu\text{s}$
Repeatability	$\pm 0.5\%$
Maximum repetition frequency	1000 Hz
Maximum measurable energy	1 J
Noise equivalent energy <sup>1</sup>	1 mJ
Maximum pulse width	10 $\mu\text{s}$
Energy calibration uncertainty <sup>2</sup>	$\pm 4\%$
Maximum incidence angle	$\pm 25^\circ$ for beam diameter < 12mm, $\pm 5^\circ$ for beam diameter > 12mm
Maximum divergence	10° (half-angle)
Back reflections	12 %, concentrated in a cone with 15 degrees half-angle
Calibrated spectral range	532 nm and 1064 nm

1. Typical value  
2. At 532 nm and 1064 nm

### 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>
Maximum power	1 kW

1. At 1064 nm, CW  
2. At 532 nm and 1064 nm, 7 ns

### PHYSICAL CHARACTERISTICS



Cooling	Water
Aperture diameter	50 mm
Absorber	Pyroelectric
Dimensions	127H x 140W x 115D mm
Weight	4 kg
ORDERING INFORMATION	
IS50A-1KW-RMT-D0	Custom
IS50A-1KW-RMT-INT-D0	
IS50A-1KW-RMT-IDR-D0	
IS50A-1KW-RMT-INE-D0	

Specifications are subject to change without notice. Refer to the user manual for complete specifications.

## INTERESTED IN THIS PRODUCT?

GET A QUOTE

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