

IS50A-1KW-RMT-DO

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 μm
Typical rise time	30 μs
Repeatability	$\pm 0.5\%$
Maximum repetition frequency	1000 Hz
Maximum measurable energy	1 J
Noise equivalent energy ¹	1 mJ
Maximum pulse width	10 μs
Energy calibration uncertainty ²	$\pm 4\%$
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 ¹	5 kW/cm ²
Maximum energy density ²	400 mJ/cm ²
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