

## UP12E-10S-H5-D0

Thermal detector for laser power measurement up to 10 W.



### PRODUCT FAMILY KEY FEATURES

### MODULAR CONCEPT

Increase the power capability of your detector: 3 different cooling modules

#### HIGH PERFORMANCE

- Fast rise time (0.3 sec)
- High damage threshold (36 kW/cm²)

#### COMPACT DESIGN

Only 14 mm thick (10S model)

#### **ENERGY MODE**

Measure single shot energy up to  $5\,\mathrm{J}$ 

#### SMART INTERFACE

Containing all the calibration data

#### **COMPATIBLE STAND**

STAND-S-233

## **SPECIFICATIONS**

MEASUREMENT CAPABILITIES	
Maximum average power (continuous)	10 W
Maximum average power (1 minute)	20 W
Noise equivalent power <sup>1</sup>	1 mW
Spectral range <sup>2</sup>	0.193 - 20 μm
Typical rise time <sup>3</sup>	0.3 s
Power calibration uncertainty <sup>4</sup>	±2.5 %
Repeatability	±0.5 %
1 Nominal value actual value depends on electrical noise in the measurement system	

- I. Nominal value, actual value depends on electrical noise in the measurement system
- 2. For the calibrated spectral range, see the user manual.
- 3. With anticipation.
- 4. Including linearity with power.

### MEASUREMENT CAPABILITIES (ENERGY MODE)

MEASOREMENT CAPABILITIES (ENERGY MODE)	
Maximum measurable energy <sup>1</sup>	5 J
Noise equivalent energy $^2$	0.02 J
Minimum repetition period	1.5 s
Maximum pulse width	50 ms
Energy calibration uncertainty <sup>3</sup>	±5 %

- 1. For 360  $\mu s$  pulses. Higher pulse energy possible for long pulses (ms), less for short pulses (ns).
- 2. Nominal value, actual value depends on electrical noise in the measurement system.
- 3. When single-shot energy calibration is purchased

#### DAMAGE THRESHOLDS

Maximum average power density<sup>1</sup> 36 kW/cm<sup>2</sup>
Maximum energy density<sup>2</sup> 11J/cm<sup>2</sup>

- 1. At 1064 nm, 10 W CW. May vary with wavelength and average power.
- 2. At 1064 nm, 7 ns, 10 Hz. Damage thresholds vary with pulse width. Use our Product Finder or contact Gentec-EO to know about damage thresholds for different pulse widths.

## PHYSICAL CHARACTERISTICS

Cooling

Aperture diameter	12 mm
Absorber	H5
Dimensions	38H x 38W x 14D mm
Weight	0.13 kg
ORDERING INFORMATION	
UP12E-10S-H5-D0	200383
UP12E-10S-H5-INT-D0	202613
UP12E-10S-H5-IDR-D0	203321

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

# **INTERESTED IN THIS PRODUCT?**



Find your local sales representative at gentec-eo.com/contact-us