

# UPF10P-2S-H5-L-D0

Thermal detector for laser power measurement up to 2 W.



# PRODUCT FAMILY KEY FEATURES

### LOW POWER THERMOPILE

Noise level of a photo detector with the large bandwidth and high power capacity of a thermal device

#### IR FILTER (UPF10 MODELS)

Removes unwanted IR interference

### HIGH PERFORMANCE

- Fast rise time (1.4 sec)
- High damage threshold (36 kW/cm<sup>2</sup>)

### COMPACT DESIGN

Only 13 mm thick (UP10P model)

#### **ENERGY MODE**

Measure single shot energy up to  $3\,\mathrm{J}$ 

### SMART INTERFACE

Containing all the calibration data

# **COMPATIBLE STAND**

STAND-S-233

# **SPECIFICATIONS**

# MEASUREMENT CAPABILITIES

Maximum average power (continuous)	2 W
Noise equivalent power <sup>1</sup>	30 μW
Spectral range <sup>2</sup>	0.28 - 2.1 μm
Typical rise time <sup>3</sup>	1.4 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.
- 2. For the calibrated spectral range, see the user manual.
- 3. With anticipation.
- 4. Including linearity with power.

# MEASUREMENT CAPABILITIES (ENERGY MODE)

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Maximum measurable energy <sup>1</sup>	3 J
Noise equivalent energy <sup>2</sup>	5 mJ
Minimum repetition period	2 s
Maximum pulse width	63 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 energy density<sup>2</sup>

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

Convection

Aperture diameter	10 mm
Absorber	H5
Dimensions	46H x 46W x 21.4D mm
Weight	0.14 kg
ORDERING INFORMATION	
UPF10P-2S-H5-L-D0	
UPF10P-2S-H5-L-INT-D0	
UPF10P-2S-H5-L-IDR-D0	

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