# gentec-ۥ)

## UPF10P-2S-H5-L-D0

Thermal detector for laser power measurement up to 2 W.



#### **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/cm²)

#### COMPACT DESIGN

Only 13 mm thick (UP10P model)

#### **ENERGY MODE**

Measure single shot energy up to 3 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
Typical power sensitivity <sup>4</sup>	2 mV/W
Power calibration uncertainty <sup>5</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. Into 100 k $\Omega$  load. Maximum output voltage = sensitivity x maximum power.
- 5. Including linearity with power.

### MEASUREMENT CAPABILITIES (ENERGY MODE)

MEASUREMENT CAPABILITIES (ENERGY MODE)	
Typical energy sensitivity	2.4 mV/J
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 µs 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/cm²
Maximum energy density <sup>2</sup>	1 J/cm²

1. At 1064 nm, 10 W CW. May vary with wavelength and average power.

2. At 1064 nm, 7 ns, 10 Hz. May vary with wavelength and pulse width.

PHYSICAL CHARACTERISTICS	
Cooling	Convection
Aperture diameter	10 mm
Absorber	H5
Dimensions	46H x 46W x 21.4D mm
Weight	0.14 kg
ORDERING INFORMATION	
UPFI0P-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?**

GET A QUOTE

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