

## UP12E-20H-H5-D0

Thermal detector for laser power measurement up to 20 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/cm<sup>2</sup>)

#### COMPACT DESIGN

Only 14 mm thick (10S model)

#### ENERGY MODE

Measure single shot energy up to 5 J

#### SMART INTERFACE

Containing all the calibration data

#### COMPATIBLE STAND

[STAND-S-233](#)

## SPECIFICATIONS

### MEASUREMENT CAPABILITIES

|  |               |
|--|---------------|
| Maximum average power (continuous)         | 20 W          |
| Maximum average power (1 minute)           | 40 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.

2. For the calibrated spectral range, see the user manual.

3. With anticipation.

4. Including linearity with power.

### MEASUREMENT CAPABILITIES (ENERGY MODE)

|   |        |
|---|--------|
| Maximum measurable energy <sup>1</sup>      | 5 J    |
| Noise equivalent energy <sup>2</sup>        | 0.02 J |
| Minimum repetition period                   | 1.5 s  |
| Maximum pulse width                         | 50 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/cm <sup>2</sup> |
| Maximum energy density <sup>2</sup>        | 1 J/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 | Convection (heatsink) |
|---------|-----------------------|

|                             |                    |
|-----------------------------|--------------------|
| Aperture diameter           | 12 mm              |
| Absorber                    | H5                 |
| Dimensions                  | 38H x 38W x 45D mm |
| Weight                      | 0.15 kg            |
| <b>ORDERING INFORMATION</b> |                    |
| UPI2E-20H-H5-D0             | 200385             |
| UPI2E-20H-H5-IDR-D0         | 203323             |
| UPI2E-20H-H5-INT-D0         | 202615             |

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](https://gentec-eo.com/contact-us)