



# **gentec-**

### UP19K-50L-H5-D0

Thermal detector for laser power measurement up to 50 W.



#### PRODUCT FAMILY KEY FEATURES

#### MODULAR CONCEPT

Increase the power capability of your detector: 5 different cooling modules

#### HIGH PERFORMANCE

- Fast rise time (0.6 sec)
- High damage threshold (36 kW/cm<sup>2</sup>)

#### COMPACT DESIGN

Only 20.6 mm thick (15S model)

#### ENERGY MODE

Measure single shot energy up to 15 J

#### SMART INTERFACE

Containing all the calibration data

COMPATIBLE STAND STAND-S-233

# SPECIFICATIONS

#### MEASUREMENT CAPABILITIES

| MEASOREMENT CAPABILITIES   |               |
|--|---------------|
| Maximum average power (continuous)   | 50 W          |
| Maximum average power (1 minute)   | 90 W          |
| Noise equivalent power <sup>1</sup>  | 1 mW          |
| Spectral range <sup>2</sup>  | 0.193 - 20 μm |
| Typical rise time <sup>3</sup>   | 0.6 s         |
| Power calibration uncertainty <sup>4</sup>   | ±2.5 %        |
| Repeatability  | ±0.5 %        |
| <ol> <li>Nominal value, actual value depends on electrical noise in the measurement system.</li> <li>For the calibrated spectral range, see the user manual.</li> <li>With anticipation.</li> <li>Including linearity with power.</li> </ol> |               |
| MEASUREMENT CAPABILITIES (ENERGY MODE)   |               |
| Maximum measurable energy <sup>1</sup>   | 15 J          |
| Noise equivalent energy <sup>2</sup>   | 0.02 J        |
| Minimum repetition period  | 4 s           |
| Maximum pulse width  | 88 ms         |

Energy calibration uncertainty<sup>3</sup>

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

#### DAMAGE THRESHOLDS

| Maximum average | power density <sup>1</sup> |
|-----------------|----------------------------|
|-----------------|----------------------------|

Maximum energy density<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. May vary with wavelength and pulse width.

#### PHYSICAL CHARACTERISTICS

±5 %

36 kW/cm<sup>2</sup> 1 J/cm<sup>2</sup>





### Instrument Expert Original factory packaging www.dorgean.com

| Aperture diameter                       | 19 mm                    |
|---|--------------------------|
| Absorber                                | H5                       |
| Dimensions                              | 76.2H x 76.2W x 73.6D mm |
| Weight                                  | 0.48 kg                  |
|   |                          |
| ORDERING INFORMATION                    |                          |
| ORDERING INFORMATION<br>UP19K-50L-H5-D0 | 200164                   |
|   | 200164<br>202621         |

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