

## UP19K-50L-W5-D0

Thermal detector for laser power measurement up to 50 W.



### KEY FEATURES

#### MODULAR CONCEPT

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

#### VERY HIGH DAMAGE THRESHOLD

100 kW/cm<sup>2</sup> in average power density

#### COMPACT DESIGN

Only 21 mm thick (15S model)

#### ENERGY MODE

Measure single shot energy up to 200 J

#### SMART INTERFACE

Containing all the calibration data

#### COMPATIBLE STAND

[STAND-S-233](#)

## SPECIFICATIONS

### MEASUREMENT CAPABILITIES

Maximum average power (continuous)	50 W
Maximum average power (1 minute)	85 W
Noise equivalent power <sup>1</sup>	1 mW
Spectral range <sup>2</sup>	0.193 - 10 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)

Maximum measurable energy <sup>1</sup>	200 J
Noise equivalent energy <sup>2</sup>	0.02 J
Minimum repetition period	5 s
Maximum pulse width	133 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>	100 kW/cm <sup>2</sup>
Maximum energy density <sup>2</sup>	1.1 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)
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Aperture diameter	19 mm
Absorber	W
Dimensions	76.2H x 76.2W x 73.6D mm
Weight	0.48 kg
ORDERING INFORMATION	
UP19K-50L-W5-D0	200331
UP19K-50L-W5-IDR-D0	203355
UP19K-50L-W5-INT-D0	202637

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)