

UP19K-50F-W5-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

VERY HIGH DAMAGE THRESHOLD

100 kW/cm² 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 ¹	1 mW
Spectral range ²	0.193 - 10 µm
Typical rise time ³	1.4 s
Power calibration uncertainty ⁴	±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.

MEASUDEMENT CADABILITIES (ENEDGY MODE)

MEASUREMENT CAPABILITIES (ENERGY MODE)	
Maximum measurable energy ¹	200 J
Noise equivalent energy ²	0.02 J
Minimum repetition period	5 s
Maximum pulse width	133 ms
Energy calibration uncertainty ³	±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 ¹	100 kW/cm ²
Maximum energy density ²	1.1 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 Fan

Aperture diameter	19 mm
Absorber	W
Dimensions	50H x 50W x 63D mm
Weight	0.25 kg
ORDERING INFORMATION	
UP19K-50F-W5-D0	200334B
UP19K-50F-W5-INT-D0	203047B
UP19K-50F-W5-BLU-D0	203658
UP19K-50F-W5-IDR-D0	203351

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