gentec-eo
PARTNERS for ACCURACY

UP19K-50L-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/cm^2 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.

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/cm²
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	Convection (heatsink)

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