

# 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/cm²)

### COMPACT DESIGN

Only 20.6 mm thick (15S model)

#### **ENERGY MODE**

Measure single shot energy up to 15  ${\tt J}$ 

# 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)	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 %

- 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)

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>	±5 %

- 1. For 360  $\mu s$  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/cm²
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. May vary with wavelength and pulse width.

# PHYSICAL CHARACTERISTICS

Cooling Convection (heatsink)

Aperture diameter	19 mm
Absorber	H5
Dimensions	76.2H x 76.2W x 73.6D mm
Weight	0.48 kg
ORDERING INFORMATION	
UP19K-50L-H5-D0	200164
UP19K-50L-H5-INT-D0	202621
UP19K-50L-H5-IDR-D0	203353

Specifications are subject to change without notice. Refer to the user manual for complete specifications.

# **INTERESTED IN THIS PRODUCT?**



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