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## UP19K-15S-H5-D0

Thermal detector for laser power measurement up to 15 W.



#### **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)	15 W
Maximum average power (1 minute)	30 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
Typical power sensitivity <sup>4</sup>	0.65 mV/W
Power calibration uncertainty <sup>5</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. Into 100  $k\Omega$  load. Maximum output voltage = sensitivity x maximum power.
- 5. Including linearity with power.

### MEASUREMENT CAPABILITIES (ENERGY MODE)

Typical energy sensitivity	0.65 mV/J
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 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  $% \left( 1\right) =\left( 1\right) \left( 1\right) \left$

### DAMAGE THRESHOLDS

Maximum average power density <sup>i</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	
Aperture diameter	19 mm
Absorber	H5
Dimensions	50H x 50W x 20.6D mm
Weight	0.16 kg
ORDERING INFORMATION	
UP19K-15S-H5-D0	200142
UP19K-15S-H5-BLU-D0	203433
UP19K-15S-H5-IDR-D0	203337
UP19K-15S-H5-INT-D0	202617

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

### **INTERESTED IN THIS PRODUCT?**



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