

UP10K-2S-H5-L-D0

Thermal detector for laser power measurement up to 2 W.



PRODUCT FAMILY KEY FEATURES

LOW POWER THERMOPILE

Noise level of a photo detector with the large bandwidth and high power capacity of a thermal device

IR FILTER (UPF10 MODELS)

Removes unwanted IR interference

HIGH PERFORMANCE

- Fast rise time (1.1 sec)
- High damage threshold (36 kW/cm²)

COMPACT DESIGN

Only 13 mm thick (UP10P model)

ENERGY MODE

Measure single shot energy up to $3\,\mathrm{J}$

SMART INTERFACE

Containing all the calibration data

COMPATIBLE STAND

STAND-S-233

SPECIFICATIONS

MEASUREMENT CAPABILITIES

Maximum average power (continuous)	2 W
Noise equivalent power ¹	30 µW
Spectral range ²	0.193 - 20 μm
Typical rise time ³	1.1 s
Power calibration uncertainty ⁴	±2.5 %
Repeatability	±0.5 %

- 1. Nominal value, actual value depends on electrical noise in the measurement system.
- $2. \, {\sf For} \ {\sf the} \ {\sf calibrated} \ {\sf spectral} \ {\sf range}, \, {\sf see} \ {\sf the} \ {\sf user} \ {\sf manual}.$
- 3. With anticipation.
- 4. Including linearity with power.

MEASUREMENT CAPABILITIES (ENERGY MODE)

Maximum measurable energy ¹	3 J
Noise equivalent energy ²	5 mJ
Minimum repetition period	2 s
Maximum pulse width	63 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 powe	r density ^l	36 kW/cm ²
Maximum energy densit	y ²	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

Convection

Aperture diameter	10 mm
Absorber	H5
Dimensions	50H x 50W x 21.5D mm
Weight	0.193 kg
ORDERING INFORMATION	
UP10K-2S-H5-L-D0	202872
UP10K-2S-H5-L-IDR-D0	203317
UP10K-2S-H5-L-INT-D0	203035

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

INTERESTED IN THIS PRODUCT?



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