

POWER DETECTORS

AVAILABLE WITH *integra*



See page 36 for details

UP17-H/W

17 mm Ø, 1 mW - 7 W, Ultra Thin Casing



KEY FEATURES

1. **ULTRA THIN CASING**
Only 10.7 mm thick!
2. **CHOICE BETWEEN 2 ABSORBERS**
 - H5: 36 kW/cm²
 - W5: Unequalled 100 kW/cm²
3. **HIGH POWER TO SIZE RATIO**
6 W continuous reading
4. **ENERGY MODE**
Measure single shot energy up to 200 J (with the W5 version)
5. **SMART INTERFACE**
Containing all the calibration data
6. **integra OPTIONS**
 - Standard: USB Output (-INT)
 - In Option: RS-232 Output (-IDR)

AVAILABLE MODELS



UP17P-6S-H5
(6W-36 kW/cm²)



UP17P-6S-W5
(6W-100 kW/cm²)

ACCESSORIES



Stand with Steel Post
(Model Number: 200160)



Extension Cables
(4, 15, 20 or 25 m)



Pelican Carrying Case

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APPLICATION NOTE

MEASURING LASER POWER WITH A THERMOPILE DETECTOR: THE BASICS! [202175](#)

UP17-H/W

CE NIST*
Traceable 
*Also traceable to NRC-CNRC

SPECIFICATIONS

	UP17P-6S-H5	UP17P-6S-W5
MAX AVERAGE POWER (CONTINUOUS / 1 MINUTE)		
	6 W / 7 W	6 W / 7 W
EFFECTIVE APERTURE		
	17 mm Ø	17 mm Ø
COOLING METHOD		
	Convection	Convection
MEASUREMENT CAPABILITY		
Spectral Range *	0.19 – 20 µm	0.19 – 10.0 µm
Noise Equivalent Power ^a	1 mW	1 mW
Rise Time (nominal) ^b	0.8 sec	1.4 sec
Sensitivity (typ into 100 kΩ load) ^c	0.6 mV/W	0.6 mV/W
Calibration Uncertainty ^d	±2.5 %	±2.5 %
Repeatability	±0.5 %	±0.5 %
Energy Mode		
Sensitivity	0.7 mV/J	0.2 mV/J
Maximum Measurable Energy ^e	15 J	200 J
Noise Equivalent Energy ^a	0.02 J	0.02 J
Minimum Repetition Period	4 sec	5 sec
Maximum Pulse Width	88 ms	133 ms
Accuracy with energy calibration option	±5 %	±5 %
DAMAGE THRESHOLDS		
Maximum Average Power Density ^f	36 kW/cm ²	100 kW/cm ²
Maximum Energy Density		
1064 nm, 360 µs, 5 Hz	5 J/cm ²	100 J/cm ²
1064 nm, 7 ns, 10 Hz	1 J/cm ²	1.1 J/cm ²
532 nm, 7 ns, 10 Hz	0.6 J/cm ²	1.1 J/cm ²
266 nm, 7 ns, 10 Hz	0.3 J/cm ²	0.7 J/cm ²
PHYSICAL CHARACTERISTICS		
Effective Aperture	17 mm Ø	17 mm Ø
Absorber (High Damage Threshold)	H5	W5
Dimensions	46H x 46W x 10.7D mm	46H x 46W x 10.7D mm
Weight (head only)	0.1 kg	0.1 kg
ORDERING INFORMATION		
Product Name	UP17P-6S-H5-D0	UP17P-6S-W5-D0
Product Number (without stand)	201033	201021
 Add Extension for INTEGRA (US)	-INT	-INT
Product Number (without stand)	203039	203041
 Add Extension for INTEGRA (RS-232)	-IDR	-IDR
Product Number (without stand)	203327	203329
Specifications are subject to change without notice // Compatible stand: P/N 200160		

* For the calibrated spectral range, see the user manual.

- a. Nominal value, actual value depends on electrical noise in the measurement system.
- b. With anticipation.
- c. Maximum output voltage = sensitivity x maximum power.
- d. Including linearity with power.
- e. For 360 µs pulses. Higher pulse energy possible for long pulses (ms), less for short pulses (ns).
- f. At 1064 nm, 10 W CW.

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