



# 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/cm<sup>2</sup>
  - W5: Unequalled 100 kW/cm<sup>2</sup>
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/cm<sup>2</sup>)



UP17P-6S-W5  
(6W-100 kW/cm<sup>2</sup>)

## ACCESSORIES



Stand with Steel Post  
(Model Number: 200160)



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



Pelican Carrying Case

## SEE ALSO

HOW IT WORKS	<b>14</b>
CALIBRATION	<b>6</b>
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## APPLICATION NOTE

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

MONITORS

ENERGY DETECTORS

POWER DETECTORS

HIGH POWER SOLUTIONS

PHOTO DETECTORS

THZ DETECTORS

OEM DETECTORS

SPECIAL PRODUCTS

BEAM DIAGNOSTICS

## UP17-H/W



\*Also traceable to NRC-CNRC

## SPECIFICATIONS

	UP17P-6S-H5	UP17P-6S-W5		
<b>MAX AVERAGE POWER (CONTINUOUS / 1 MINUTE)</b>	6 W / 7 W	6 W / 7 W		
<b>EFFECTIVE APERTURE</b>	17 mm Ø	17 mm Ø		
<b>COOLING METHOD</b>	Convection	Convection		
<b>MEASUREMENT CAPABILITY</b>				
Spectral Range *	0.19 – 20 µm	0.19 – 10.0 µm		
Noise Equivalent Power <sup>a</sup>	1 mW	1 mW		
Rise Time (nominal) <sup>b</sup>	0.8 sec	1.4 sec		
Sensitivity (typ into 100 kΩ load) <sup>c</sup>	0.6 mV/W	0.6 mV/W		
Calibration Uncertainty <sup>d</sup>	±2.5 %	±2.5 %		
Repeatability	±0.5 %	±0.5 %		
<b>Energy Mode</b>				
Sensitivity	0.7 mV/J	0.2 mV/J		
Maximum Measurable Energy <sup>e</sup>	15 J	200 J		
Noise Equivalent Energy <sup>a</sup>	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 %		
<b>DAMAGE THRESHOLDS</b>				
Maximum Average Power Density <sup>f</sup>	36 kW/cm <sup>2</sup>	100 kW/cm <sup>2</sup>		
Pulsed Laser Damage Thresholds	Max Energy Density	Peak Power Density	Max Energy Density	Peak Power Density
1064 nm, 360 µs, 5 Hz	5 J/cm <sup>2</sup>	14 kW/cm <sup>2</sup>	100 J/cm <sup>2</sup>	667 kW/cm <sup>2</sup>
1064 nm, 7 ns, 10 Hz	1 J/cm <sup>2</sup>	143 MW/cm <sup>2</sup>	1.1 J/cm <sup>2</sup>	157 MW/cm <sup>2</sup>
532 nm, 7 ns, 10 Hz	0.6 J/cm <sup>2</sup>	86 MW/cm <sup>2</sup>	1.1 J/cm <sup>2</sup>	157 MW/cm <sup>2</sup>
266 nm, 7 ns, 10 Hz	0.3 J/cm <sup>2</sup>	43 MW/cm <sup>2</sup>	0.7 J/cm <sup>2</sup>	27 MW/cm <sup>2</sup>
<b>PHYSICAL CHARACTERISTICS</b>				
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		
<b>ORDERING INFORMATION</b>				
Product Name	UP17P-6S-H5-D0	UP17P-6S-W5-D0		
Product Number (without stand)	201033	201021		
Add Extension for INTEGRA (USB)	-INT	-INT		
Product Number (without stand)	203039	203041		
Add Extension for INTEGRA (RS-232)	-IDR	-IDR		
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 when customized for long pulses (ms), less for short pulses (ns).  
 f. At 1064 nm, 10 W CW.