

# UP17P-H5 (W5)



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



## Key Features

- 1 **Ultra Thin Casing**  
Only 10.5 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 (W5)
- 5 **High Quality Stand**  
Post threaded on both sides to allow extension
- 6 **Smart Interface**  
Containing all the calibration data



UP17P-6S-H5



**NEW**

### See also

. How it works .....	14
. Calibration .....	6
. Detailed dimensions .....	76
. Spectral absorption .....	107
. Compatible monitors	
SOLO 2 .....	20
UNO .....	22
S-LINK-2 .....	24
P-LINK .....	26

## Accessories

### » Fiber Optic Adapters (FC, SMA, SC)

Variety of fiber adapter options to give you the most flexibility in using our power detectors with your fiber coupled lasers.



### » Extension Cables (4, 15, 20 and 25 m)

For some OEM, manufacturing and laboratory applications.





### » Pelican Carrying Case

We offer a robust hard shell polymer carrying case.



## UP17P-H5 (W5)

## SPECIFICATIONS

Models	UP17P-6S-H5	UP17P-6S-W5
		
Max Average Power (continuous)	6 W	6 W
Max Average Power (1 minute)	7 W	7 W

MEASUREMENT CAPABILITY	H5	W5
Spectral Range	0.19 – 20 $\mu\text{m}$	0.19 – 10 $\mu\text{m}$
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 k $\Omega$ load) <sup>c</sup>	0.6 mV/W	0.6 mV/W
Calibration Uncertainty <sup>d</sup>	$\pm 2.5$ %	$\pm 2.5$ %
Repeatability	$\pm 0.5$ %	$\pm 0.5$ %
Energy Mode		
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	$\pm 5$ %	$\pm 5$ %

## DAMAGE THRESHOLDS

Maximum Average Power Density <sup>f</sup>	36 kW/cm <sup>2</sup>		100 kW/cm <sup>2</sup>	
	Max Energy Density	Peak Power Density	Max Energy Density	Peak Power Density
Pulsed Laser Damage Thresholds				
1064 nm, 360 $\mu\text{s}$ , 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>

## PHYSICAL CHARACTERISTICS

Effective Aperture Diameter	17 mm $\emptyset$	17 mm $\emptyset$
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

Full Product Name	UP17P-6S-H5	UP17P-6S-W5
Product Number (including stand)	201036	201037

a. Nominal value, actual value depends on electrical noise in the measurement system.

b. With Gentec-EO SOLO, UNO, P-LINK and S-LINK-2 monitors.

c. Maximum output voltage = sensitivity x maximum power.

d. Including linearity with power.

e. For 360  $\mu\text{s}$  pulses. Higher pulse energy possible when customized for long pulses (ms), less for short pulses (ns).

f. At 1064 nm, 10 W CW.