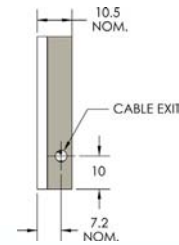


ULTRA SERIES UP17P SPECIFICATIONS

CHARACTERISTICS

- Ultra Thin Casing
- 2 Choices of Absorbers
- High Power to Size Ratio
- Can be used in Energy Mode



UP17P-6S-H5

UP17P-6S-W5

MEASUREMENT CAPABILITY

	UP17P-6S-H5	UP17P-6S-W5
Spectral Range	0.19 - 11 μm	0.19 - 10 μm
Maximum Measurable Power	6 W	6 W
Noise Equivalent Power ^a	1 mW	1 mW
Rise Time (Nominal) ^b	2.5 sec	5 sec
Sensitivity ^c	0.6 mV/W	0.6 mV/W
Calibration Uncertainty ^d	$\pm 2.5\%$	$\pm 2.5\%$
Repeatability	$\pm 0.5\%$	$\pm 0.5\%$
Energy Mode		
Sensitivity	0.7 mV/J	0.2 mV/J
Maximum Measurable Energy ^e	15 J	200 J
Noise Equivalent Energy ^a	20 mJ	20 mJ
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

	UP17P-6S-H5		UP17P-6S-W5	
Max Average Power (Continuous)	6 W		6 W	
Max Average Power (2 minutes)	7 W		7 W	
Max Average Power Density ^f	36 kW/cm ²		100 kW/cm ²	
Pulsed Laser Damage Thresholds	Max Energy Density	Peak Power Density	Max Energy Density	Peak Power Density
1064 nm, 360 ms, 5 Hz	5 J/cm ²	14 kW/cm ²	100 J/cm ²	667 kW/cm ²
1064 nm, 7 ns, 10 Hz	1 J/cm ²	143 MW/cm ²	1.1 J/cm ²	157 MW/cm ²
532 nm, 7 ns, 10 Hz	0.6 J/cm ²	86 MW/cm ²	1.1 J/cm ²	157 MW/cm ²
248 nm, 26 ns, 10 Hz	0.3 J/cm ²	43 MW/cm ²	0.7 J/cm ²	27 MW/cm ²

PHYSICAL CHARACTERISTICS

Effective Aperture Diameter	17 mm \varnothing
Absorber	High Damage Threshold - H5 High Peak Power Density - W5
Cooling	Convection
Dimensions	46 (H) mm x 46 (W) mm x 10.7 (D) mm
Weight (head only)	100 g
Effective Area	2.27 cm ²

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

b. With Gentec-EO TPM 300CE, DUO, SOLO or P-LINK monitors.

c. Maximum output voltage = sensitivity x maximum power.

d. Including linearity with power. With Gentec-EO monitor.

e. For 360 μs pulses. Higher pulse energy possible when customized for long pulses (ms), less for short pulses (ns).

f. 1064 nm, 1 W CW.

Specifications subject to change without notice.

Distribution in the UK



Lambda Photometrics Ltd, Lambda House, Batford Mill, Harpenden, Hertfordshire AL5 5BZ

E: info@lambdaphoto.co.uk **W:** www.lambdaphoto.co.uk **T:** +44 (0)1582 764334 **F:** +44 (0)1582 712084

The leading supplier of scientific and industrial lasers, optical systems and associated accessories, fibre optic components and instrumentation, and machine vision products.