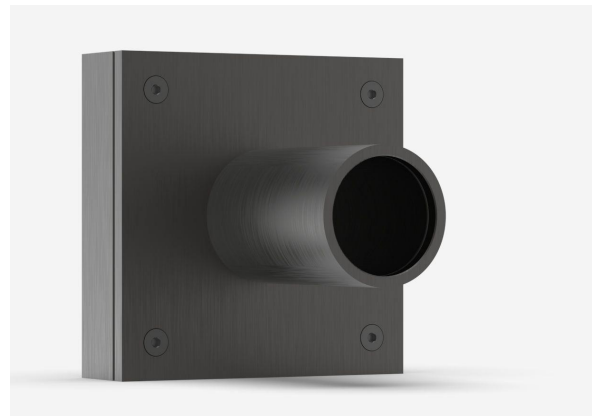


# XLP12-3S-H2-D0

P/N 201032

Thermopile detector for laser power measurement up to 3 W.



## KEY FEATURES

### LOW POWER THERMOPILE

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

### MINIMAL THERMAL DRIFT

Only 6  $\mu\text{W}/^\circ\text{C}$  (with the IR filter)

### HIGH SENSITIVITY

200 mV/W (without the IR filter)

### SPECIAL MODEL FOR ULTRASHORT PULSES

VP (volume absorber) version is perfect for low power lasers with ultrashort pulses (ps and fs)

### IR FILTER (XLPF12 MODEL)

Removes unwanted IR interference

### ISOLATION TUBE

Eliminates power fluctuations created by air turbulence

## COMPATIBLE STAND

[STAND-S-233](#)

## COMPATIBLE DISPLAYS & PC INTERFACES

[MAESTRO](#)

[TUNER](#)

[UNO](#)

[S-LINK-1](#)

[S-LINK-2](#)

[P-LINK \(USB\)](#)

[M-LINK](#)

[P-LINK \(RS-232\)](#)

[P-LINK-4 \(USB\)](#)

[P-LINK-4 \(Ethernet\) V2](#)

[S-LINK-1 \(Ethernet\)](#)

[S-LINK-2 \(Ethernet\)](#)

## MEASUREMENT CAPABILITIES

Maximum average power (continuous)	3 W
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Maximum average power (1 minute)	3 W
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Noise equivalent power <sup>1</sup>	0.5 $\mu\text{W}$
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Spectral range <sup>2</sup>	0.19 - 20 $\mu\text{m}$
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Typical rise time <sup>3</sup>	2.5 sec
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Typical power sensitivity <sup>4</sup>	200 V/W
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Power calibration uncertainty <sup>5</sup>	$\pm 2.5\%$
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Repeatability	$\pm 0.5\%$
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Thermal drift <sup>6</sup>	12 $\mu\text{W}/^\circ\text{C}$
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1. Nominal value, actual value depends on electrical noise in the measurement system.
2. For the calibrated spectral range, see the user manual.
3. With anticipation.
4. Into 100 k $\Omega$  load. Maximum output voltage = sensitivity x maximum power.
5. Including linearity with power.
6. With MAESTRO.

## MEASUREMENT CAPABILITIES (ENERGY MODE)

Typical energy sensitivity	25 mV/J
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Maximum measurable energy <sup>1</sup>	5 J
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Noise equivalent energy <sup>2</sup>	12 $\mu\text{J}$
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Minimum repetition period	16 s
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Maximum pulse width	300 ms
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Energy calibration uncertainty <sup>3</sup>	$\pm 5\%$
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1. For 360  $\mu\text{s}$  pulses. Higher pulse energy possible for long pulses (ms), less for short pulses (ns).

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2. Nominal value, actual value depends on electrical noise in the measurement system.
3. When single-shot energy calibration is purchased

## DAMAGE THRESHOLDS

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Maximum average power density <sup>1</sup>	1 kW/cm <sup>2</sup>
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Maximum energy density <sup>2</sup>	1 J/cm <sup>2</sup>
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Peak power density <sup>3</sup>	143 MW/cm <sup>2</sup>
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1. At 1064 nm, 1 W CW.
2. At 1064 nm, 7 ns, 10 Hz.
3. At 1064 nm, 7 ns, 10 Hz.

## PHYSICAL CHARACTERISTICS

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Aperture diameter	12 mm
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Absorber	H2
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Dimensions	73H x 73W x 20D mm (72D mm with tube)
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Weight	0.31 kg
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