

# XLP12-3S-H2-D0

Thermopile detector for laser power measurement up to 3 W.



## PRODUCT FAMILY 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 µW/°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

# **SPECIFICATIONS**

MEASUREMENT CAPABILITIES	
Maximum average power (continuous)	3 W
Maximum average power (1 minute)	3 W
Noise equivalent power <sup>1</sup>	0.5 µW
Spectral range <sup>2</sup>	0.193 - 20 μm
Typical rise time <sup>3</sup>	2.5 s
Power calibration uncertainty <sup>4</sup>	±2.5 %
Repeatability	±0.5 %
Thermal drift <sup>5</sup>	12 μW/°C

- $\hbox{1. Nominal value, actual value depends on electrical noise in the measurement system.}\\$
- 2. For the calibrated spectral range, see the user manual.
- 3. With anticipation.
- 4. Including linearity with power.
- 5. With MAESTRO.

## MEASUREMENT CAPABILITIES (ENERGY MODE)

MEASUREMENT CAPABILITIES (ENERGY MODE)	
Maximum measurable energy <sup>1</sup>	5 J
Noise equivalent energy <sup>2</sup>	12 μJ
Minimum repetition period	16 s
Maximum pulse width	300 ms
Energy calibration uncertainty <sup>3</sup>	±5 %

- 1. For 360 µs pulses. Higher pulse energy possible for long pulses (ms), less for short pulses (ns).
- 2. Nominal value, actual value depends on electrical noise in the measurement system.
- 3. When single-shot energy calibration is purchased

# DAMAGE THRESHOLDS

Maximum average power density <sup>1</sup>	1 kW/cm <sup>2</sup>
Maximum energy density <sup>2</sup>	1 J/cm²

- 1. At 1064 nm, 1 W CW. May vary with wavelength and average power.
- 2. At 1064 nm, 7 ns, 10 Hz. May vary with wavelength and pulse width.

PHYSICAL CHARACTERISTICS	
Cooling	Convection
Aperture diameter	12 mm
Absorber	H2
Dimensions	73H x 73W x 20D mm (72D mm with tube)
Weight	0.31 kg
ORDERING INFORMATION	
XLP12-3S-H2-D0	201032
XLP12-3S-H2-INT-D0	202609
XLP12-3S-H2-BLU-D0	203544
XI P12-3S-H2-IDR-D0	203391

Specifications are subject to change without notice. Refer to the user manual for complete specifications.

# **INTERESTED IN THIS PRODUCT?**



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