

## XLP12-3S-H2-D0

Thermopile detector for laser power measurement up to 3 W.



## PRODUCT FAMILY KEY FEATURES

## **NEW: IMPROVED ACCURACY**

The uncertainty at the laser calibration wavelength is now lower than ever: only  $\pm 2.0\%$ 

#### 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 %
Repeatability	±0.5 %
Thermal drift <sup>5</sup>	12 μW/°C

- 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)

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	
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

Maximum energy density<sup>2</sup>

XLP12-3S-H2-IDR-D0

1 J/cm²

203391

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

# **INTERESTED IN THIS PRODUCT?**



Find your local sales representative at gentec-eo.com/contact-us