

New Product - XLP12

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Preliminary Datasheet

NEW!



The XLP12 eXtreme Low Power

μ W to W range

Thermopile-Based

Minimal Thermal Drift

Flat Spectral Response

High Sensitivity

gentec-eo

Laser Power & Energy Measurement Since 1972

Gentec-EO introduces the new thermopile-based eXtreme Low Power detector, the **XLP12** for low power measurements in both the μW and mW regimes with very low thermal drift. Featuring broadband flat spectral response, minimal thermal drift and a noise equivalent power as low as $1 \mu\text{W}$! The **XLP12** is ideally suited for measuring any pulsed or CW low power laser.



XLP12-1S-H2

MEASUREMENT CAPABILITY

Spectral Range	0.19 – 11 μm
Maximum Measurable Power	1 W
Noise Equivalent Power ^a	1 μW
Rise Time (Nominal) ^b	2.5 sec
Sensitivity ^c	200 mV/W
Calibration Uncertainty ^d	$\pm 2.5 \%$
Repeatability	$\pm 0.5 \%$
Thermal Drift	12 $\mu\text{W}/^\circ\text{C}$

DAMAGE THRESHOLDS

Max Average Power (continuous)	1 W
Max Average Power (2 minutes)	2 W
Max Average Power Density ^e	3 kW/cm^2
Pulse Laser Damage Thresholds	
1.064 μm , 360 μs , 5 Hz	Max Energy Density 5 J/cm^2
1.064 μm , 7 ns, 10 Hz	1 J/cm^2

PHYSICAL CHARACTERISTICS

Effective Aperture Diameter	12 mm \varnothing
Absorber	H2
Dimensions (without isolation tube)	73H x 73W x 20D mm
Dimensions (with isolation tube)	73H x 73W x 70D mm
Weight (head only)	0.304 kg
Effective Area	1.13 cm^2

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

^b With Gentec-EO monitors.

^c Maximum output voltage = sensitivity x maximum power.

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

^e At 1064 nm, 1 W CW.

Specifications subject to change without notice