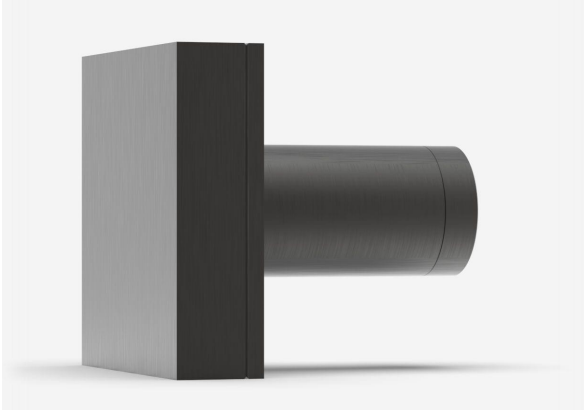
XLPF12-3S-H2-D0

P/N 201077

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 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

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
Maximum average power (1 minute)	3 W
Noise equivalent power[1]	0.5 µW
Spectral range[2]	0.28 - 2.1 µm
Typical rise time[3]	2.5 sec
Typical power sensitivity[4]	180 V/W
Power calibration uncertainty[5]	±2.5 %
Repeatability	±0.5 %
Thermal drift[6]	6 µW/°C

1. Nominal value, actual value depends on electrical noise in the measurement system.
2. This spectral range refers to the calibration traceability.
3. With anticipation.
4. Into 100 kΩ load. Maximum output voltage = sensitivity x maximum power.
5. Including linearity with power.
6. With MAESTRO.

MEASUREMENT CAPABILITIES (ENERGY MODE)

Typical energy sensitivity	22.5 mV/J
Maximum measurable energy[1]	5 J
Noise equivalent energy[2]	12 µJ
Minimum repetition period	16 s
Maximum pulse width	300 ms
Energy calibration uncertainty[3]	±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[1]	1 kW/cm²
Maximum energy density[2]	1 J/cm²
Peak power density[3]	143 MW/cm²

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

Aperture diameter	12 mm
Absorber	H2
Dimensions	73H x 73W x 28D mm (80D mm with tube)
Weight	0.32 kg