

# ULTRA SERIES XLP12 SPECIFICATIONS

## MAIN FEATURES

- $\mu\text{W}$  to W Range
- Thermopile-Based
- Minimal Thermal Drift
- Flat Spectral Response
- High Sensitivity

Without Filter



XLP12-1S-H2

With Filter



XLP12F-1S-H2

## MEASUREMENT CAPABILITY

Spectral Range	0.19 - 11 $\mu\text{m}$	0.28 - 1.36 $\mu\text{m}$
Maximum Measurable Power	1 W	
Noise Equivalent Power	$\pm 0.5 \mu\text{W}$	
Thermal Drift	12 $\mu\text{W}/^\circ\text{C}$	
Rise Time (nominal)	2.5 sec	
Sensitivity	200 mV/W	180 mV/W
Calibration Uncertainty	$\pm 2.5\%$	
Repeatability	$\pm 0.5\%$	
Energy Mode		
Sensitivity	25 mV/J	
Maximum Measurable Energy	5 J	
Noise Equivalent Energy	12 $\mu\text{J}$	
Minimum Repetition Period	16 sec	
Maximum Pulse Width	300 ms	
Accuracy with energy calibration option	$\pm 5\%$	

## DAMAGE THRESHOLDS

Max Average Power (continuous)	1 W	
Max Average Power (2 minutes)	2 W	
Maximum Average Power Density	1 $\text{kW}/\text{cm}^2$	
Pulsed Laser Damage Thresholds	Max Energy Density	Peak Power Density
1.064 $\mu\text{m}$ , 360 $\mu\text{s}$ , 5 Hz	5 $\text{J}/\text{cm}^2$	14 $\text{kW}/\text{cm}^2$
1.064 $\mu\text{m}$ , 7 ns, 10 Hz	1 $\text{J}/\text{cm}^2$	143 $\text{MW}/\text{cm}^2$
532 nm, 7 ns, 10 Hz	0.6 $\text{J}/\text{cm}^2$	86 $\text{MW}/\text{cm}^2$
248 nm, 26 ns, 10 Hz	0.3 $\text{J}/\text{cm}^2$	43 $\text{MW}/\text{cm}^2$

## PHYSICAL CHARACTERISTICS

Effective Aperture Diameter	12 mm $\emptyset$
Absorber	High Damage Threshold - H2
Dimensions (without isolation tube)	73 mm H x 73 mm W x 20 mm D
Dimensions (with isolation tube)	73 mm H x 73 mm W x 72 mm D
Weight (head only)	0.312 kg
Effective Area	1.13 $\text{cm}^2$