







-  Dozens of times faster than standard thermopile sensors.
-  Power density capability: 1.5KW/cm²
-  Active area: 16x16mm
-  Wavelength range: Measures from 250nm to 1100nm and 10.6 microns.

DESIGNED FOR OEM AND LABORATORY APPLICATIONS

Blink FR is a new generation of fast response laser sensors (patent pending), based on a technology that enables to reach high speeds unreachable with standard thermopile detectors.

Blink FR sensors are based on Laserpoint's proprietary technology that enables natural response times of 90 ms (typ), while still keeping a broadband spectral range, power density capability of comparable thermopile detectors and direct high power operation up to 60W. Blink FR is therefore able to measure several laser behaviours like pointing stability, fast drift and power instabilities occurring in the timeframe of dozens of ms. Blink FR sensors, differently from thermopile sensors, offer both an unreached natural response time (without any acceleration by additional electronics) down to 90 ms (typ.) and a high power operation allowing to directly measure these kind of fast phenomena. The broadband operation of Blink FR allows to measure power from a wide variety of laser sources emitting in UV, Visible and Infrared regions (CO₂), while photodiodes, although characterized by a high speed response, have both a much more limited operating wavelength range and maximum measurable power.

TECHNICAL SPECIFICATIONS



LASERPOINT

THE POINT OF DIFFERENCE IN PHOTONICS

MOD. BL-W-50W-16-K

Power Mode	
Max. Average Power	50 W
Max Intermittent Power ⁽¹⁾	60 W
Min. Measurable Power	30 mW
Resolution	1 mW
Noise Equivalent Power (NEP)	1.5 mW
Natural Response Time (0-90%)	90 ms
Calibration Uncertainty	± 3%
Power Linearity	± 2%
Energy Mode	
Max. Energy (25 ms pulse)	5 J
Max. Energy (10 ns pulse)	1 J
Min. Measurable Energy (25 ms pulse)	5 mJ
Min. Measurable Energy (10 ns pulse)	3 mJ
Max repetition rate (1 ms pulse)	6 Hz
Energy Resolution	1 mJ
Calibration Uncertainty	± 5%

Absorber Specs	
Aperture	16 x 16 mm
Spatial Uniformity	± 3%
Absorber Spectral Range	0.2 - 25 µm
Calibration Spectral Range	0.25 - 1.1 µm; 10.6 µm
Max Power Density ⁽²⁾	1.5 kW /cm ²
Max Energy Density (25 ms pulse) ⁽³⁾	5 J/cm ²
Max Energy Density (10 ns pulse) ⁽³⁾	1 J/cm ²
General Characteristics	
Cooling	Water ^(a)
Weight	130 g
Dimensions	56 x 56 x 18.5 mm
Cable Length	1.5 m
Notes	
⁽¹⁾ 2 sec. Max.	^(a) Water Min. 1 l/min, Max 4 l/min (@ 10-25 °C).
⁽²⁾ Measured att 1064 nm, 10W.	Damage threshold depends on power level.
⁽³⁾ Single shot.	Admissible rate of water temperature variation <1 °C/min.