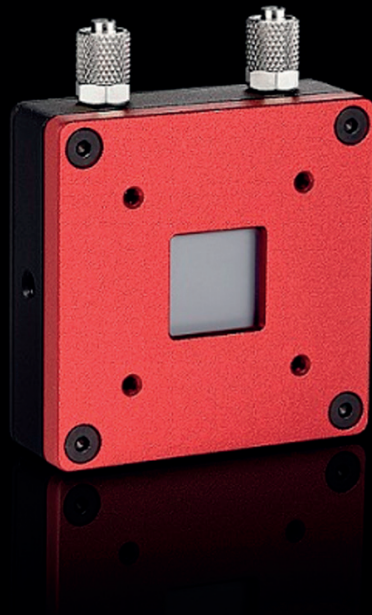


BLINK

THE NEW GENERATION
OF FAST RESPONSE LASER SENSORS

BLINK^{FR}




LASERPOINT
THE POINT OF DIFFERENCE IN PHOTONICS

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THE POINT OF DIFFERENCE IN PHOTONICS


BLINK•FR



 Dozen of time faster than standard thermopile sensors

 Max. Power density capability: 10 kW/cm²

 Max. Active Area: 16 mm x 16 mm

 Wavelength range: Measures from 250nm to 1100nm and 10.6 microns

DESIGN FOR OEM AND LABORATORY APPLICATIONS

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



Blink FR sensors are based on LaserPoint's proprietary technology that enables 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 100W. Blink FR is therefore able to measure several laser behaviors like pointing stability, fast drift and power instabilities occurring in the timeframe of dozens of ms. Blink FR sensors, differently from thermopiles 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 the UV, Visible and Infrared regions (CO₂), while photodiodes, although characterized by a high speed response, have both a much more limited operating wavelength range, maximum measurable power and a signal response much more depending from temperature.

BLINK FR - TECHNICAL SPECIFICATIONS

	Blink FR with Absorber T Standard Energy Density				Blink FR with Absorber A High Energy Density			
Ordering Code	BL-A-5W-16-K	BL-A-8W-16-K	BL-A-25W-16-K	BL-W-50W-16-K	BL-A-5W-12-A	BL-A-10W-12-A	BL-A-50W-12-A	BL-W-100W-12-A
Available Cooling systems	Conduction ^(b)	Conduction ^(b)	Forced Air ^(b)	Water ^(a)	Conduction ^(b)	Conduction ^(b)	Forced Air ^(b)	Water ^(a)
Power Mode								
Max Average Power	5 W	8 W	25 W	50 W	5 W	10 W	55 W	100 W
Min Measurable Power	30 mW				50 mW			
Noise Equivalent Power	1.5 mW				4 mW			
Natural Response Time (0-90%)	Typ. 90 ms (Min. 50 ms - Max. 120 ms)				Typ. 90 ms (Min. 50 ms - Max. 120 ms)			
Power Calibration Uncertainty	± 3 %				± 3 %			
Power linearity ⁽¹⁾	± 3 %				± 3 %			
Energy mode								
Min. Energy	25 mJ				50 mJ			
Max. Energy	5 J				10 J			
Max repetition rate	5 Hz				5 Hz			
Energy Calibration Uncertainty	± 5 %				± 5 %			
Absorber Specs								
Aperture	16 mm x 16 mm				12 mm x 12 mm			
Type	K				A			
Spatial Uniformity ⁽¹⁾	± 3 %				± 3 %			
Absorber Spectral range	0.2 -25 μm				0.5 - 1.1 μm			
Calibration Spectral range	0.25 - 1.1 μm ; 10.6 μm				0.532 μm , 1.07 μm			
Max. Power Density ⁽²⁾	1.5 kW/cm ²				10 kW/cm ²			
Max. Energy Density ⁽³⁾	1 J/cm ² (@ 10ns pulse width)				10 J/cm ² (@ 10ns pulse width)			
General Characteristics								
Dimensions (mm)	60x60x16.1	60x60x41.2	60x60x66	56x56x18.5	60x60x16.1	60x60x41.2	60x60x66	56x56x18.5
Max Weight	140 g	240 g	380 g	130 g	140 g	240 g	380 g	130 g
Cable length - Connector	1.5 m - DB15 2.5 m - USB (U option) 1.5 m - RS232 (R option)				1.5 m - DB15 2.5 m - USB (U option) 1.5 m - RS232 (R option)			
Notes								
(1) Detector centrally irradiated @ 50% area (2) 3 mm beam diameter, scanning 80% of active area (3) @ 1070 nm, 10W	(a) Water: min. 1 l/min, Max. 4 l/min @ 10-25°C. Admissible rate or water temperature variation < 1°C/min; (b) Recommended ambient temperature: 10 -35 °C (forced air); 10 -30 °C (conduction);							

INNOVATION IS OUR DNA

At LaserPoint innovation means providing smarter solutions to customer requirement: that's why we never stand still, constantly investing in innovation and technology. LaserPoint is an independent Company that employs physicists, engineers and technicians with solid background in laser technologies, R&D and manufacturing. The results of our work are the several patents on laser measurement devices from 2011 to 2022 and our ISO 9001 certification on our entire development and manufacturing process.

Achievements first introduced by LaserPoint in the market:

- Broadband, High-Speed laser sensors (Blink)
- Pulse Controller System for detection of missing and low energy pulses
- Touch Screen Power and Energy Meter
- Super Hard Coating
- Detectors with USB/RS connectivity

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