



USB and RS-232 Kilowatt OEM Power Sensors

Compact OEM Thermopile Sensors for High Power

Coherent offers a variety of off-the-shelf OEM sensors that cover wide range - from 10 mW to 1 kW, DUV to far IR, and small to large area.

These kilowatt thermopile sensors are water-cooled for measuring laser power up to 1 kW. They are compact designs and more easily fit inside laser systems than some of our other kW sensors. These sensors are configured with USB and RS-232 cables for direct connection to a PC or industrial controller. DB-25 sensor for use with our stand alone meters are also available.

FEATURES & BENEFITS

- Small compact design
- Air- or water-cooled
- Cost effective
- 19 mm, 35 mm, and 50 mm apertures
- RoHS Compliant

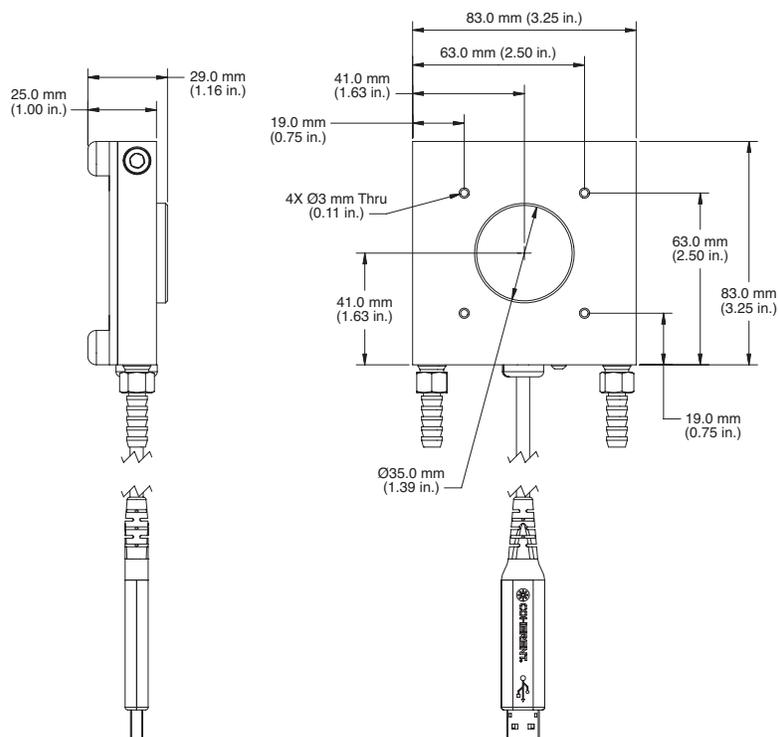


SPECIFICATIONS	BeamFinder	PM1K-36C
Wavelength Range (nm)	0.25 to 10.6	
Power Range (W)	50 to 1000	
Max. Intermittent Power (W) (<5 min.)	NA	3000 ¹
Noise Equivalent Power (mW)	20	
Maximum Avg. Power Density ² (kW/cm ²)	1 to 2.5	
Maximum Pulse Energy Density (mJ/cm ²)	500	600
Response Time (sec.) (0% to 95%)	4	
Speed-up On	4	
Speed-up Off	6	
Detector Coating	Broadband	
Detector Element	Thermopile	
Detector Diameter (mm)	35	36
Calibration Uncertainty (%) (k=2)	±5	
Power Linearity (%)	±1	
Spectral Compensation Accuracy (%)	±1.5	
Calibration Wavelength (nm)	10,600	
Cooling Method	Water	
Cable Type	USB	USB and RS
Cable Length (m)	2.5	2.5 (USB)/0.3 (RS)
Part Number ³	1233118	1174266 (USB)/1174267 (RS)

1 Intermittent power levels may be sustainable for longer than 5 minutes when used with lasers with large diameter, non-Gaussian beam profiles. Monitor closely for coating damage if used longer than five minutes at higher powers.
 2 The damage resistance of the coating is dependent upon the beam size and profile, the average power level, and the water flow rate. Contact Coherent or your local representative for details related to your application.
 3 Software, water fittings and post stand included with kW sensors.

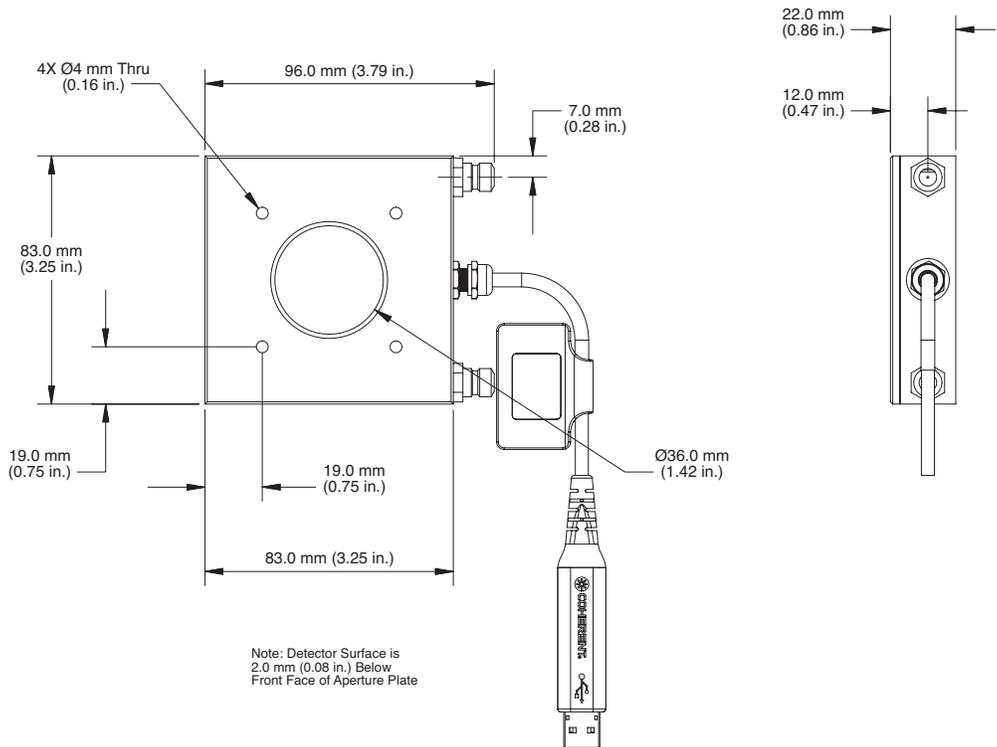
MECHANICAL SPECIFICATIONS

BeamFinder



MECHANICAL SPECIFICATIONS

PM1K-36C (USB)

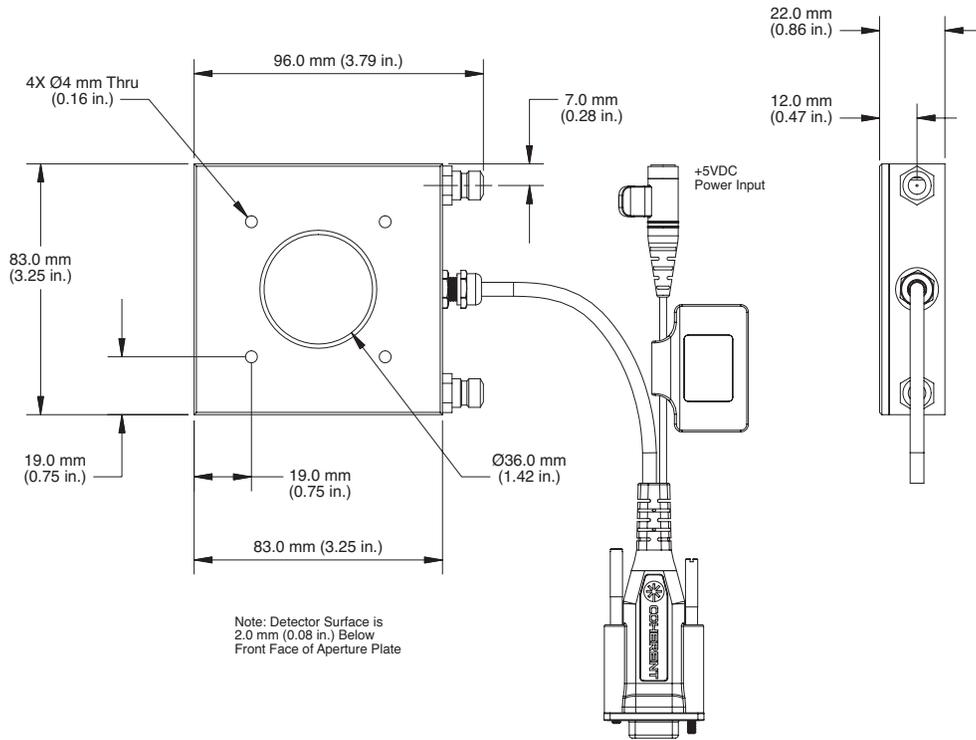




USB and RS-232 Kilowatt OEM Power Sensors Datasheet

MECHANICAL SPECIFICATIONS

PM1K-36C (RS)



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Coherent follows a policy of continuous product improvement. Specifications are subject to change without notice. Coherent's scientific and industrial lasers are certified to comply with the Federal Regulations (21 CFR Subchapter J) as administered by the Center for Devices and Radiological Health on all systems ordered for shipment after August 2, 1976.

Coherent offers a limited warranty for all Kilowatt OEM Power Sensors. For full details of this warranty coverage, please refer to the Service section at www.coherent.com or contact your local Sales or Service Representative. MC-015-20-0M0420 Copyright ©2020 Coherent, Inc.