



High-Peak-Power Thermopile Sensors

Designed for Use With Pulsed High-Peak-Power, Low Repetition Rate

These sensors are designed for use with pulsed high-peak-power, low repetition rate, Q-switched Nd:YAG lasers. A volume-absorbing substrate mounted in front of the detector absorbs the bulk of the laser energy, thus preventing all of the laser energy from striking the front surface of the detector element. These sensors are intended to be used at relatively low repetition rates of approximately 10 pps.

The PM10V1 and PM30V1 utilize a volume absorber and have a damage threshold of 2 J/cm² at 1064.

A removable front aperture to allows easy replacement of the volumeabsorbing substrate, should it be damaged. Replacements can be ordered separately (PMV1-KIT, part number 0011-8935).

FEATURES & BENEFITS

- Volume absorber
- High peak power handling capability
- 2 J/cm² at 1064
- 19 mm aperture
- · RoHS compliant

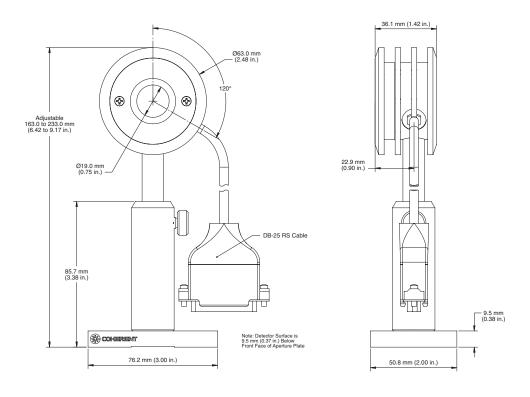


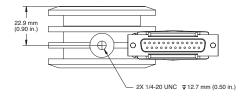


SPECIFICATIONS	PM10V1	PM30V1
Wavelength Range (nm)	0.25 to 3	
Power Range	10 mW to 10 W	100 mW to 30 W
Noise Intermittent Power (<5 min.) (W)	15	50
Resolution (mW)	1	10
Maximum Avg. Power Density (W/cm ²)	50	
Maximum Pulse Energy Density (J/cm²)	2 (10 ns, 1064 nm)	
Response Time (sec.)	3	
Detector Coating	Volume Absorbing	
Active Area Diameter (mm)	19	
Calibration Uncertainty (%) (k=2)	±1	
Calibration Wavelength (nm)	514	
Cooling Method	Air	
Cable Type	PM DB-25	
Cable Length (m)	2	
Part Number	1098338	1098429

MECHANICAL SPECIFICATIONS

PM10V1





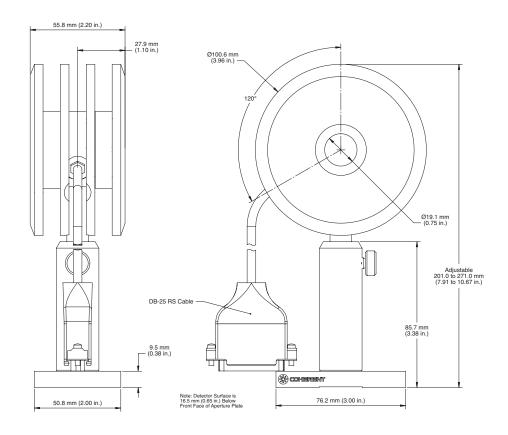


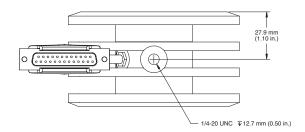


High-Peak-Power Thermopile Sensors Datasheet

MECHANICAL SPECIFICATIONS

PM30V1







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