

# Coherent® High Power Water-Cooled Thermopile Sensor PM1K+ 1409621 | 1kW Max Power

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⊖ 1 ⊕ **\$3,934.00**

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## Product Downloads

### General

1409621 **Model Number:**

**Meter required** **Type:**

3 **Calibration Uncertainty (%):**

Water **Cooling Method:**

Response Time (s):  
14.5s if Speed-up is on

Compatible Meters:  
[#35-203](#), [#12-393](#), [#59-978](#), [#88-411](#), [#66-277](#), [#88-412](#), [#23-660](#), [#23-661](#)

Maximum Incident Energy Density:  
600mJ/cm<sup>2</sup> (10ns, 1064nm)

## Physical & Mechanical Properties

Active Area Diameter (mm):  
50

## Optical Properties

Calibration Wavelength (nm):  
1070

Wavelength Range (nm):  
250 - 11000

Wavelength Range (μm):  
0.25 - 11

## Electrical

Power Resolution (W):  
1

Power Range:  
5W-1kW

Maximum Power (W):  
1000

Minimum Power (W):  
5

## Hardware & Interface Connectivity

Computer Interface:  
DB-25

## Regulatory Compliance

RoHS 2015:  
[Exempt](#)

Reach 224:  
[Contains SVHC\(s\)](#)

Certificate of Conformance:  
[View](#)

## Product Details

- Water-Cooling Capability to Withstand Laser Powers up to 5kW
- Spectrally Flat from 0.25 to 11μm
- Large 50mm Aperture for Accepting a Wide Range of Beam Diameters

Coherent® High Power Water-Cooled Thermopile Sensors are designed to withstand high power lasers up to 5kW. The water-cooling mechanism reduces the heat transferred to the sensor from input lasers to prevent sensor damage when used with the recommended minimum water flowrate. This makes these sensors ideal for use with >100W power industrial CO<sub>2</sub> and Nd:YAG lasers that exceed the power handling capability of standard thermopile sensors. Coherent® High Power Water-Cooled Thermopile Sensors cover a broad wavelength spectrum from 190 - 11,000nm, allowing for them to be used in most laser applications. A power resolution of 1W allows for these thermopile sensors to provide exceptional measurement accuracy of high power lasers. Refer to manual included with purchase for fitting and water flow specifications.