

# DustMon™ PM IIoT Particulate Monitor

*Real time data means more time at the face.*





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# Measure PM With Confidence

The DustMon™ PM Industrial Internet of Things (IIoT) particulate monitor offers unparalleled reliability, precision, and simplicity. It is the only MCERTS-certified IIoT Ethernet particulate monitor that continuously and accurately measures ambient air quality, even in foggy and misty conditions.

MCERTS (Monitoring Certification Scheme) is the Environment Agency's program for certifying equipment, personnel, and organizations involved in monitoring emissions to air, land, and water. This program ensures compliance with regulations governing industrial emissions and monitoring data. Built on proven international and European standards, MCERTS guarantees high-quality monitoring.

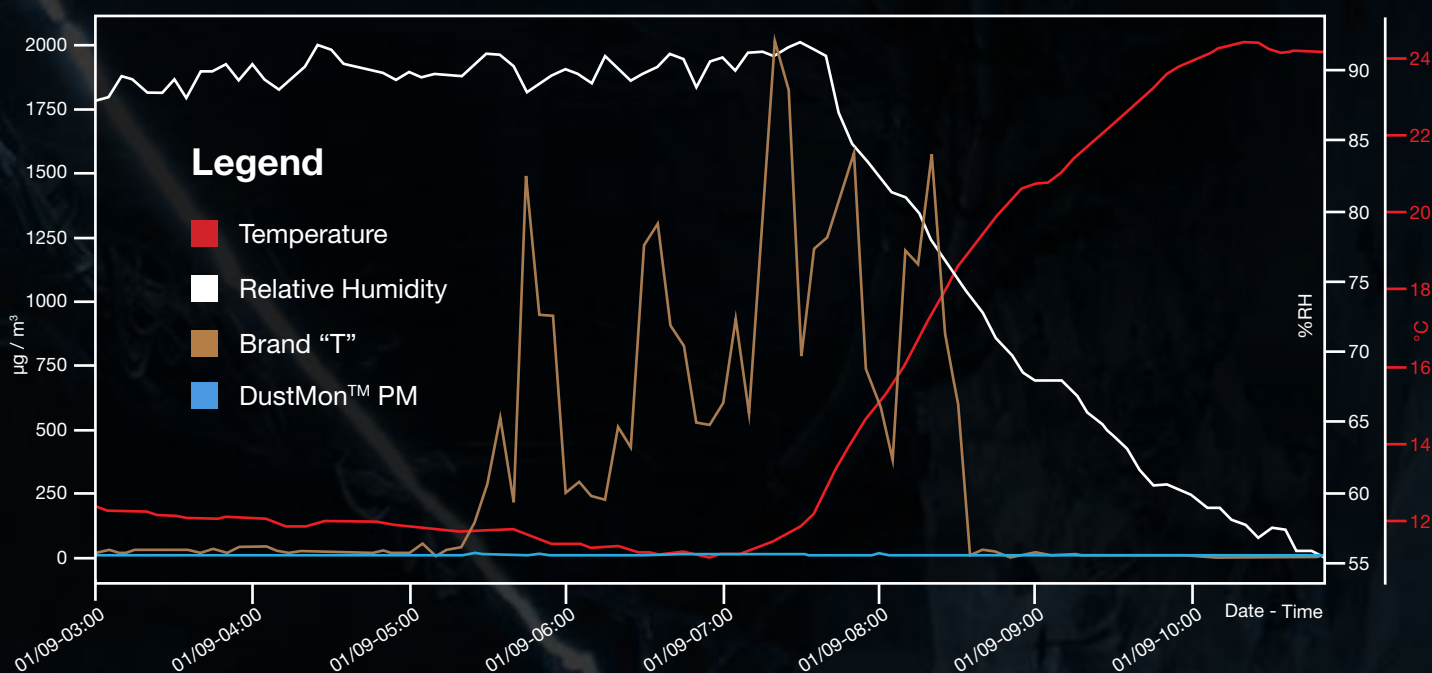
MCERTS enhances public confidence in monitoring data, equipment, and personnel, providing a framework for selecting monitoring equipment that meets the Environment Agency's stringent specifications.

Monitoring equipment that meets the Environment Agency's specifications.



# Reduce and Prevent False PM Counts

The DustMon™ PM is a reliable particulate monitor designed to minimize false positive signals caused by fog and mist in highly condensing environments. It excels in monitoring for bush fires at fresh air raises and supports dust mitigation programs underground at return air raises, crushers, and material handling transfer points.



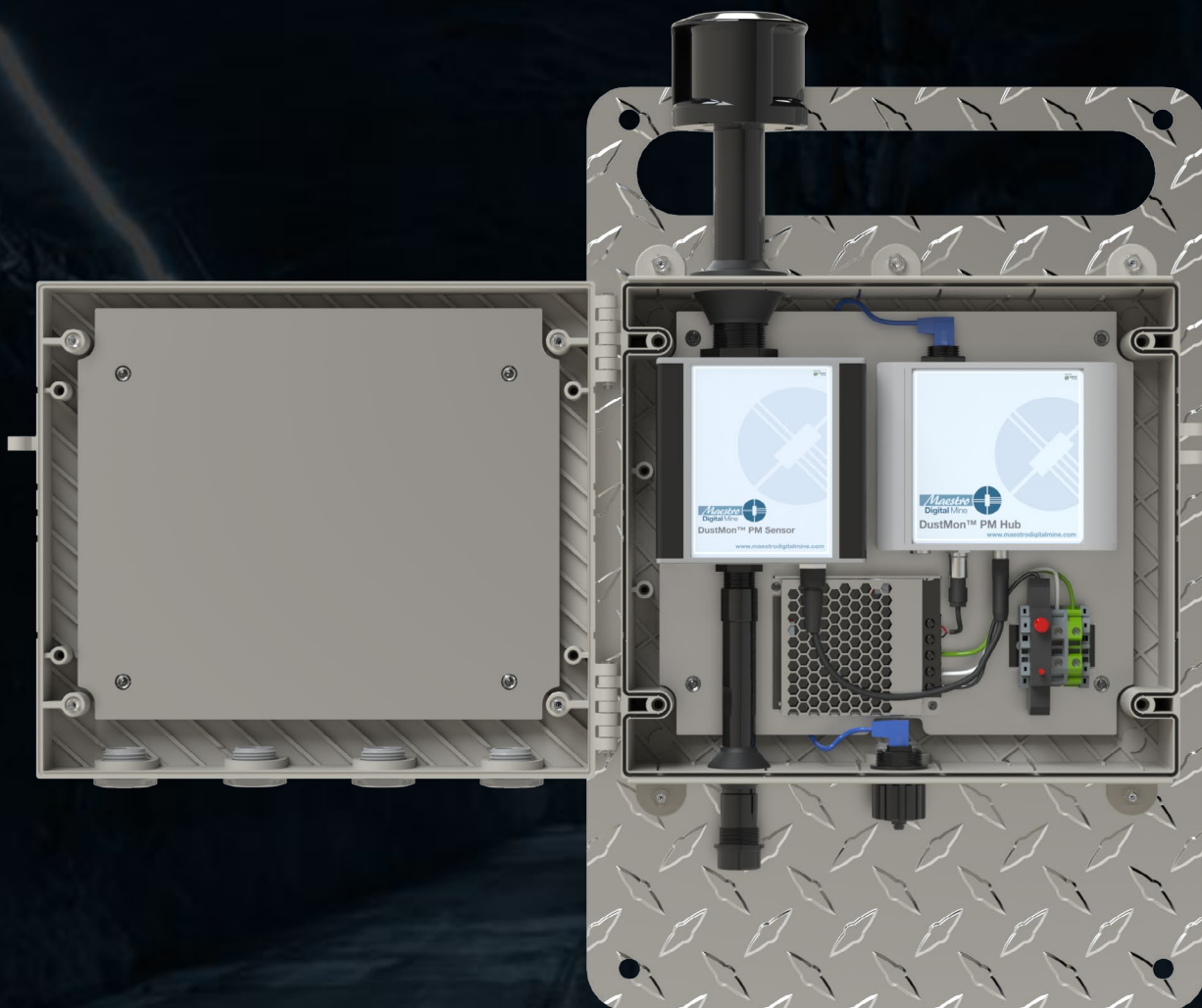
\*The influence of fog increased the measurement by a factor of **x375** without an inlet heater.





# Calibration Free System

A simple and quick sensor change-out module that can be swapped in the field in under 15 minutes, every three months, eliminating the need for on-site verification and calibration resources.



# Technical Specifications

<b>Measurement parameters</b>	PM10, PM4, PM2.5, PM1 and, temperature
<b>Measurement method</b>	Optical particle counter
<b>Measurement range</b>	Up to 2000 µg/m <sup>3</sup>
<b>Particulate range</b>	0.35 to 40 µm
<b>Environmental approvals</b>	MCERTS certified
<b>Measurement period</b>	1, 5, 10, 15 and 30-minute logging intervals Hourly and 24 hourly averages calculated online
<b>Data storage</b>	3+ years on board (at 5-minute intervals)
<b>Enclosure dimensions</b>	31.8cm W x 43.2cm H x 15.2cm D (12 ½"W x 17"H x 6"D)
<b>Enclosure weight</b>	5 kg (11 lbs)
<b>Operating temperature range</b>	-20 to 50°C (-4 to 122°F)
<b>Operating humidity</b>	0% to 95% RH
<b>Communications</b>	Modbus TCP/IP RJ45 Connection
<b>Power input</b>	110V - 240VAC
<b>Rating</b>	NEMA 4X enclosure
<b>Electrical approvals</b>	CSA or ESA general purpose

# The Maestro Ecosystem



**Vigilante AQS™**  
Air Quality Stations



**SuperBrite™**  
**Marquee Display**



**Plexus PowerNet™**



**ModuDrive™**  
**IIoT Ethernet Actuators**

For more information on the Maestro ecosystem visit [maestrodigitalmine.com](http://maestrodigitalmine.com)



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**complex simple**

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