

# MET ONE 6000 SERIES

## REMOTE AIRBORNE PARTICLE COUNTERS



***High performing, reliable  
0.2  $\mu\text{m}$  sensitivity remote***

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EXCELLENCE IN PROCESS ANALYTICS

# MET ONE 6000 SERIES

*The MET ONE 6000 series remote airborne particle counter offers accurate and reliable continuous particle monitoring. With a sensitivity range of 0.2 to 10 µm, the MET ONE 6000 series is designed to meet the specific needs of cleanroom operations within the semiconductor, hard disk drive and flat panel display industries.*



## The Most Reliable Top Performing, High Sensitivity Remote Particle Counter

Measuring particles using light scattering principles is as much an art as a science. MET ONE 6000 series has perfected the art of measuring particles for its high sensitivity 0.2 µm channel. The 0.2 µm sensor is developed to provide the most reliable and dependable performance for its operating range.

Available in a sensitivity range of 0.2 to 10 µm, and flow rates of 2.83 LPM or 28.3 LPM, the MET ONE 6000 series is designed to meet the specific needs of cleanroom operations within the semiconductor, hard disk drive and flat panel display industries.

With an array of communication and mechanical installation options, the MET ONE 6000 is easy to integrate with any facility monitoring system. These features also reduce downtime for instrument removal and reinstallation during routine calibration and preventative maintenance cycles.

The MET ONE 6000 offers industry leading diagnostic features that reduce troubleshooting time and related downtime costs. Built with Long Life Laser™ technology and supported by industry leading after sales support from Hach Ultra, MET ONE 6000 offers unparalleled user experience in product quality, reliability and performance for remote particle counting.

## Applications

- Cleanroom Monitoring
- Inert Gas Sampling
- Minienvironment Monitoring

## Benefits

- High performance, reliable 0.2 µm sensitivity counter designed for 0.2 µm applications. Accurately identifies smaller particles to improve product quality and increase yield
- Long Life Laser™ diode reduces the need for replacement parts and the overall cost of ownership
- Easy to Install, remove and interchange with various installation options and DIP switches. Reduces initial installation cost and subsequent reinstallation cost during routine maintenance/calibration work

- Instrument can be diagnosed for flow, sensor, communication failures, and count alarm or count alert through built-in or external light stack. These additional diagnostic features provide faster trouble shooting and reduced downtime

- 0.2 to 5.0 µm and 0.5 to 10.0 µm detection range
- Long Life Laser™ diode reduces cost of ownership
- Additional diagnostics reduces troubleshooting time
- Integrate with any FMS system with multiple communications
- Worldwide service and support



### Port Sizes

Model 6002	0.32 cm (1/8-inch) ID inlet	0.64 cm (1/4-inch) ID outlet
Model 6003	0.32 cm (1/8-inch) ID inlet	0.64 cm (1/4-inch) ID outlet
Model 6015	0.64 cm (1/4-inch) ID inlet	0.64 cm (1/4-inch) ID outlet

### Flow Rate

Model 6002	0.1 CFM (2.83 LPM)
Model 6003	0.1 CFM (2.83 LPM)
Model 6015	1.0 CFM (28.3 LPM)

### Sensitivity

Model 6002	0.2 µm at 0.1 CFM (2.83 LPM)
Model 6003	0.3 µm at 0.1 CFM (2.83 LPM)
Model 6015	0.5 µm at 1.0 CFM (28.3 LPM)

### Range

Model 6002	0.2 µm to 5.0 µm at 0.1 CFM (2.83 LPM)
Model 6003	0.3 µm to 10.0 µm at 0.1 CFM (2.83 LPM)
Model 6015	0.5 µm to 10.0 µm at 1.0 CFM (28.3 LPM)

### Channel Sizes

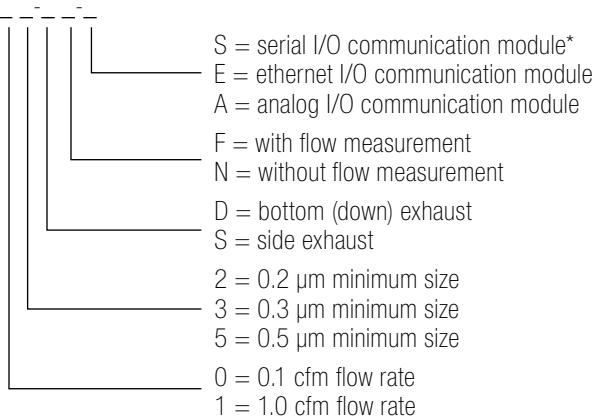
	STANDARD 2-CHANNEL	OPTIONAL 4-CHANNEL
Model 6002	0.2 and 0.3 µm	0.2, 0.3, 0.5 and 1.0 µm
Model 6003	0.3 and 0.5 µm	0.3, 0.5, 1.0 and 5.0 µm
Model 6015	0.5 and 5.0 µm	0.5, 1.0, 5.0 and 10.0 µm

### Counting Efficiency

Model 6002	50% at 0.2 µm
Model 6003	50% at 0.3 µm
Model 6015	50% at 0.5 µm

## Performance Specifications

<b>Light Source</b>	Long Life Laser™ diode
<b>Weight</b>	0.68 kg (1.5 lb)
<b>Dimensions</b>	13.56 w x 8.13 d x 10.87 h cm (5.34 x 3.20 x 4.28 inches)
<b>Enclosure</b>	304 stainless steel
<b>Status Indicator</b>	Multi-colored LED for normal status, count alarm, count alert, sensor failure, flow failure or communication failure
<b>Power Requirements</b>	9 to 28 VDC
<b>Power Consumption</b>	Serial and pulse unit: 3.3 W maximum; Ethernet unit: 4.3 W maximum
<b>Operating Temperature</b>	10 to 32 °C (50 to 90 °F), 5 to 95% relative humidity, non-condensing
<b>Storage Temperature</b>	-40 to 70 °C (-40 to 158 °F), 5 to 98% relative humidity, non-condensing
<b>Signal Output Options</b>	Pulse Analog 4–20 mA Serial RS-232 Serial RS-485 with Modbus RTU or FXB communication protocol Ethernet with TCP/IP protocol
<b>Vacuum Requirements</b>	At least 40.6 cm (16 inches) Hg
<b>Number of Size Channels</b>	Standard 2 or Optional 4 (pulse units have 2 channels only)
<b>Flow Control</b>	Through critical orifice
<b>Coincidence Loss</b>	Model 6002/6003: 5% at 2,000,000 particles/ft <sup>3</sup> (70,600,000 particles/m <sup>3</sup> ) Model 6015: (except Pulse) 5% at 400, 000 particle/ft <sup>3</sup> (14,000,000 particles/m <sup>3</sup> )
<b>False Count Rate</b>	One or less in five minutes
<b>Accessories Included</b>	DIN Rail Mounting Kit, Isokinetic Probe, Male Phoenix Terminal Strip with Cover, Operator Manual
<b>How To Order</b>	20886



### Optional Accessories\*\*

Optional 4-Channel Setting  
Wall Plate Mounting Kit  
Utility Terminal Box Mounting Kit  
Purge Filters, 1.0 CFM 1/4 Tube and 0.1 CFM 1/8 Tube  
Isokinetic Probes, 0.1 CFM and 1.0 CFM  
Cable, Service Port Connector with RS-232 Converter  
Relative Humidity/Temperature Probe  
Brackets, for RH/Temp Probe and LED Indicator Stack/Isokinetic Probe  
Remote Indicator Light Assembly  
Cable Assembly, 3 m for Remote Indicator Light Assembly  
Cable Assembly, RJ45 Adapter  
Power Supply Unit, 24 VDC @ 5.0A, Universal Input for FMS

\* If a serial I/O model is ordered, a second part number 2088600-232, 2088600-485, or 2088600-PLS must be ordered that will identify the serial I/O configuration as RS-485, RS-232, or Pulse, respectively.

\*\* For a comprehensive parts and accessories list, please refer to the user manual.



### Global Headquarters

6, route de Compois, CP 212  
1222 Vésenaz, Geneva, Switzerland  
Tel +41 (0)22 594 64 00  
Fax +41 (0)22 594 64 99

### Americas Headquarters

481 California Avenue  
Grants Pass, Oregon 97526, USA  
Tel 1 800 866 7889 / +1 541 472 6500  
Fax +1 541 472 6170

