MET ONE 6000 Series
Remote Airborne Particle Counters

High performing, reliable 0.3 µm sensitivity remote

BECKMAN COULTER

Life Sciences

The MET ON
counters
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High performance

0.3 µm sensitivity counter designed for ISO 21501 compliance for data accuracy and reliability

Easy to integrate with any FMS system

Multiple communication options such as Pulse, Serial Modbus, Ethernet, Wireless and Analog

Long Life Laser™ diode

Reduces the need for replacement parts and the overall cost of ownership

Port Sizes	Model 6003	0.32 cm (⅛-inch) ID inlet	0.64 cm (¼-inch) ID outlet
	Model 6005	0.32 cm (⅛-inch) ID inlet	0.64 cm (¼-inch) ID outlet
	Model 6013	0.64 cm (¼-inch) ID inlet	0.64 cm (¼-inch) ID outlet
	Model 6015	0.64 cm (¼-inch) ID inlet	0.64 cm (¼-inch) ID outlet
Flow Rate	Model 6003	0.1 CFM (2.83 LPM)	
	Model 6005	0.1 CFM (2.83 LPM)	
	Model 6013	1.0 CFM (28.3 LPM)	
	Model 6015	1.0 CFM (28.3 LPM)	
Sensitivity	Model 6003	0.3 µm at 0.1 CFM (2.83 LPM)	
	Model 6005	0.5 µm at 0.1 CFM (2.83 LPM)	
	Model 6013	0.3 µm at 1.0 CFM (28.3 LPM)	
	Model 6015	0.5 µm at 1.0 CFM (28.3 LPM)	
Range	Model 6003	0.3 µm to 10.0 µm at 0.1 CFM (2.83 LPM)	
	Model 6005	0.5 µm to 10.0 µm at 0.1 CFM (2.83 LPM)	
	Model 6013	0.3 µm to 10.0 µm at 1.0 CFM (28.3 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 6003	0.3 and 0.5 µm	0.3, 0.5, 1.0 and 5.0 µm
	Model 6005	0.5 and 5.0 µm	0.5, 1.0, 5.0 and 10.0 µm
	Model 6013	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 6003	50% (± 20%) for 0.3 µm, (100% ± 10% at 1.5 times the minimum sensitivity). Fully complies with ISO21501-4.	
	Model 6005	50% (± 20%) for 0.5 µm, (100% ± 10% at 1.5 times the minimum sensitivity). Fully complies with ISO21501-4.	
	Model 6013	50% (± 20%) for 0.3 µm, (100% ± 10% at 1.5 times the minimum sensitivity). Fully complies with ISO21501-4.	
	Model 6015	50% (± 20%) for 0.5 µm, (100% ± 10% at 1.5 times the minimum sensitivity). Fully complies with ISO21501-4.	

* Pulse models have two channels only

Faster trouble shooting and reduced downtime

Instrument can be diagnosed for flow, sensor, communication failures, and count alarm or count alert through built-in or external status light

Easy installation options

Reduces initial installation cost and subsequent reinstallation cost during routine maintenance/calibration work
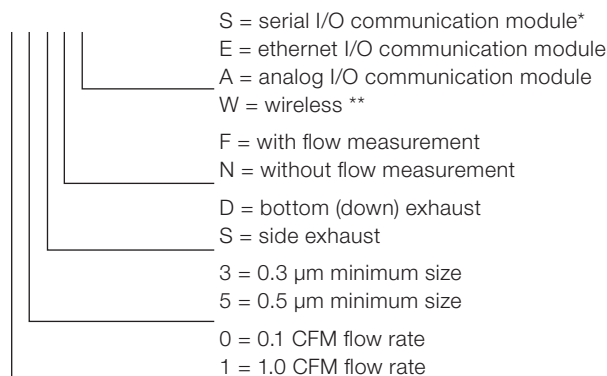
Built-in flow sensor

Improves operational reliability during continuous monitoring

The MET ONE 6000 series remote airborne particle counter offers accurate and reliable continuous particle monitoring. With a sensitivity range of 0.3 or 0.5 to 10 µm, data accuracy and repeatability through ISO 21501 compliant calibration, the MET ONE 6000 series is designed to meet the specific needs of cleanroom operations within the pharmaceutical, 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. Built with Long Life Laser™ technology, the MET ONE 6000 offers industry leading diagnostic features that reduce troubleshooting time and related downtime costs.

Specifications

Light Source	Long Life Laser™ diode
Weight	0.82 kg (1.8 lbs)
Dimensions	13.56 w x 8.93 d x 12.06 h cm (5.34 x 3.52 x 4.75 inches)
Enclosure	304 stainless steel
Status Indicator	Multi-colored LED for normal status, count alarm, count alert, sensor failure, flow failure or communication failure
Power Requirements	9 to 28 VDC
Power Consumption	Serial and pulse units: 3.3 W; Ethernet unit: 4.3 W; Analog: 3.5 W; Wireless: 7.1 W. Maximum amperage requirement: 1 A
Operating Temperature	10 to 32 °C (50 to 90 °F), 5 to 95% relative humidity, non-condensing
Storage Temperature	-40 to 70 °C (-40 to 158 °F), 5 to 98% relative humidity, non-condensing
Signal Output Options	Pulse Analog 4–20 mA Serial RS-232 Serial RS-485 with Modbus RTU or FXB communication protocol Ethernet or Wireless with TCP/IP protocol
Vacuum Requirements	At least 40.6 cm (16 inches) Hg
Number of Size Channels	Standard 2 or Optional 4 (pulse units have 2 channels only)
Flow Control	Through critical orifice
Coincidence Loss	Model 6003/6005: 5% at 2,000,000 particles/ft^3 (70,600,000 particles/m^3) Model 6013/6015: 5% at 400, 000 particle/ft^3 (except Pulse) (14,000,000 particles/m^3)
False Count Rate	One or less in five minutes
Accessories Included	DIN Rail Mounting Kit, Isokinetic Probe, Male Phoenix Terminal Strip with Cover, Operator Manual
How To Order	20886 _ _-_ _-_

S = serial I/O communication module*
E = ethernet I/O communication module
A = analog I/O communication module
W = wireless **

F = with flow measurement
N = without flow measurement

D = bottom (down) exhaust
S = side exhaust

3 = 0.3 µm minimum size
5 = 0.5 µm minimum size

0 = 0.1 CFM flow rate
1 = 1.0 CFM flow rate

Optional Accessories*

Optional 4-Channel Setting (Pulse models have two channels only)
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, RJ-45 Adapter
Power Supply Unit, 24 VDC @ 5.0 A, 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.
** Wireless models are available in limited number of countries. Contact your Hach sales representative for details.
*** For a comprehensive parts and accessories list, please refer to the user manual.

Contact us to place an order, request information or receive technical support.

Service packages and extended warranty up to 5 years.

On site technical support.

Seminars and workshops: Practical and hands on training.

Regular customer information by post and email.

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