



# MET ONE 3400 Series Portable Airborne Particle Counter

Now with Ethernet, Wireless and Manifold Support



**BECKMAN  
COULTER**

*Life Sciences*

**MET ONE 3400 SERIES**  
PORTABLE AIRBORNE PARTICLE COUNTER

# MET ONE 3400 S

airborne particle counter,

## ***Intuitive user interface***

*Easy area, location, operating parameter configuration and replication*

## ***Sampling Plan Wizard***

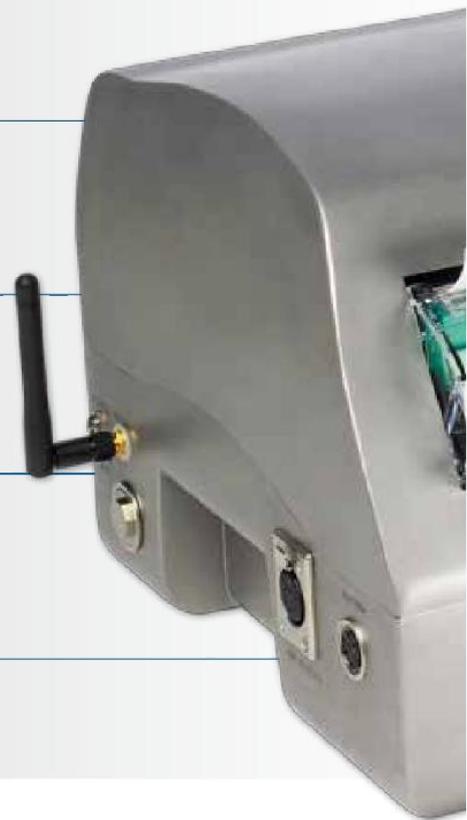
*ISO 14644 and Annex 1 compliance in a few clicks*

## ***21 CFR Part 11 compliance***

*Paperless secure data transfer*

## ***Unit-to-unit accuracy and reproducibility***

*Assured through ISO 21501 compliance*



# Series is the fastest and easiest-to-use saving hours of valuable operator time



## ***OPC Server enables open communication architecture***

*Industry standard connectivity to data management software*

## ***Flexible communications***

*Wireless, Ethernet, Serial and USB*

## ***Long continuous operation***

*Dual hot-swappable batteries*

## ***Optional 100 LPM flow rate***

*One m<sup>3</sup> sampling in just 10 minutes*

The new enhanced MET ONE 3400 Series is the easiest-to-use and easiest-to-integrate portable particle counter for any facility or environmental monitoring program. It's easy to setup the MET ONE 3400 for routine sampling through the use of software wizards that guide the analyst to configure the instrument for ISO 14644, EU GMP Annex 1 and other common regulatory sampling requirements. Once setup, the instrument is easy-to-use through one touch sampling and location identification, saving technicians valuable time and reducing potential errors between sampling points.

Once the programming has been established on your first counter, it's easy to replicate. Simply copy the complete configuration to a USB stick and transfer the new settings to the next unit. This allows you to quickly and easily create a fleet of particle counters, all alike. And, because all of our counters are ISO 21501 compliant, you can be assured that all of your instruments will count with the same accuracy and reproducibility.

Furthermore, with flexible communications options such as Ethernet and 802.11 wireless and an open communications architecture, the MET ONE 3400 may be seamlessly integrated into any facility monitoring or central data management system eliminating the need for manual record keeping.

The MET ONE 3400 Series is available in 1 CFM, 50 LPM and now 100 LPM flow rates. The new 100 LPM MET ONE 3445 takes just ten minutes to collect 1 m<sup>3</sup> samples required to certify Grade A areas per the EU GMP Annex 1 guidance.

The new MET ONE 3400 is faster, easier-to-use and more reliable than ever before.

## Specifications

<b>Standard Size Channels</b>	3413 and 3423 3415 and 3425	0.3, 0.5, 1.0, 3.0, 5.0, 10.0* $\mu\text{m}$ 0.5, 1.0, 2.0, 3.0, 5.0, 10.0 $\mu\text{m}$ or 0.5, 1.0, 2.0, 3.0, 5.0, 25.0* $\mu\text{m}$
<b>Flow Rate</b>	3445 3413 and 3415 3423 and 3425 3445	0.5, 1.0, 2.0, 3.0, 5.0, 10.0 $\mu\text{m}$ 28.3 LPM (1.0 CFM) $\pm 5\%$ (default factory setting) 50 LPM (1.77 CFM) $\pm 5\%$ (default factory setting) 100 LPM (3.53 CFM) $\pm 5\%$ (default factory setting)
<b>Zero Count</b>	Conforms to JIS B9921. 1 count or less in 5 minutes, 95% confidence level	
<b>Coincidence Loss</b>	28.3 LPM (1.0 CFM) 50 LPM (1.77 CFM) 100 LPM (3.53 CFM)	5% at 14,126,000 particles/ $\text{m}^3$ (400,000 particles/ $\text{ft}^3$ ) 5% at 4,000,000 particles/ $\text{m}^3$ (113,266 particles/ $\text{ft}^3$ ) 10% at 10,000,000 particles/ $\text{m}^3$ (283,166 particles/ $\text{ft}^3$ )
<b>Counting Efficiency</b>	3413 and 3423  3415, 3425 and 3445	50% $\pm 20\%$ for 0.3 $\mu\text{m}$ , (100% $\pm 10\%$ at 1.5 times the minimum sensitivity), fully complies with ISO 21501-4 50% $\pm 20$ for 0.5 $\mu\text{m}$ , (100% $\pm 10\%$ at 1.5 times the minimum sensitivity), fully complies with ISO 21501-4
<b>Light Source</b>	Long Life Laser™ diode with 10-year Mean Time To Failure (MTTF)	
<b>Pump Type</b>	Air vacuum, rated for continuous use	
<b>Count Display</b>	Color 1/4 VGA TFT Touch Screen	
<b>Interface</b>	Windows CE®-based	
<b>Sample/Hold/Delay Times</b>	1 second to 23 hours 59 minutes 59 seconds	
<b>Count Alarms</b>	1 to 9,999,999 counts	
<b>Count Cycles</b>	Up to 100 while in automatic mode	
<b>Manifold</b>	Supports A3432 32-port Manifold System	
<b>Location Labels</b>	0 to 999, appears on printout	
<b>Data Storage</b>	5,000 samples, scrollable on Historical Data review screen***	
<b>Communication Interfaces</b>	RS-232, RS-485, 802.11 b/g Wireless, 802.3 Ethernet, USB Client (Version 1.1), USB Host (Version 1.1)	
<b>Communication Protocol</b>	Modbus TCP, Modbus RTU, Serial FX	
<b>Battery Type</b>	Lithium ion smart battery; rechargeable, ejectable and hot-swappable	
<b>Operating Time (Battery)</b>	28.3 LPM (1.0 CFM) and 50 LPM (1.77 CFM) 100 LPM (3.53 CFM)	up to 6 hours** up to 3 hours**
<b>Battery Recharge Time</b>	6.75 hours minimum, 10 hours maximum	
<b>Power</b>	24 VDC 3.2 A with 100-240 VAC 50/60 Hz adapter (included in ship kit)	
<b>Size Dimensions</b>	31.8 W x 25.4 D x 20.3 H cm (12.5 x 10 x 8 inches)	
<b>Weight (without battery)</b>	3413 and 3415 3423 and 3425 3445	7.55 kg (16.6 lbs) 8.33 kg (18.3 lbs) 8.65 kg (19.0 lbs)
<b>Enclosure Material</b>	Stainless Steel	
<b>Environment</b>	Operating  Storage	0 to 40° C (32 to 104° F), 10 to 90% relative humidity, non-condensing -40 to 50° C (-40 to 122° F), 0 to 98% relative humidity, non-condensing
<b>Accessories Included</b>	Zero Count Filter Flash Memory Drive Operator Manual	Isokinetic Probe (aluminum) PortAll 2.4 Trial Software 10 Feet Non-Kink Hytrel® Tubing
<b>Options</b>	Wireless Option Air Velocity Sensor Smart Battery Charger IQ/OQ Validation Protocol High Pressure Diffuser	Relative Humidity/Temperature Hard Carry Case Isokinetic Probe (stainless steel) Filter Scanning Probe USB to RS-485 or USB to RS-232 Converter MET ONE A3432 32-Port Manifold

\* Channel selections can be selected at time of order in a range from 0,3  $\mu\text{m}$  to 25  $\mu\text{m}$ . However 0,3  $\mu\text{m}$  and 25  $\mu\text{m}$  cannot be configured together.

\*\* Battery life is based on typical usage.

\*\*\* FTP file transfer mode limits max records to 1,000.

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