MET ONE 3400 Series Portable Airborne Particle Counter

Now with Ethernet, Wireless and Manifold Support

HACH®

Be Right™

MET ONE 3400 SERIES
PORTABLE AIRBORNE PARTICLE COUNTER

MET ONE 3400 Series is the fastest and easiest-to-use airborne particle counter, saving hours of valuable operator time

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

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 m³ 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^3 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

Standard Size Channels	3413 and 3423	0.3, 0.5, 1.0, 3.0, 5.0, 10.0* µm
	3415 and 3425	0.5, 1.0, 2.0, 3.0, 5.0, 10.0 µm or 0.5, 1.0, 2.0, 3.0, 5.0, 25.0* µm
	3445	0.5, 1.0, 2.0, 3.0, 5.0, 10.0 µm
Flow Rate	3413 and 3415	28.3 LPM (1.0 CFM) ±5% (default factory setting)
	3423 and 3425	50 LPM (1.77 CFM) ±5% (default factory setting)
	3445	100 LPM (3.53 CFM) ±5% (default factory setting)
Zero Count	Conforms to JIS B9921. 1 count or less in 5 minutes, 95% confidence level	
Coincidence Loss	28.3 LPM (1.0 CFM)	5% at 14,126,000 particles/m^3 (400,000 particles/ft^3)
	50 LPM (1.77 CFM)	5% at 4,000,000 particles/m^3 (113,266 particles/ft^3)
	100 LPM (3.53 CFM)	10% at 10,000,000 particles/m^3 (283,166 particles/ft^3)
Counting Efficiency	3413 and 3423	50% ±20% for 0.3 µm, (100% ±10% at 1.5 times the minimum sensitivity), fully complies with ISO 21501-4
	3415, 3425 and 3445	50% ±20 for 0.5 µm, (100% ±10% at 1.5 times the minimum sensitivity), fully complies with ISO 21501-4
Light Source	Long Life Laser™ diode with 10-year Mean Time To Failure (MTTF)	
Pump Type	Air vacuum, rated for continuous use	
Count Display	Color 1/4 VGA TFT Touch Screen	
Interface	Windows CE®-based	
Sample/Hold/Delay Times	1 second to 23 hours 59 minutes 59 seconds	
Count Alarms	1 to 9,999,999 counts	
Count Cycles	Up to 100 while in automatic mode	
Manifold	Supports A3432 32-port Manifold System	
Location Labels	0 to 999, appears on printout	
Data Storage	5,000 samples, scrollable on Historical Data review screen	
Communication Interfaces	RS-232, RS-485, 802.11 b/g Wireless, 802.3 Ethernet, USB Client (Version 1.1), USB Host (Version 1.1)	
Communication Protocol	Modbus TCP, Modbus RTU, Serial FX	
Battery Type	Lithium ion smart battery; rechargeable, ejectable and hot-swappable	
Operating Time (Battery)	28.3 LPM (1.0 CFM) and 50 LPM (1.77 CFM)	up to 6 hours**
	100 LPM (3.53 CFM)	up to 3 hours**
Battery Recharge Time	6.75 hours minimum, 10 hours maximum	
Power	24 VDC 3.2 A with 100-240 VAC 50/60 Hz adapter (included in ship kit)	
Size Dimensions	31.8 W x 25.4 D x 20.3 H cm (12.5 x 10 x 8 inches)	
Weight (without battery)	3413 and 3415	7.55 kg (16.6 lbs)
	3423 and 3425	8.33 kg (18.3 lbs)
	3445	8.65 kg (19.0 lbs)
Enclosure Material	Stainless Steel	
Environment	Operating	0 to 40° C (32 to 104° F), 10 to 90% relative humidity, non-condensing
	Storage	-40 to 50° C (-40 to 122° F), 0 to 98% relative humidity, non-condensing
Accessories Included	Zero Count Filter	Isokinetic Probe (aluminum)
	Flash Memory Drive	PortAll 2.4 Trial Software
	Operator Manual	10 Feet Non-Kink Hytrel® Tubing
Options	Wireless Option	Relative Humidity/Temperature
	Air Velocity Sensor	Hard Carry Case
	Smart Battery Charger	Isokinetic Probe (stainless steel)
	IQ/OQ Validation Protocol	Filter Scanning Probe
	High Pressure Diffuser	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 µm to 25 µm. However 0.3 µm and 25 µm cannot be configured together.
** Battery life is based on typical usage.

CLASS 1 LASER PRODUCT
Contact manufacturer for complete compliance details

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At Hach, it's about learning from our customers and providing the right answers.

Keep it pure.

Make it simple.

Be right.

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