

MET ONE 3400 Series Portable Airborne Particle Counter

Now with Ethernet, Wireless and Manifold Support



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 m³ 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* um $0.5,\,1.0,\,2.0,\,3.0,\,5.0,\,10.0\,\mu m$

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)

Conforms to JIS B9921. 1 count or less in 5 minutes, 95% confidence level

Zero Count Coincidence Loss 28.3 LPM (1.0 CFM) 5% at 14,126,000 particles/m3 (400,000 particles/ft3)

> 50 LPM (1.77 CFM) 5% at 4,000,000 particles/m3 (113,266 particles/ft3) 100 LPM (3.53 CFM) 10% at 10,000,000 particles/m3 (283,166 particles/ft3)

Counting Efficiency 3413 and 3423 50% \pm 20% for 0.3 μ m, (100% \pm 10% at 1.5 times the

minimum sensitivity), fully complies with ISO 21501-4 3415, 3425 and 3445 $50\% \pm 20$ for $0.5 \mu m$, ($100\% \pm 10\%$ 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

Windows CE®-based Interface

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

3445

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

Lithium ion smart battery; rechargeable, ejectable and hot-swappable Battery Type 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)

31.8 W x 25.4 D x 20.3 H cm (12.5 x 10 x 8 inches) Size Dimensions 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 0 to 40° C (32 to 104° F), Operating

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

CLASS 1 LASER PRODUCT

Contact manufacturer for complete compliance details

* 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.

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

Keep it pure.

Make it simple.

Be right.

