



MET ONE 3411 Portable Airborne Particle Counter



Be Right™

MET ONE 3411

PORTABLE AIRBORNE PARTICLE COUNTER

**Does your particle counter
contaminate your cleanroom?**

Do you trust the results?

**How much time do you spend
recording and analyzing the data?**



Introducing the MET ONE 3411 0.1 micron sensitivity portable airborne particle counter. Unlike many particle counters the MET ONE 3411 fan remains off when operating in a standard semiconductor cleanroom environment thus particle generation is virtually eliminated.

Cleanroom friendly monitoring

Reduced particle impact
to cleanroom environment

Unit-to-unit accuracy and reproducibility

Assured through ISO 21501 compliance

Flexible communications

Wireless, Ethernet, Serial and USB

Long continuous operation

Dual hot-swappable batteries

Intuitive touch-screen user interface

Easy area, location, operating
parameter configuration and replication



The MET ONE 3411 is designed to meet the rigorous requirements of ISO-21501-4 to provide the users with unparalleled accuracy. This assures the repeatability of particle measurements between multiple instruments; critical for process benchmarking and troubleshooting activities.

Specifications

| | |
|----------------------------------|---|
| <i>Number of Size Channels</i> | 6 |
| <i>Particle Sizes</i> | 0.1, 0.2, 0.3, 0.5, 1.0, 5.0 |
| <i>Flow Rate</i> | 1.0 CFM (28.3 LPM) |
| <i>Zero Count</i> | ISO 21501-4 and JIS B 9921: 1 count or less in 5 minutes, 95% UCL |
| <i>Coincidence Loss</i> | 5% at 50,000 /ft ³ per ISO 21501-4 method |
| <i>Counting Efficiency</i> | 50% at 0.1 µm; 100% for particles > 0.15 µm per ISO 21501-4 and JIS B 9921 |
| <i>Light Source</i> | Helium Neon Laser, 5 mW Max Power at 632.8 nm |
| <i>Pump Type</i> | Patented multi-lobe closed loop controlled rated for continuous use |
| <i>Display</i> | ¼ VGA Color TFT touch screen |
| <i>Printer</i> | High speed thermal |
| <i>Language</i> | English, French, German, Italian, Spanish, Korean*, Japanese*, Chinese (Simplified and Traditional)* |
| <i>Maximum Count Displayed</i> | 9,999,999 displayed |
| <i>Delay Time</i> | 15 seconds to 23 hours 59 minutes 59 seconds |
| <i>Sample/Hold Times</i> | 1 second to 23 hours 59 minutes 59 seconds |
| <i>Count Alarms</i> | 1 to 9,999,999 counts |
| <i>Data Storage</i> | 5,000 samples, scrollable on Historical Data review screen (FIFO or Overflow) |
| <i>Locations</i> | ID: 0 to 999; NAME: Alphanumeric, appears on printout |
| <i>Outputs</i> | USB Client (Version 1.1) USB Host (Version 1.1) RS-485 Ethernet with TCP/IP protocol Wireless with 802.11g protocol (optional) MET ONE 2432 Manifold Auxiliary (alarm and scan probe) |
| <i>Communication Protocol</i> | Modbus TCP, Modbus RTU, Serial FX |
| <i>Inputs</i> | Air Velocity Probe RH/Temperature Probe |
| <i>Auto CDA Purge</i> | Purge solenoid activated by connection to CDA |
| <i>Battery Type</i> | Lithium ion smart battery; rechargeable, ejectable, and hot-swappable |
| <i>Battery Quantity Included</i> | 2 |
| <i>Battery Operating Time</i> | 3 hours minimum |
| <i>Battery Recharge Time</i> | 6.75 hours minimum, 10 hours maximum |
| <i>Power</i> | 24 VDC with 100-240 VAC, 50/60 Hz adapter |
| <i>Enclosure Material</i> | Easy to clean passivated Stainless Steel |
| <i>Size</i> | 33 W x 55.9 D x 22.9 H cm (13 x 22 x 9 inches) including protrusions, handles, feet, etc. |
| <i>Weight</i> | Without battery: 15.9 kg (35 lbs), Battery: 0.66 kg (1.45 lbs) |
| <i>Environment</i> | Operating 10° to 40°C (50° to 104°F); 10 to 90% relative humidity, non-condensing Storage -40° to 50°C (-40° to 122°F); 10 to 90% relative humidity, non-condensing |
| <i>Optional Accessories</i> | Smart Battery Charger/Calibrator: PN 280-300-5000 Additional Battery: PN 280-120-2024 |



CLASS 1 LASER PRODUCT

Contact manufacturer for complete compliance details

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In the interest of improving and updating its equipment, Hach Company reserves the right to alter specifications to equipment at any time.

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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