



# MET ONE 3411 Portable Airborne Particle Counter

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*Be Right™*

# Does your particle counter contaminate your cleanroom? Do you trust the results? How much time do you spend recording and analyzing the data?

## **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*



Introducing the new 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.

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

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

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