

# MET ONE 3411 Portable Airborne Particle Counter





# **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

Number of Size Channels 6

Particle Sizes 0.1, 0.2, 0.3, 0.5, 1.0, 5.0 Flow Rate 1.0 CFM (28.3 LPM)

Zero Count ISO 21501-4 and JIS B 9921: 1 count or less in 5 minutes, 95% UCL

Coincidence Loss 5% at 50,000 /ft<sup>3</sup> per ISO 21501-4 method

Counting Efficiency 50% at 0.1 µm;

100% for particles > 0.15 μm per ISO 21501-4 and JIS B 9921

Light Source Helium Neon Laser, 5 mW Max Power at 632.8 nm

Pump Type Patented multi-lobe closed loop controlled rated for continuous use

Display 1/4 VGA Color TFT touch screen

Printer High speed thermal

Language English, French, German, Italian, Spanish, Korean\*, Japanese\*,

Chinese (Simplified and Traditional)\*

Maximum Count Displayed 9,999,999 displayed

Delay Time 15 seconds to 23 hours 59 minutes 59 seconds
Sample/Hold Times 1 second to 23 hours 59 minutes 59 seconds

Count Alarms 1 to 9,999,999 counts

Data Storage 5,000 samples, scrollable on Historical Data review screen

(FIFO or Overflow)

Locations ID: 0 to 999; NAME: Alphanumeric, appears on printout

Outputs 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)

Communication Protocol Modbus TCP, Modbus RTU, Serial FX

Inputs Air Velocity Probe
RH/Temperature Probe

Auto CDA Purge Purge solenoid activated by connection to CDA

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

Battery Quantity Included 2

PART-419SB08.14-A

Battery Operating Time 3 hours minimum

Battery Recharge Time 6.75 hours minimum, 10 hours maximum
Power 24 VDC with 100-240 VAC, 50/60 Hz adapter
Enclosure Material Easy to clean passivated Stainless Steel

Size 33 W x 55.9 D x 22.9 H cm (13 x 22 x 9 inches)

including protrusions, handles, feet, etc.

Weight Without battery: 15.9 kg (35 lbs), Battery: 0.66 kg (1.45 lbs)

Environment Operating 10° to 40°C (50° to 104°F);

10 to 90% relative humidity, non-condensing

Storage  $-40^{\circ}$  to  $50^{\circ}$ C (- $40^{\circ}$  to  $122^{\circ}$ F);

10 to 90% relative humidity, non-condensing

Optional Accessories Smart Battery Charger/Calibrator: PN 280-300-5000

Additional Battery: PN 280-120-2024

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