

MET ONE 3400 SERIES PORTABLE AIRBORNE PARTICLE COUNTER



***Faster, easier sampling
and continuation control***

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EXCELLENCE IN PROCESS ANALYTICS

0.3

0.5

MET ONE 3400 SERIES

Met One 3400 Series Airborne Particle Counters offer faster sampling and simple portability for ease of use and reduced technician time. Lightweight and compact, the instrument features strategically-placed handles for easy lifting: two on the sides and one on the front. Position the 3400 either vertically or horizontally. Most importantly, dual hot-swappable batteries minimize downtime for seamless operation.

For data entry and management, the 3400's color, high-contrast touch screen facilitates operation and viewing from a greater distance in different lighting and at different angles. An intuitive, icon-driven operating system with touch commands further simplifies the count collecting process. Transfer data quickly from the 3400 via the conveniently-located USB port and flash drive or print results immediately from the built-in printer.

Built with Long Life Laser technology, the 3400 performs reliably, promoting low cost long-term ownership. For environments concerned with viable organisms, stainless steel construction and unobstructed surfaces permit quick and frequent wipe downs. The 3400 interfaces with PortAll Version 2 software to support 21 CFR Part 11 compliance, remote scheduling and data download. The software also conducts rapid pass/fail reporting and provides the necessary regulatory documentation for ISO, FDA and EU compliance.



16 minutes and counting

Here's how to save sampling time with the 3423/3425's faster flow rate:

Sample: 1 m3	
28.3 L/min	36 minutes
50 L/min	20 minutes
Time Savings	16 minutes

Consider the number of times you sample in a day and multiply by 16 for your daily time savings! Save time and resources every time you sample.

Features

- 28.3 or 50 L/min (1.0 or 1.77 cfm) flow rates
- 0.3 or 0.5 micron minimum sensitivity
- 6 particle size channels
- Long Life Laser™ technology for superior performance
- Hot-swappable batteries with 7-hour operation
- Easy-to-use touchscreen
- Stainless steel enclosure
- USB connectivity for data download
- Supports 21 CFR Part 11 compliance with PortAll Version 2

Applications

- Monitor and verify cleanrooms
- Test filters
- Track down particle sources
- Validate compliance with regulations
- Manage contamination control for manufacturing processes



Performance Specifications

Standard Size Channels (µm)	3413 and 3423:	0.3, 0.5, 1.0, 3.0, 5.0, 10.0*	
	3415 and 3425:	0.5, 1.0, 2.0, 3.0, 5.0, 10.0 or 0.5, 1.0, 2.0, 3.0, 5.0, 25.0*	
Flow Rate	3413 and 3415:	28.3 L/min (1.0 cfm)	
	3423 and 3425:	50 L/min (1.77 cfm)	
Zero Count	Conforms to JIS. 1 count or less in 5 minutes, 95% confidence level		
Coincidence Loss	28.3 L/min (1.0 cfm):	5% at 14,126,000 particles/m ³ (400,000 particles/ft ³)	
	50 L/min (1.77 cfm):	5% at 4,000,000 particles/m ³ (113,266 particles/ft ³)	
Counting Efficiency	50%		
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		
Maximum Count	9,999,999 displayed		
Sample/Hold/Delay Times	Sample Time:	1 second to 23 hrs 59 min 59 sec	
	Hold/Delay Times:	0 second to 23 hrs 59 min 59 sec	
Count Alarms	1 to 9,999,999 counts		
Count Cycles	Up to 100 while in automatic mode		
Location Labels	0 to 999, appears on printout		
Data Storage	5,000 samples, scrollable on front panel		
Outputs	USB Client (Version 1.1), USB Host (Version 1.1)		
Battery Type	Lithium ion smart battery; rechargeable, ejectable and hot-swappable		
Quantity Included	1		
Operating Time (Battery)	28.3 L/min (1.0 cfm):	6 hours**	
	50 L/min (1.77 cfm):	7 hours**	
Battery Recharge Time	6.75 hours minimum, 10 hours maximum		
Power	100-240 VAC, 50/60 Hz		
Size Dimensions	31.8 W x 25.4 D x 20.3 H cm (12.5" x 10" x 8")		
Weight (without battery)	3413 and 3415:	6.58 kg (14.5 lbs)	
	3423 and 3425:	7.35 kg (16.2 lbs)	
Battery Weight	0.66 kg (1.45 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	
Warranty	2 years (instrument), 3 years (Long Life Laser diode)		
Accessories Included	Isokinetic Probe (aluminum)	Zero Count Filter	PortAll Version 2 Trial Software
	Flash Memory Drive	AC Power Cord	Nozzle Cleaning Brush
	2 Rolls Printer Paper	Operator Manual	
	0.825 cm (0.325") I.D. Hytrel® Tubing (3413 and 3415)		
	1.27 cm (0.5") I.D. Hytrel Tubing (3423 and 3425)		
When ordering, specify	Basic Sensitivity:	0.3 to 10 µm (3413 or 3423) or 0.5 to 10.0 µm or 0.5 to 25.0 µm (3415 or 3425)	
	Optional Upgrade:	Choose 6 sizes from 0.3, to 25.0 µm*	
	Flow Rate:	28.3 L/min (1.0 cfm) (3413 or 3415) or 50 L/min (1.77 cfm) (3423 or 3425)	
Optional Accessories/Spares	Relative Humidity/Temperature	Sensor Flash Memory Drive	PortAll Version 2 Software
	Air Velocity Sensor	Lithium Ion Smart Battery	Case with Wheels and Foam Insert
	Isokinetic Probe (stainless steel)	Smart Battery Charger	IQ/OQ Validation Protocol
	High Pressure Diffuser	Filter Scanning Probe, non-electronic	Recommended Spares Kit
	Zero Count Filter	USB to RS-485 or USB to RS-232 Converter	
	0.825 cm (0.325") I.D. Hytrel Tubing (3413 and 3415)		
	1.27 cm (0.5") I.D. Hytrel Tubing (3423 and 3425)		

* 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 estimated with the following conditions: The 1.77 cfm unit sampling for 20 minutes (1 m³) sample, print record, a 5 minute hold time (simulating move to new location), then repeating this cycle. The backlight sleep time is set at 2 minutes. For the 1.0 cfm unit, the sample time is set at one minute, print record, then repeat this cycle. The backlight would remain on at all times.

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