



7501 Remote Airborne Particle Counter 0.1 CFM (2.83 LPM)

The Particles Plus 7501 Remote Particle Counter measures 0.5 μ m to 25 μ m with a flow rate of 0.1 CFM (2.83 LPM) and is the most versatile remote particle counter available. The 7501 can be used as a stand-alone battery operated instrument or it can be easily integrated into a building automation and cleanroom management system via Ethernet, USB or (optional) Wireless 802.11 b/g, RS485 or RS232.

The 7501 reports and displays 6 user-selectable particle size channels, as well as temperature and relative humidity, flow and sensor status, date of last calibration, serial number, laser on-time and date of manufacture for easy maintenance and warranty management.

View data and generate ISO 14644-I, EU GMP Annex I or FS 209E reports on screen or via printer, USB key, real time through its versatile output options or export to Particles Plus data-download software. Particles Plus counters can be controlled and monitored remotely via web browser.

The 7501 particle counter stores up to 45,000 time stamped particle count and environmental data records which provides data redundancy on every instrument. The 7501 also has a mass concentration mode that approximates density in μ g/m³.

All Particles Plus counters meet ISO 21501-4 and JIS B9921. The 7501 ensures compliance with an on-board pulse height analyzer.

Features and Benefits

- Measures 0.5 μm to 25 μm
- 0.1 CFM (2.83 LPM) flow rate
- · Long life laser diode technology
- Measures up to 6 channels of simultaneous data
- Approximates mass concentration in μg/m³
- Large easy-to-use icon driven color touch screen display
- Temperature and relative humidity probe included
- Stores up to 45,000 sample records, 1,000 sample locations and 50 recipes
- Easy configuration and transferable from instrument to instrument
- Connect using Ethernet, USB or (optional) Wireless 802.11 b/g, RS485 or RS232
- Static or dynamic IP address (DHCP)
- Displays and externally prints reports for ISO 14644-1, EU GMP Annex 1 and FS 209E
- Internal audible alarm
- User-definable reports
- User-selectable channel sizes
- Complies with ISO 21501-4 and JIS B9921 standards
- · Easy to clean and wipe down with minimal particle traps
- Seamless integration into a facility monitoring system
- · Light weight stainless steel enclosure
- 2 year warranty. Extended warranties available.



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Specifications

Particle Counter 7000 SERIES	Model	7501
	Size Range	0.5 to 25 μm
	Size Channels	Factory calibrated at 0.5, 0.7, 1.0, 3.0, 5.0, 10.0 µm variable binning
PARTICLES	Flow rate	0.1 CFM (2.83 LPM)
i Ü	Concentration Limit	10,000,000 Particles/ft ³ @ 10% coincidence loss
	Battery Run Time	10 hours
Light Source	Long life laser diode	
Counting Efficiency	50% @ 0.5 μm; 100% for particles >0.75 μm per JIS	
Zero Count	<1 count / 5 minutes (<2 particles /ft³) (per ISO 21501-4 & JIS)	
Count Modes	Automatic, manual, real-time meter, cumulative/differential, mass concentration, count or concentration	
Count Alarms	I to 9,999,999 counts	
Calibration	NIST traceable	
Display	4.3" (10.9 cm) WQVGA (480	0x272) color touch screen
Printer (Optional)	Optional external thermal printer available. Prints in all available languages.	
Vacuum Source	Internal pump with automatic flow control	
Filtered Exhaust	Internal HEPA filter	
Number of Channels	6	
Custom Size Channels	Calibration for custom size channels available	
Audible Alarm	Adjustable built-in alarm	
Battery	Removable Li-ion	
Battery Recharge Time	4 hours within instrument (<2 hours with external battery charger)	
Reports	ISO 14644-1, EU GMP Annex 1, FS 209E	
Recipes	50 user-configurable recipes	
Communication Modes	Ethernet and USB	
Optional Communication Modes	Wireless 802.11 b/g, RS485 or RS232	
Environmental Sensor	Includes temperature and relative humidity probe 32° to 122°F (0° to 50°C) ±1°F (0.5°C), 15-90% ±2% relative humidity	
Alarm	Alarms on counts for all particle sizes, low battery, sensor failure, environmental sensors and flow	
Standards	ISO 21501-4 and JIS B9921	
Calibration	Recommended minimum once per year	
External Surface	Stainless steel	
Dimensions $(L \times W \times H)$	5.2" x 4.15" x 8.25" (13.3 cm x 10.5 cm x 21 cm) includes barb fittings	
Weight	4 lb (1.8 kg)	
Accessories	Quick start guide, operating manual on USB flash drive, isokinetic probe, temperature relative humidity sensor, purge filter, battery, data download software, USB cable, power supply & cable	
Optional Accessories	Printed manual, spare battery, external battery charger, external printer and isokinetic probes	
Buffer Memory	45,000 sample records (rotating buffer) including particle count data, environmental data, locations and times. Scrollable on screen or printout	
Sample Locations	Up to 1,000 locations 20 characters long	
Sample Time	I second to 99 hours	
Power	110 to 240 VAC 50/60 Hz universal in-line power supply	
Operating Conditions	41° to 104°F (5° to 40°C) / 20% to 95% non-condensing	
Storage Conditions	32° to 122°F (0° to 50°C) / Up to 98% non-condensing	
Warranty	2 Years. Extended warranties available.	

Patent Pending

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