



Remote Airborne Particle Counters 0.1 CFM (2.83 LPM)

he Particles Plus 5301P and 5501P Remote Particle Counters measure from 0.3 μ m to 25 μ m with a flow rate of 0.1 CFM (2.83 LPM) from an internal vacuum pump and are the most featureadvanced remote particle counters available. Integration is easy into a building automation and cleanroom management system via Ethernet, or (optional) Wireless 802.11 b/g, RS485 or RS232

The 5301P and 5501P remote particle counters display and report 6 user-selectable particle size channels, as well as (optional) 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.

These remote particle counters store up to 45,000 time stamped particle count and environmental data records which provides data redundancy on every instrument. Particles Plus counters can be controlled and monitored remotely via web browser.

All Particles Plus counters meet ISO 21501-4 and JIS B9921. The 5301P and 5501P ensure compliance with an on-board pulse height analyzer.

Features and Benefits

- 5301P: Measures 0.3 μm to 25 μm
- 5501P: 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
- Particle concentrations up to 10,000,000 Particles/ft³ @ 10% coincidence loss
- Approximates mass concentration in μg/m³
- Large easy-to-use icon driven color touch screen display
- · (Optional) temperature and relative humidity probe
- Internal vacuum pump
- Stores up to 45,000 sample records for on-board data redundancy
- Annotation function allows user to save 32 character notations to a sample record
- 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)
- Internal audible alarm
- · User-selectable channel sizes
- Complies with ISO 21501-4 and IIS B9921 standards
- Easy to clean and wipe down with minimal particle traps
- Versatile mounting options
- · Seamless integration into a facility monitoring system
- · Light weight stainless steel enclosure
- 2 year warranty. Extended warranties available.





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Specifications

Models	5301P	5501P	
Size Range	0.3 to 25 μm	0.5 to 25 μm	
Size Channels	Factory calibrated at 0.3, 0.5, 1.0,	Factory calibrated at 0.5, 0.7, 1.0,	
	3.0, 5.0, 10.0 µm	3.0, 5.0, 10.0 μm	
Flow rates	0.1 CFM (2.83 LPM)	0.1 CFM (2.83 LPM)	
Concentration Limit	10,000,000 Particles/ft³ @ 10%	10,000,000 Particles/ft³ @ 10%	
	coincidence loss	coincidence loss	
Counting Efficiency	50% @ 0.3 μm; 100% for	50% @ 0.5 μm; I 00% for	
	particles >0.45 μm per JIS	particles >0.75 μm per JIS	
Light Source	Long life laser diode		
Zero Count	<1 count / 5 minutes (<2 particles / ft³) (per ISO 21501-4 & JIS)		
Count Modes	Automatic, manual, real-time meter, cumulative/differential, count or concentration		
Count Alarms	I to 9,999,999 counts		
Calibration	NIST traceable		
Display	4.3" (10.9 cm) WQVGA (480x272) color touch screen		
Internal Vacuum Pump	Internal pump with automatic flow control		
Number of Channels	6		
Custom Size Channels	Calibration for custom size channels available		
Airflow	Internally monitored		
Audible Alarm	Adjustable built-in alarm		
Communication Modes	Ethernet and USB		
Optional Communication Modes	Wireless 802.11 b/g, RS485 or RS232		
Environmental Sensor	(Optional) temperature and relative humidity probe 32° to 122°F (0° to 50°C) \pm 1°F (0.5°C), 15-90% \pm 2% relative humidity		
Alarm	Alarms on counts for all particle sizes, 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 x W x H)	5.2" x 2.3" x 8.9" (13.3 cm x 5.8 cm x 22.6 cm) includes barb fittings		
Weight	2.6 lb (1.18 kg)		
Accessories	Quick start guide, operating manual on USB flash drive, isokinetic probe, power supply & cable		
Optional Accessories	Printed manual, temperature relative humidity sensor, isokinetic probes, purge filter, data cable, mounting		
	bracket and sample tubing		
Buffer Memory	45,000 sample records (rotating buffer) including particle count data and environmental data		
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.	2 Years. Extended warranties available.	



