



Remote Airborne Particle Counters 0.1 CFM (2.83 LPM)

The Particles Plus 520I, 530I and 550I Remote Particle Counters are the most feature-advanced remote particle counters available. Integration is easy into a building automation and cleanroom management system via Ethernet.

The 520I, 530I and 550I remote particle counters display and report 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.

These remote particle counters store up to 40,000 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 520I, 530I and 550I ensure compliance with an on-board pulse height analyzer.

Features and Benefits

- 520I: Measures 0.2 μm to 10.0 μm
- 530I: Measures 0.3 μm to 25 μm
- 550I: 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 $\mu\text{g}/\text{m}^3$
- Large easy-to-use icon driven color touch screen display
- (Optional) temperature and relative humidity probe
- Stores up to 40,000 sample records for on-board data redundancy
- Easy configuration and transferable from instrument to instrument
- Choose from 8 languages for display
- Connect using Ethernet and USB outputs
- Static or dynamic IP address (DHCP)
- Internal audible alarm
- User-selectable channel sizes
- Complies with ISO 21501-4 and JIS 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.



31 Tosca Drive
Stoughton, MA 02072 U.S.A.
781.341.6898 phone
www.particlesplus.com

Specifications

Models	520I	530I	550I
Size Range	0.2 to 10.0 μm	0.3 to 25 μm	0.5 to 25 μm
Size Channels	Factory calibrated at 0.2, 0.3, 0.5, 0.7, 1.0, 2.0 μm	Factory calibrated at 0.3, 0.5, 1.0, 3.0, 5.0, 10.0 μm	Factory calibrated at 0.5, 0.7, 1.0, 3.0, 5.0, 10.0 μm
Flow rates	0.1 CFM (2.83 LPM)	0.1 CFM (2.83 LPM)	0.1 CFM (2.83 LPM)
Concentration Limit	4,000,000 Particles/ ft^3 @ 5% coincidence loss	4,000,000 Particles/ ft^3 @ 5% coincidence loss	4,000,000 Particles/ ft^3 @ 5% coincidence loss
Counting Efficiency	50% @ 0.2 μm ; 100% for particles >0.3 μm per JIS	50% @ 0.3 μm ; 100% for particles >0.45 μm per JIS	50% @ 0.5 μm ; 100% for particles >0.75 μm per JIS
Light Source	Long life laser diode		
Zero Count	<1 count / 5 minutes (<2 particles / ft^3) (per ISO 21501-4 & JIS)		
Count Alarms	1 to 9,999,999 counts		
Calibration	NIST traceable		
Display	4.3" (10.9 cm) WQVGA (480x272) color touch screen		
Vacuum Requirements	External vacuum >15" (38.1 cm) of Hg		
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		
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	40,000 sample records (rotating buffer) including particle count data and environmental data		
Language Support	English, Chinese (simplified & traditional), Japanese, Korean, German, French, Spanish, Italian		
Sample Time	1 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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