

## 9510 Remote Airborne Particle Counters

### 1.0 CFM (28.3 LPM)

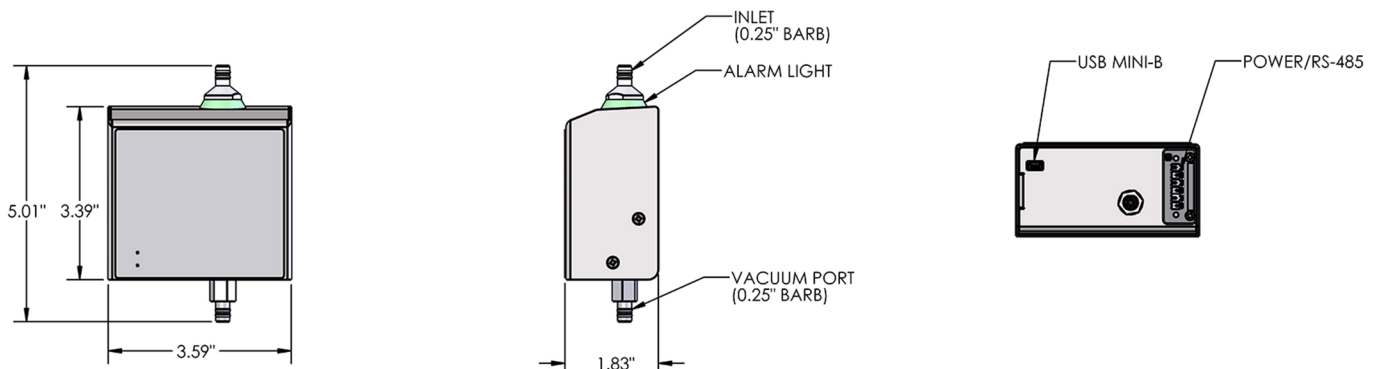


The 9510 particle counters provide a range of particle size measurement from 0.5 to 10.0  $\mu\text{m}$  at a flow rate of 0.1 CFM (2.83 LPM). These sensors allow for efficient particle counting with specifications that exceed the ISO 21501-4 and JIS B9921 calibration standards.

These sensors have 6 user-selectable particle size channels (up to 30 channels optional) and are equipped with an integral critical orifice and flow sensor to provide a stable flow rate from an external vacuum source. Integration into a building automation or facility monitoring system is easy via isolated RS-485 Modbus communication.

#### Features and Benefits

- 9510: Measures 0.5  $\mu\text{m}$  to 10.0  $\mu\text{m}$
- 1.0 CFM (28.3 LPM) flow rate
- Long life laser diode technology
- Measures up to 6 channels of simultaneous data (30 channels optional)
- Particle concentrations up to 1,500,000 Particles/ft<sup>3</sup> @ 10% coincidence loss
- Internal critical orifice
- User-selectable channel sizes
- Stores up to 60,000 sample records for on-board data redundancy
- (Optional) temperature and relative humidity probe available
- Connect using Modbus RTU/ASCII over isolated RS-485
- Complies with ISO 21501-4 and JIS B9921 standards
- Easy to clean and wipe down with minimal particle traps
- Versatile mounting options
- Alarm light
- LED Indicators
- Seamless integration into a facility monitoring system
- Lightweight stainless steel enclosure
- 2 year warranty. Extended warranties available.





## Specifications

<b>Model</b>	<b>9510</b>
Size Range	0.5 to 10.0 $\mu\text{m}$
Size Channels	Factory calibrated at 0.5, 1.0, 2.5, 5.0, and 10.0 $\mu\text{m}$
Number of Channels	6 channels (up to 30 optional)
Counting Efficiency	50% @ 0.5 $\mu\text{m}$ ; 100% for particles > 0.75 $\mu\text{m}$ per JIS
Flow Rate	1.0 CFM (28.3 LPM)
Concentration Limits	1,500,000 Particles/ft <sup>3</sup> @ 10% coincidence loss
Light Source	Long life laser diode
Zero Count	< 1 count / 5 minutes (< 1 particles / 15ft <sup>3</sup> )
Count Alarms	1 to 9,999,999
Calibration	NIST traceable
Vacuum Requirements	External vacuum > 15" (38.1cm) of Hg
Airflow	Internally monitored
Configuration/Download	USB mini-B
Alarm	Alarm LED ring
Communication Modes	MODBUS™ RTU or ASCII outputs (over isolated RS-485)
Standards	ISO 21501-4 and JIS B9921
Instrument Calibration	Recommended minimum once per year
External Surface	Stainless steel
Dimensions (L x W x H)	3.59" x 1.83" x 5.01" (9.1 cm x 4.6 cm x 12.7 cm) including probes and connectors
Weight	1.65 lb. (0.75 kg)
Accessories	Wiring Connector, operating manual on USB flash drive
Optional Accessories	Power Supply, Remote Mounting Bracket, Stainless Steel Barbed Isoprobe (1.0 CFM/28.3 LPM), Purge Filter Assembly, and Sample & Vacuum Tubing
Buffer Memory	60,000 sample records (rotating buffer) including particle count data and environmental data
Sample Time	1 second to 99 hours
Power	9 - 24 VDC (< 2.5 watts)
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 year limited warranty. Extended warranties available.

PAT. <https://particlepatents.com/> Additional Patents Pending.

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