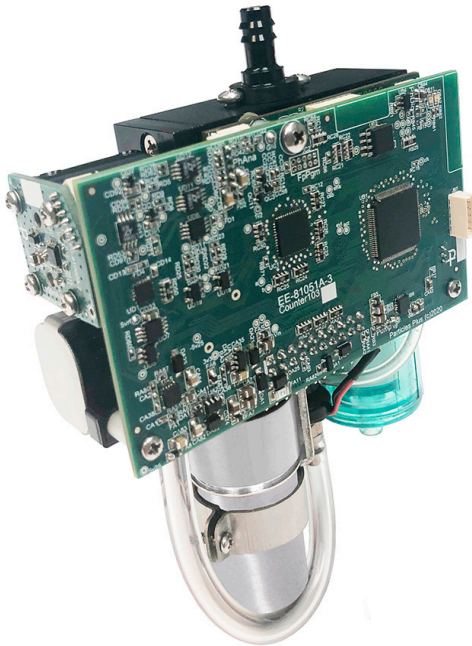


## 9301P-OEM

### 0.1 CFM (2.83 LPM)



The Particles Plus® 9301P-OEM Airborne Particle Counters feature a minimalist design to maximize functionality for researchers and OEM application, with 30 user-selectable particle size channels ranging from 0.3 up to 25.0  $\mu\text{m}$  at a 0.1 CFM (2.83 LPM) flow rate.

Calibrated to ISO 21501-4 standards for traceability, the 9301P-OEM features onboard storage for redundant data validation and secure user access. Built for scalability and long-term reliability, these models utilize durable laser diodes backed by a lifetime warranty, and deliver exceptional zero-count performance. With seamless connectivity, remote diagnostics, and a standardized architecture, the Particles Plus® 9301P-OEM offers simplified integration and a lower total cost of ownership for critical monitoring applications.

The assembly is mounted on a plate for ease of integration. The unit includes a particle sensor, particle counter board, integrated vacuum pump and manifold with pre/post filters, real-time clock/calendar with battery backup, logging and data storage for up to 65,000 sample records. It communicates via UART and operates from 7-15 VCD.

#### Features and Benefits

- 1.2 LPM flow rate
- Long life laser diode technology for reliable performance
- Measures up to 30 channels of simultaneous data
- Accurate in high concentration environments with minimal time to zero-count
- Internal vacuum pump and HEPA filtered exhaust
- Troubleshoot issues remotely from anywhere with an internet connection
- Stores up to 65,000 sample records for on-board data redundancy
- User-selectable channel sizes
- Complies with ISO 21501-4 and JIS B9921 standards
- Assembly mounted on back plate for ease of integration
- 2 Year Limited Warranty (Extended and Lifetime Warranties available)

## Specifications

<b>Model</b>	<b>9301P-OEM</b>
Size Range	0.3 to 25 $\mu\text{m}$
Size Channels	Factory calibrated at 0.3, 0.5, 1.0, 2.5, 5.0, 10.0 $\mu\text{m}$
Counting Efficiency	50% @ 0.3 $\mu\text{m}$ ; 100% for particles > 0.45 $\mu\text{m}$ per JIS
Flow Rate / Accuracy	0.1 CFM (2.83 LPM)
Concentration Limits	10,000,000 particles/ft <sup>3</sup> @ 10% coincidence (per ISO 21501-4), No appreciable drift. 20,000,000 particles/ft <sup>3</sup> @ 10% coincidence (as tested and validated <sup>1</sup> )
Aerosol Concentration Range	0.01 to 20,000 $\mu\text{g}/\text{m}^3$
Light Source	Long life laser diode
Zero Count	<1 count / 60 minutes (<1 particles / 6 ft <sup>3</sup> ). No fault count subtraction. No appreciable drift.
Resolution	0.00003 $\mu\text{g}/\text{m}^3$
Calibration	NIST Traceable
Internal Vacuum Pump	Integrated pump
Filtered Exhaust	HEPA filtered exhaust
Airflow	Internally monitored
Number of Channels	Up to 30 channels
Alarm	Adjustable built-in alarm
Communication Modes	Modbus (RTU/ASCII) via 3.3v UART
Standards	ISO 21501-4 and JIS B9921
Instrument Calibration	Recommended minimum once a year
Dimensions (L x W x H)	3.41 x 4.89 x 1.57 in (8.7 x 12.4 x 4.0 cm) includes inlet
Weight	13 oz (368 grams)
Optional Accessories	9301P-OEM Starter kit, 9000 Series Breakout Board, Square Base with flanges
Data Storage	65,000 sample records (rotating buffer) with environmental data
Sample Time	1 second to 99 hours
Power	7 - 15 Vdc (< 2 watts max)
Operating Conditions	41° to 104°F (5° to 40°C) / 20% to 95% non-condensing RH
Storage Conditions	32° to 122°F (0° - 50°C) / < 98% non-condensing RH
Warranty	2 Year Limited Warranty (Extended and Lifetime Warranties available)

