5300P Remote Particle Counter
1.2 LPM

The Particles Plus® 5300P Remote Particle Counter measures particles from 0.3 to 25.0 µm at a flow rate of 1.2 LPM. These compact and user-friendly instruments are purpose-built for ambient and indoor air quality monitoring, industrial hygiene, environmental research, and health & safety applications. The 5300P has an optimized flow rate for high-concentration environments, providing improved accuracy, reduced coincidence loss, and extended instrument lifespan in comparison to higher-flow models.

Built for research, industrial hygiene, indoor air quality, and cleanroom applications, the 5000 Series delivers reliable, high-performance monitoring across a wide range of environments. From the cleanest labs to the dirtiest worksites, confidently monitor any environment thanks to the industry's highest particle concentration limits.

One of the key advantages of the 5000 Series as a remote particle counter is its built-in touchscreen display. It provides real-time visual feedback for technicians working in critical areas, enabling immediate identification of elevated particle counts. Adjustable audible alarms offer an additional layer of awareness in critical environments.

Designed for continuous, powered operation, the 5000 Series is ideal for fixed installations where uninterrupted monitoring is essential. Manage data directly on the device or through the Particles Plus® free software. Export raw data in .CSV or generate custom reports (ISO 14644-1, EU GMP Annex 1, or FS 209E). Remote diagnostics are available through the software from anywhere with an internet connection. The 5000 Series can function as a standalone unit or be seamlessly integrated into building automation and cleanroom management systems.
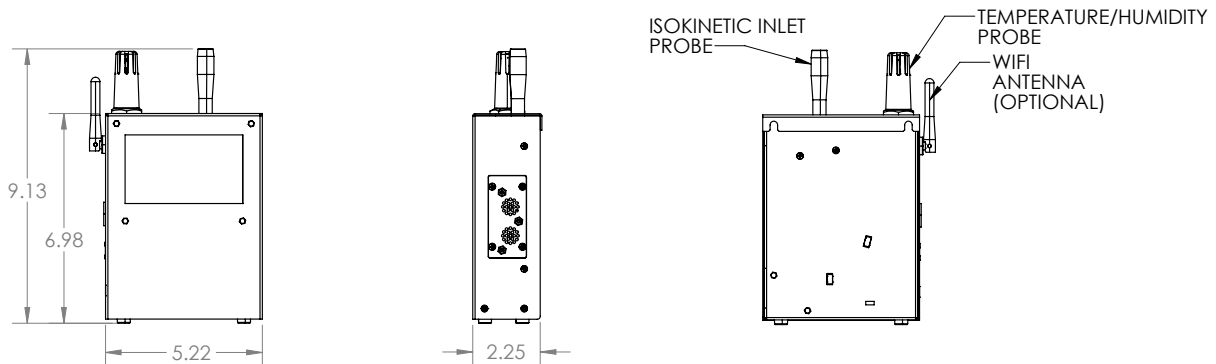
Features and Benefits

- Measures up to six particle size channels simultaneously
- Multiple data communication options: Ethernet, USB, RS485, RS232, and WiFi
- Large, icon-driven color touchscreen display for easy operation
- Optional temperature, relative humidity, CO2 and TVOC sensors
- Stores up to 45,000 sample records, 1,000 locations, and 50 sampling recipes
- Annotation feature allows users to save 32-character notes with sample records
- Approximates mass concentration with density & refractive index corrections
- Long-life laser diode technology and PHA for reliable sensor performance
- Diagnose issues remotely from anywhere with an internet connection
- Remote diagnostics allows for remote service investigation through the internet
- Seamlessly integrates into facility monitoring and building automation systems
- Easy to clean, lightweight stainless steel enclosure with minimal particle traps
- Complies with ISO 21501-4 and JIS B9921 standards
- Built-in audible and visual alarms for real-time alerts
- Versatile mounting options
- 2 Year Limited Warranty (Extended and Lifetime Warranties available)

Specifications

Model	5300P
Size Range	0.3 to 25 µm
Size Channels	Factory calibrated at 0.3, 0.5, 1.0, 2.5, 5.0, 10.0 µm variable binning
Flow rates	1.2 LPM
Concentration Limits	27,000,000 particles/ft^3 @ 10% coincidence (per ISO 21501-4), 50,000,000 particles/ft^3 @ 10% coincidence (as tested and validated[1])
Light Source	Long life laser diode
Counting Efficiency	50% @ 0.3 µm; 100% for particles >0.45 µm per JIS
Zero Count	<1 count / 60 minutes (<1 particles / 6 ft^3). No fault count subtraction.
Count Modes	Automatic, manual, real-time meter, cumulative/differential, mass concentration, count or concentration
Count Alarms	1 to 9,999,999 counts
Calibration	NIST traceable
Display	4.3″ (10.9 cm) WQVGA (480×272) color touch screen
Printer (Optional)	External thermal printer available
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
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 32º to 122ºF (0º to 50ºC) ±1ºF (0.5ºC) and relative humidity probe 15-90% ±2%
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)	5.22" x 2.25" x 9.13" (13.3 cm x 5.7 cm x 23.2 cm) includes barb fittings
Weight	2.6 lb (1.18 kg)
Accessories	Operating manual on USB flash drive, isokinetic probe, temperature relative humidity sensor, filter, data download software, USB cable, power supply & cable
Optional Accessories	Printed manual, 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	1 second to 99 hours
Power	110 to 240 VAC 50/60 Hz universal in-line power supply
Operating Conditions	41º to 104ºF (5º to 40ºC) / 20% to 95% non-condensing
Storage Conditions	32º to 122ºF (0º to 50ºC) / Up to 98% non-condensing
Warranty	2 year limited warranty. Extended warranties available.

1- Validated by independent analysis see paper available at www.particlesplus.com/aac2022_paper

ISOKINETIC INLET PROBE

TEMPERATURE/HUMIDITY PROBE

WIFI ANTENNA (OPTIONAL)

9.13

6.98

5.22

2.25

Made in USA

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