

8306 Handheld Airborne Particle Counter

PARTICLES PLUS°

0.1 CFM (2.83 LPM)

- Industry's highest concentration of 15,000,000 particles/ft³ @ 10% coincidence loss
- Ideal for use in research, industrial health and safety, indoor air quality, and cleanroom applications
- Up to 10 hours continuous operation on a fully charged battery
- Industry's first Sleep Mode and Power Conservation Mode with Intelligent Battery
- The most comprehensive internal self-diagnostics of any handheld particle counter
- Real-Time Meter detects particle contamination sources with visual and audible indication
- Internet of Things (IoT) communication allows for network or cloud-based data options



The Particles Plus® 8306 Handheld Particle Counter measures 0.3 to 25.0 µm with a flow rate of 0.1 CFM (2.83 LPM).

Easy to configure, this instrument displays up to 6 user-selectable size channels as well as temperature and relative humidity. View data and generate ISO 14644-1, EU GMP Annex 1 or FS 209E reports on screen or via printer, USB key, real time through its versatile output options or export to Particles Plus® data-download software. Particles Plus® counters can be controlled and monitored remotely via web browser. The 8306 has a mass concentration mode that approximates density in µg/m³.

All Particles Plus® counters meet ISO 21501-4 and JIS B9921. The 8306 ensures compliance with an on-board pulse height analyzer.

Features and Benefits

- Measures 0.3 µm to 25.0 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 µg/m³ with density and refractive index corrections
- Integrated handle for one-handed operation
- · Large easy-to-use icon driven color touch screen display
- · Temperature and relative humidity probe included
- Stores up to 45,000 sample records, 1,000 sample locations and 50 recipes
- Annotation function allows user to save 32 character notations to a sample record
- · Remote diagnostics allows for remote service investigation through the Internet
- · Easy configuration and transferable from instrument to instrument
- Connect using Ethernet, USB or (optional) Wireless 802.11 b/g, RS 485 or RS232
- Displays user-definable reports for ISO 14644-1, EU GMP Annex 1 and FS 209E
- Internal audible alarm with comprehensive alarm management
- · User-selectable channel sizes
- Complies with ISO 21501-4 and JIS B9921 standards
- · Easy to clean and wipe down with minimal particle traps
- · Seamless integration into a facility monitoring system
- · Lightweight high-impact injection molded plastic enclosure
- 2 year limited warranty. Extended warranties available.

Specifications

 Model
 8306

 Size Range
 0.3 to 25 µm

Size Channels Factory calibrated at 0.3, 0.5, 1.0, 2.5, 5.0, 10.0 μ m variable binning

Flow rates 0.1 CFM (2.83 LPM)

Concentration Limits 15,000,000 particles/ft³ @ 10% coincidence (per ISO 21501-4),

30,000,000 particles/ft³ @ 10% coincidence (as tested and validated¹)

Battery Run Time >10 hours continuous operation

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 ft³)

Count Modes Real-Time Meter and graph, cumulative/differential count/m³ and count/ft³, and mass concentration (PM)

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

Custom Size Channels Calibration for custom size channels available

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Audible Alarm Adjustable built-in alarm

Battery Removable Li-ion (Recharge time: 4 hours within instrument, <2 hours with external battery charger)

Reports ISO 14644-1, EU GMP Annex 1, FS 209E

Recipes 50 user-configurable recipes

Communication Modes Ethernet and USB. (Optional) Wireless 802.11 b/g, RS485 or RS232

Environmental Sensor Includes temperature 32° to 122°F (0° to 50°C) ±1°F (0.5°C) 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 High impact injection molded plastic

Dimensions (L x W x H) 5.12" x 4.25" x 12.26" (13.0 cm x 10.8 cm x 31.1 cm) includes handle and does not include probes

Weight 2.2 lb (1.0 kg)

Accessories Operating manual and IMS software on USB flash drive, isokinetic probe, temperature relative humidity sensor, purge

filter, battery, data download software, USB cable, power supply and cable

Optional Accessories Printed manual, carrying case, spare battery, external battery charger, external printer and isokinetic probes, barbed

fittings, IMS-RT monitoring system

Buffer Memory 45,000 sample records (rotating buffer) including particle count data, environmental data, locations, annotations, and

times. Scrollable on screen or printout times. Scrollable on screen or printout

Sample Locations Up to 1,000 locations 20 characters long

Sample Time 1 second to 99 hours

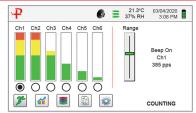
Power 110 to 240 VAC 50/60 Hz universal in-line power supply Operating Conditions 41° to 104°F (5° to 40°C) / 20% to 95% non-condensing Storage Conditions 32° to 122°F (0° to 50°C) / Up to 98% non-condensing

Warranty 2 Years. Extended warranties available.

1- Validated by independent analysis see paper available at www.particlesplus.com/aac2022 paper



Audible and Visual Alarm Management



Real-Time Meter Pinpoints Particles Sources



Icon Driven Menus for Ease-of-Use



Recipe: Recipe 1

