

H8303 and H8503 Handheld Airborne Particle Counters

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
- >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
- Internet of Things (IoT) communication allows for network or cloud-based data options



The Airy Technology® H8303 and H8503 Handheld Particle Counters measure 0.3 or 0.5 to 25.0 μm with a flow rate of 0.1 CFM (2.83 LPM). Easy to configure, these instruments display up to 3 user-selectable size channels as well as temperature and relative humidity. View data or export to Instrument Management Software (IMS). Airy Technology® counters can be controlled and monitored remotely via web browser.

All Airy Technology® counters meet ISO 21501-4 and JIS B9921. The H8303 and H8503 ensure compliance with an on-board pulse height analyzer.

Features and Benefits

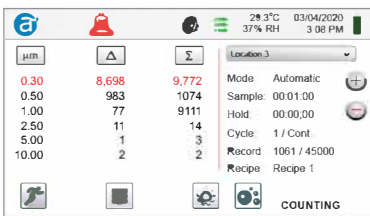
- H8303: Measures 0.3 μm to 25.0 μm .
- H8503: Measures 0.5 μm to 25 μm
- 0.1 CFM (2.83 LPM) flow rate
- Long life laser diode technology
- Measures up to 3 channels of simultaneous data
- Integrated handle for one-handed operation
- Large easy-to-use icon driven color touch screen display
- Stores up to 45,000 sample records and 1,000 sample locations
- Easy configuration and transferable from instrument to instrument
- Connect using USB or (optional) Ethernet, Wireless 802.11 b/g
- 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
- Seamless integration into a facility monitoring system
- Lightweight high-impact injection molded plastic enclosure
- 1 year limited warranty. Extended warranties available.

Optional Features and Benefits

- Temperature and relative humidity probe
- Ethernet, Wireless 802.11 b/g, RS485, or RS232 output
- Additional 3 size channels (easily add at any later time)
- External printer and printing option

Specifications

Models	H8303	H8503
Size Range	0.3 to 25 µm	0.5 to 25 µm
Size Channels	Factory calibrated at 0.3, 0.5, 5.0 µm	Factory calibrated at 0.5, 1.0, 5.0 µm
Counting Efficiency	50% @ 0.3 µm; 100% for particles >0.45 µm per JIS	50% @ 0.5 µm; 100% for particles >0.75 µm per JIS
Flow rate	0.1 CFM (2.83 LPM)	
Concentration Limit	15,000,000 Particles/ft ³ @ 10% coincidence loss	
Battery Run Time	>10 hours continuous operation	
Light Source	Long life laser diode	
Zero Count	<1 count / 60 minutes (<1 particles / 6 ft ³)	
Count Modes	Cumulative/differential, count, count/m ³ , and count/ft ³	
Count Alarms	1 to 9,999,999 counts	
Calibration	NIST traceable	
Display	4.3" (10.9 cm) WQVGA (480x272) 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	3	
Custom Size Channels	Calibration for custom size channels available	
Audible Alarm	Adjustable built-in alarm	
Battery	Removable Li-ion	
Battery Recharge Time	4 hours within instrument (<2 hours with external battery charger)	
Communication Modes	USB. (Optional) Ethernet, Wireless 802.11 b/g, RS485 or RS232.	
Environmental Sensor	(Optional) Temp and RH probe 32° to 122°F (0° to 50°C) ±1°F (0.5°C), 15-90% ±2% relative humidity	
Alarm	Alarms on counts for all particle sizes, sensor failure, environmental sensors and flow	
Standards	ISO 21501-4 and JIS B9921	
Instrument 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, filter, battery, USB cable, power supply and cable	
Optional Accessories	Printed manual, carrying case, spare battery, external battery charger, external printer, isokinetic probes, temperature and humidity sensor, barb fittings, and IMS-RT monitoring system	
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	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	1 year limited warranty. Extended warranties available.	



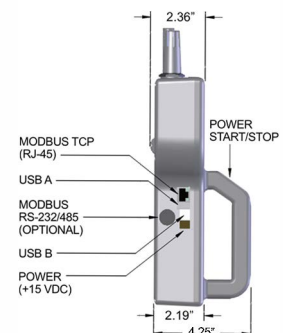
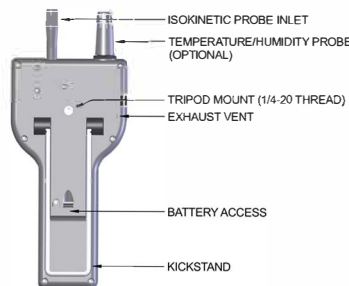
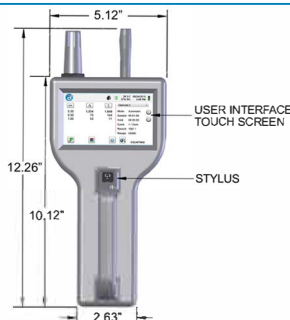
Audible and Visual Alarm Management



Icon Driven Menus for Ease-of-Use



Control and Manage Remotely with IMS



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

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