

AeroTrak® Handheld Particle Counter

Model 9306



The TSI AeroTrak[®] 9306 Handheld Particle Counter offers the most features and flexibility for customers interested in versatile handheld particle contamination monitoring.

The Model 9306 features an ergonomic handle with thumb controls, for easy one-hand operation. The 3.5-inch (8.9-cm) color touch screen interface makes it easy to configure and operate. The Model 9306 can generate Pass/Fail reports for ISO 14644-1, EU GMP Annex 1, and FS209E. Particle count data can be conveniently viewed on screen, downloaded using TrakPro[™] Lite Secure Software, or printed directly to an optional external printer.

Multiple AeroTrak® 9306 Particle Counter configurations can be conveniently stored and uploaded as needed using the TrakPro[™] Lite Secure data download and reporting software supplied as standard.

The Model 9306 complies with all the stringent requirements set forth in ISO 21501-4. These particle counters are calibrated with NIST traceable PSL spheres using TSI's world-class classifier and condensation particle counters, the recognized standard for particle measurements. Backed with a standard two-year warranty and TSI's long-standing reputation for high quality, there are no other handheld particle counters like it on the market today.

Features and Benefits

- Complies with all requirements of ISO 21501-4
- 0.3 to 25 µm size range
- 0.1 CFM (2.83 L/min) flow rate
- Measures up to six channels of simultaneous data
- Model 9306-V2 provides unique variable binning option
- Mass concentration option (density parameter is user-configurable)
- Integrated handle for one hand operation
- Removable, rechargeable Li-ion battery
- Long life laser diode
- Compatible with TrakPro[™] Lite Secure Software and FMS 5 software packages
- USB cable, USB storage device and Ethernet data transfer
- Data storage: 250 zones, 999 locations, and 10,000 samples
- Provides Pass/Fail reporting on ISO 14644-1, EU GMP, and FS209E
- External reporting of ISO 14644-1, EU GMP, and FS209E via TrakPro Lite Secure Software
- Optional Temperature/RH sensor available

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Specifications

AeroTrak® Handheld Particle Counter Model 9306

9306	
Size Range	0.3 to 25 µm
Particle Channel Sizes	9306-03: 0.3, 0.5, 0.7, 1.0, 2.0, 5.0 μm 9306-04: 0.3, 0.5, 1.0, 3.0, 5.0, 10.0 μm 9306-V2: 0.3 to 10 μm, user-selectable; factory-calibrated at 0.3, 0.5, 1.0, 3.0, 5.0, 10.0 μm
Size Resolution	<15% @ 0.5 μm (per ISO 21501-4 requirements)
Counting Efficiency	50% at 0.3 μm; 100% for particles >0.45 μm (per ISO 21501-4 and JIS)
Concentration Limit	5,950,000 particles/ft³ (210,000,000/m³) @ 10% coincidence loss
Light Source	Long life laser diode
Zero Count	<1 count per 5 minutes (per ISO 21501-4 and JIS B9921)
Flow Rate	0.1 CFM (2.83 L/min) with $\pm 5\%$ accuracy (meets ISO 21501-4 and JIS requirements)
Flow Rate Control	Electronic, automatic closed loop (patented* flow control technology)
Calibration	NIST Traceable with TSI® calibration system
Calibration Frequency	Recommended minimum once per year
Sampling Modes	Manual, automatic, beep; cumulative/differential; count or concentration
Sampling Time	1 second to 99 hours
Sampling Frequency	1 to 9999 cycles or continuous
Exhaust	Internally HEPA filtered
Communication Mode	Modbus® TCP over Ethernet or USB
Alarm Status	Audible alarm on counts
Status Indicators	Low battery, flow, laser
Environmental Sensors	Optional Temp/RH probe
Display	QVGA 3.5-inch (8.9-cm) touch screen
Reports	Provides Pass/Fail on ISO 14644-1, EU GMP, and FS209E reports
Unit ID	Configurable IP address

Security	2-level password protection to lock out usage and configuration
Data Storage	250 Zones
	999 Locations
	10,000 sample records including: date, time, six total particle size channels, flow status, and instrument status
Data Transfer	Via USB storage device, connection to the TrakPro [∞] Lite Secure Software through Ethernet or USB cable, or optional TSI® FMS Software
Languages	English, Japanese, German, French, Spanish, and Chinese (Simplified), Italian
Software	Compatible with TrakPro [™] Lite, TrakPro [™] Lite Secure and FMS 5 Software
External Surface	High Impact injection molded plastic
Dimension (H x W x D)	9.4 in. x 4.6 in. x 4.9 in. (23.9 cm x 11.7 cm x 12.4 cm) (without isokinetic inlet, includes handle)
Weight	2.2 lb (1.0 kg) with battery
Weight Power	2.2 lb (1.0 kg) with battery 110 to 240 VAC, 50 to 60 Hz universal in-line power supply
0	110 to 240 VAC, 50 to 60 Hz universal in-line
Power	110 to 240 VAC, 50 to 60 Hz universal in-line power supply
Power Battery	110 to 240 VAC, 50 to 60 Hz universal in-line power supply Removeable/rechargeable Li-Ion
Power Battery Battery Life	110 to 240 VAC, 50 to 60 Hz universal in-line power supply Removeable/rechargeable Li-lon >6 hours of continuous use
Power Battery Battery Life Recharge Time	110 to 240 VAC, 50 to 60 Hz universal in-line power supply Removeable/rechargeable Li-lon >6 hours of continuous use <2 hours
Power Battery Battery Life Recharge Time Standards	110 to 240 VAC, 50 to 60 Hz universal in-line power supply Removeable/rechargeable Li-lon >6 hours of continuous use <2 hours ISO 21501-4, CE, JIS B9921 Two years, extended warranties available 41° to 95° F (5° to 35° C), 20% to 95% non-condensing
Power Battery Battery Life Recharge Time Standards Warranty	110 to 240 VAC, 50 to 60 Hz universal in-line power supply Removeable/rechargeable Li-lon >6 hours of continuous use <2 hours ISO 21501-4, CE, JIS B9921 Two years, extended warranties available 41° to 95°F (5° to 35°C),
Power Battery Battery Life Recharge Time Standards Warranty Operating Range	110 to 240 VAC, 50 to 60 Hz universal in-line power supply Removeable/rechargeable Li-lon >6 hours of continuous use <2 hours ISO 21501-4, CE, JIS B9921 Two years, extended warranties available 41° to 95° F (5° to 35° C), 20% to 95% non-condensing 32° to 122° F (0° to 50° C),

*Patent Numbers 6,167,107

Specifications are subject to change without notice.

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