

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



Specifications

AeroTrak® Handheld Particle Counter

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 ±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	
Particle Channel Sizes 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 2ero Count 71 count per 5 minutes (per ISO 21501-4 and JIS B9921) Flow Rate 0.1 CFM (2.83 L/min) with ±5% accuracy (meets ISO 21501-4 and JIS requirements) Flow Rate Control Electronic, automatic closed loop (patented* flow control technology)	
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(patented* flow control technology)	
Calibration NIST Traceable with TSI® calibration system	
Calibration Frequency Recommended minimum once per year	
Sampling Modes Manual, automatic, beep; cumulative/different count or concentration	ial;
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	

*Patent Numbers 6,167,107

Specifications are subject to change without notice.

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Modbus is a registered trademark of Modicon, Inc.

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
Power	110 to 240 VAC, 50 to 60 Hz universal in-line power supply
Battery	Removeable/rechargeable Li-lon
Battery Life	>6 hours of continuous use
Recharge Time	<2 hours
Standards	ISO 21501-4, CE, JIS B9921
Warranty	Two years, extended warranties available
Operating Range	41° to 95° F (5° to 35° C), 20% to 95% non-condensing
Storage Range	32° to 122°F (0° to 50°C), up to 98% RH non-condensing
Included Accessories	Online operating manual, power supply, battery, isokinetic inlet, purge filter, stylus, USB cable and TrakPro Lite Secure
Optional Accessories	Spare Battery, external battery charger, isokinetic probe, sample tubing, Temp/RH probe, printer, printer paper and carrying case



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