

# Instrument Solutions DATASHEET

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# 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.

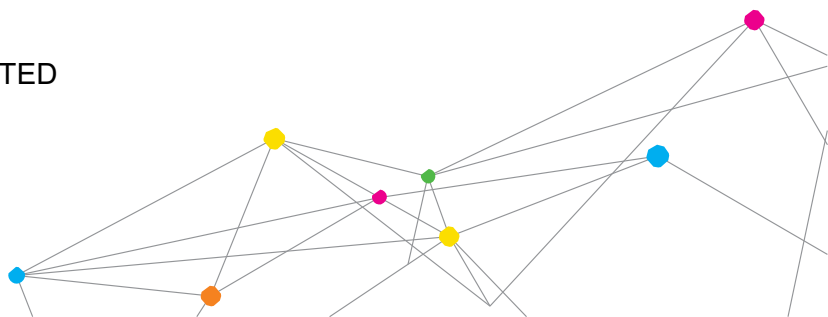
The Model 9306 complies with all the stringent requirements set forth in ISO 21501-4. These particle counters are calibrated with NIST traceable PSL spheres using TSI's world-class Classifier and Condensation Particle Counters, the recognized standard for particle measurements. Backed with a standard 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  $\mu\text{m}$  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 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
- + 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/ft <sup>3</sup> (210,000,000/m <sup>3</sup> ) @ 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
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

\*Patent Number 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 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-Ion
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% noncondensing
Storage Range	32° to 122°F (0° to 50°C), up to 98% RH noncondensing
Included Accessories	Operating manual on CD, 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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BSRIA Instrument Solutions offer an extensive range of quality test and measurement instrumentation for you to hire. The widest range and in-depth stocks of the latest equipment are available at competitive prices. BSRIA Instruments Solutions has built its fine reputation by providing the most reliable and advanced equipment from the leading manufacturers and supporting it with a high level of customer service and technical support to meet with your requirements and expectations.

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