AEROTRAK® PORTABLE
PARTICLE COUNTER
MODEL 9500

The TSI AeroTrak® 9500 Portable Particle Counter offers best-in-class features and versatility. Perform ISO 14644-1 classifications and complete certifications of EU GMP facilities by sampling 1 m³ of air in just 10 minutes! Particle count data can be conveniently viewed on screen, downloaded using TrakPro™ Lite Secure software, or printed directly to the integrated printer. Compatible with TSI's accurate ventilation probes that measure air velocity/temperature/RH, the Model 9500 is a complete solution for your certification needs. The combination of an optional electronic filter scanner with up to 26 ft of tubing, make this the best instrument for in-place filter testing.

This particle counter can generate pass/fail reports for ISO 14644-1, EU GMP Annex 1, and FS209E, via the onboard printer and the supplied TrakPro Lite Secure download software. Multiple particle counter configurations can be conveniently stored and uploaded as needed. It can be used as a stand-alone particle counter or integrated into a facility monitoring system like TSI's FMS 5.
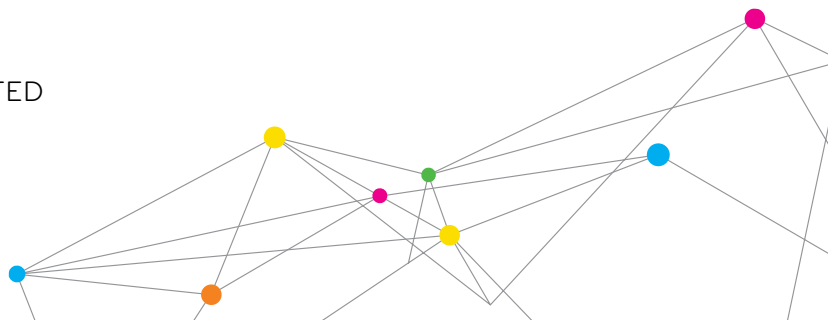
The Model 9500 complies with all the stringent requirements set forth in ISO 21501-4. It is calibrated with NIST traceable PSL spheres using TSI's world-class Classifier and Condensation Particle Counters, the recognized standard for particle measurements. Backed with a standard two-year warranty and TSI's long-standing reputation for high quality, there are no other particle counters like it on the market today.

Features and Benefits

+ 0.5 to 25 µm size range
+ Up to six channels of simultaneous data
+ 3.53 CFM (100 L/min) flow rate
+ Complies with all requirements of ISO 21501-4
+ Best choice for filter testing in clean rooms
+ Data storage: 250 zones, 999 locations, and 10,000 samples
+ USB, USB Storage Device and Ethernet data transfer
+ Industry's loudest audible alarm
+ Easy icon-driven touch screen operation
+ Onboard reports for ISO-14644-1, EU GMP Annex 1, and FS209E
+ External certification reports via TrakPro Lite Secure
+ Allows storage and recall of specific Recipes and Zone configurations
+ Displays up to three environmental parameters
+ Stainless steel enclosure
+ Lightweight
+ Stand-alone or integrate into a facility monitoring system

UNDERSTANDING, ACCELERATED

SPECIFICATIONS

AEROTRAK PORTABLE PARTICLE COUNTER MODEL 9500

9500	
Size Range	0.5 to 25 µm
Particle Channel Sizes	0.5, 0.7, 1.0, 3.0, 5.0, 10.0 µm (additional channel sizes available)
Size Resolution	<15% @ 0.5 µm (ISO 21501-4)
Counting Efficiency	50% at 0.5 µm, 100% for particles > 0.75 µm (per ISO 21501-4 and JIS)
Concentration Limit	>425,000/ft³ (15,000,000/m³) at 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	3.53 CFM (100 L/min) ±5% accuracy (meets ISO 21501-4 and JIS B9921)
Flow Rate Control	Electronic, automatic closed loop (patented* flow control technology)
Sample Tube Extension	Up to 26.2 ft (8 m)
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 filter
Vacuum Source	Internal pump
Communication Mode	Modbus® TCP over Ethernet or USB
Audible Alarm	Built-in; >85 dB at 1 meter (adjustable)
Status Indicators	Low battery, flow, laser
Alarm Output	Dry contacts, closed when alarm is engaged
Alarm Limits	Programmable for all particle channels
Display	VGA 5.7-inch (14.5 cm) touch-screen display
Languages	English, German, French, Spanish, Japanese, Chinese (simplified), Italian
Printer	Built-in thermal printer (also available without printer)
Printer Output	Prints in all available languages
Environmental Sensor Interface	Supports TSI Probe Models: 960, 962, 964, 966 (air velocity/temp/RH) and Temp/RH probe
External Chemical Resistance	Isopropyl alcohol, chlorinated solution, hydrogen peroxide
Environmental Sensor Interface	Supports TSI air velocity, temperature and relative humidity probes
Software	Compatible with TrakPro™ Lite Secure and FMS 5 software

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
Reports	Provides Pass/Fail on ISO 14644-1, EU GMP, and FS209E reports
Calibration	NIST traceable using TSI calibration system
Calibration Frequency	Recommended minimum of once per year
Dimension (H x W x D)	9.5 in. x 9.0 in. x 9.2 in. (24.1 cm x 23.0 cm x 23.2 cm) (without isokinetic inlet)
Weight	14.2 lbs (6.44 kg) with two batteries
Power	110 to 240 VAC universal power supply
Battery	Removable/rechargeable Li-Ion batteries (2 battery slots)
Battery Life	>2 hours of continuous operation
Battery Recharge	4 hours (when idle)
External Surface	Stainless steel
Operating Range	41˚to 95˚F (5˚ to 35˚C), 20% to 95% RH noncondensing
Storage Range	32˚ to 122˚F (0˚ to 50˚C), up to 98% RH noncondensing
Standards	ISO 21501-4, CE, JIS B9921
Warranty	Two years, extended warranties available
Included Accessories	Printed QuickStart guide, operating manual on CD, power supply, battery, barbed inlet, isokinetic probe, tripod, tubing, purge filter, printer paper, USB cable and TrakPro™ Lite Secure Software
Optional Accessories	Electronic filter scanning probe, basic filter scanning probe, TSI velocity probes, Temp/RH probe, additional battery, dual port external battery charger, isokinetic probes, sample tubing, carrying case

*Patent Number 6,167,107

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