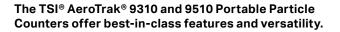


Advanced Test Equipment Corp. www.atecorp.com 800-404-ATEC (2832)



AeroTrak[®] Portable Particle Counter

Models 9310 & 9510



TSI® AeroTrak 9310 and 9510 Portable Particle Counters provide a 1.0 CFM (28.3 L/min) flow with 0.3 or 0.5 µm sensitivity. Compatible with TSI® accurate ventilation probes that measure air velocity/temperature/RH, these products provide you with a complete solution for your certification needs. Particle count data can be conveniently viewed on screen, downloaded using TrakPro™ Lite Secure Software, or printed directly to the integrated printer.

The AeroTrak[®] Portable Particle Counter generates 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. These products can be used as a stand-alone particle counter or integrated into a facility monitoring system like TSI[®] FMS 5.

Both Models 9310 and 9510 comply 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 particle counters like it on the market today.

Features and Benefits

AEROTRAK

- AeroTrak 9310 Particle Counter: 0.3 to 25 µm
- AeroTrak 9510 Particle Counter: 0.5 to 25 µm
- Up to six channels of simultaneous data
- 1.0 CFM (28.3 L/min) flow rate
- Complies with all requirements of ISO 21501-4
- 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 Software
- Barcode scanner supports recall of specific Recipe and Zone configurations
- Displays up to three environmental parameters
- Stainless steel enclosure
- Lightweight
- Stand-alone or integrate into a facility monitoring system
- Battery life provides up to 10 hours of continuous operation

Specifications AeroTrak[®] Portable Particle Counter Models 9310 & 9510

Size Range 9310-02: 9310: 0.3 to 25 μm 9510-02: 9510: 0.5 to 25 μm

Particle Channel Sizes 9310-02: 0.3, 0.5, 1.0, 3.0, 5.0, 10 μm 9510-02: 0.5, 0.7, 1.0, 3.0, 5.0, 10 μm

Size Resolution <15% @ 0.5 μm (per ISO 21501-4)

Counting Efficiency 9310-02: 50% at 0.3 μm; 100% for particles >0.45 μm (per ISO 21501-4 and JIS)

9510-02: 50% at 0.5 μm; 100% for particles 0.75 μm (per ISO 21501-4 and JIS)

Concentration Limit 820,000 particles/ft³ (29,000,000/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 1.0 CFM (28.3 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 39.4 ft (12 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 filtered

Vacuum Source

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

Software Compatible with TrakPro™ Lite Secure and FMS 5 Software

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

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 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-lon batteries (2 battery slots)

Battery Life** Up to 10 hours of continuous operation

Battery Recharge 5 hours (when idle)

External Surface Stainless steel

Operating Range 36° to 95° F (2° to 35° C), 20% to 95% RH non-condensing

Storage Range 32° to 122°F (0° to 50°C), up to 98% RH non-condensing

Standards ISO 21501-4, CE, JIS B9921

Warranty Two years

Included Accessories

Online operating manual, power supply, battery, isokinetic inlet, purge filter, stylus, 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

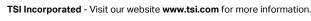
* Patent Number 6,167,107

** Battery life will vary based on setup and application.

Specifications are subject to change without notice.

AeroTrak, TSI and the TSI Logo are registered trademarks of TSI Incorporated in the United States and may be protected under other country's trademark registrations.

Modbus is a registered trademark of Modicon, Inc.



Knowledge Beyond Measure.

 USA
 Tel: +1 800 874 2811
 India
 Tel: +91 80 67877200

 UK
 Tel: +44 149 4 459200
 China
 Tel: +86 10 8219 7688

 France
 Tel: +33 1 41 19 21 99
 Singapore
 Tel: +65 6595 6388

 Germany
 Tel: +49 241 523030
 Singapore
 Tel: +65 6595 6388

P/N 5001206 Rev R