



CONTAMINATION CONTROL

Remote Particle Counters



Features and Benefits

- Accurately measures particles down to 0.100 μm
- 0.100 to 10.0 μm size range
- Up to eight channels of simultaneous data
- 1.0 CFM (28.3 L/min) flow rate
- Complies with all requirements of ISO 21501-4
- Utilizes enhanced HeNe laser
- Highly repeatable and reliable measurements/data
- 2000 sample record storage
- Ethernet Modbus[®] TCP, RS-485 Modbus[®] RTU or Pulse
- Easy to read status indicators
- Easily interfaces with facility monitoring systems
- Stainless steel enclosure
- Easily used with external vacuum pump
- Two-year warranty

AEROTRAK[™] Remote Particle Counter Model 7110

The TSI AeroTrak[™] 7110 Remote Particle Counter offers an accurate measurement of particles down to 0.100 μm ! This is made possible utilizing a patented HeNe laser technology with an enhanced signal-to-noise ratio. This instrument is designed for clean room monitoring, process tool monitoring, and filter test applications. And, since the particle counter is used with an external vacuum source, there is significant flexibility in placing and configuring systems.

Particle count data can be easily and continuously transferred to a facility monitoring system, like TSI's FMS 5 for secure data capture and analysis. Specifically, when coupled with FMS 5, you have a powerful productivity tool with features like Statistical Process Control. These particle counters can also store up to 2,000 sample records, providing data redundancy.

The Model 7110 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 commitment for superior service and support, these remote particle counters are the most accurate, high flow, high sensitivity particle counting products on the market today.



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Specifications

Model 7110

AERO^{TRAK}™ Remote Particle Counter

Features	7110
Size Range	0.100 to 10.0 µm
Particle Channel Sizes	7110-05: 0.10, 0.15, 0.2, 0.25, 0.3, 0.5, 1.0, 5.0 µm
Size Resolution	<15% @ 0.2 µm (per ISO 21501-4)
Counting Efficiency	50% at 0.100 µm; 100% for particles >0.15 µm (per ISO 21501-4 and JIS)
Concentration Limit	>40,000/ft ³ at 5% coincidence loss
Light Source	Enhanced active cavity HeNe laser
Zero Count	<1 count per 5 minutes (per ISO 21501-4 and JIS)
Flow Rate	1.0 CFM (28.3 L/min)
Vacuum Requirements	External vacuum >15 in. (38.1 cm) of Hg
Calibration	NIST traceable using TSI calibration system
Calibration Frequency	Recommended minimum of once per year
Sampling Modes	Manual or automatic
Communication Mode	Modbus® over RS-485, Modbus® over Ethernet, 4-ch CEMS pulse, serial RS-232
Data Storage	2,000 sample records
Status Indicators	Power, service, sample and flow
Alarm Output	Dry, contacts, closed when alarm is engaged
Software	Compatible with FMS 5
External Surface	Stainless steel
Dimension (H x W x D)	5.25 in. x 5.0 in. x 17.9 in. (13.4 cm x 12.7 cm x 45.6 cm)
Weight	11.5 lb (5.23 kg)
Power	110 to 240 VAC universal power supply
Standards	ISO 21501-4, CE, JIS B9921
Warranty	Two years, extended warranties available
Operating Range	50° to 95°F (10° to 35°C), 20% to 95% noncondensing
Storage Range	32° to 122°F (0° to 50°C), up to 98% RH noncondensing
Included Accessories	Printed QuickStart guide, operating manual on CD, barbed inlet, and power supply
Optional Accessories	Isokinetic inlet, isokinetic probe, purge filter, sample tubing, and vacuum tubing

Specifications are subject to change without notice.

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Contact your local TSI Distributor or visit our website www.tsi.com for more detailed specifications.