AEROTRAK® REMOTE
PARTICLE COUNTERS
MODELS 7510-01FV, 7510-02FV AND 7510-A2FV

The AeroTrak® Remote Particle Counter 7510, resistant to Vaporized Hydrogen Peroxide (VHP), is ideal for GMP manufacturing applications. Integration is easy using Ethernet (TCP/IP), serial Modbus RTU communications and 4-20mA analog outputs. The instrument can be powered over its Ethernet connection (Power-over-Ethernet) to simplify installation, or via a local power supply. Configuration can be done locally with a PC or via a web browser.

The AeroTrak Remote Particle Counter 7510 can store up to 3,000 sample records, providing data redundancy. The unit reports up to four particle sizes simultaneously and integrates seamlessly with TSI's FMS software. Its small size means installation close to critical monitoring locations, where space is hard to come by, is easy.

Model 7510-A2FV comes with 4-20mA analog outputs. Any two of four particle size channels measured can be selected for output. A third 4-20mA output reports laser status and flow information. All TSI AeroTrak Remote Particle Counters include a relay alarm output which allows users to alarm directly from the particle counter.
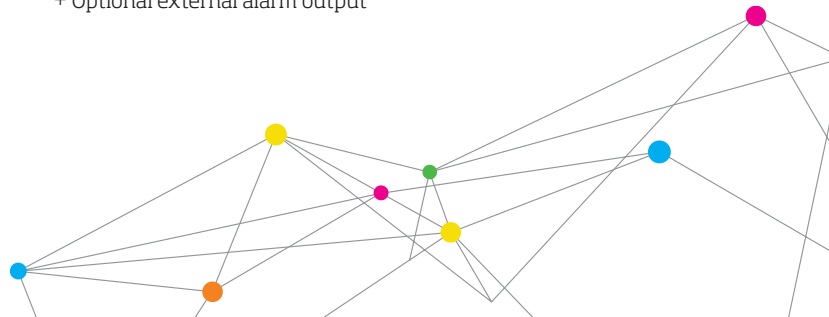
Backed by TSI's comprehensive warranty and commitment for superior service and support, there is no other remote particle counter on the market today with such features and benefits.

Features and Benefits

+ Resistant to Vaporized Hydrogen Peroxide (VHP)
+ 1 CFM (28.3 L/min) flow rate
+ ISO 21501-4 compliant calibration
+ Up to four channels of simultaneous data
+ 3,000 sample record storage
+ Ethernet (TCP/IP) and serial Modbus RTU output
+ Power-over-Ethernet (PoE) or local power
+ Static or dynamic IP address (DHCP)
+ 4-20 mA outputs available, 2 Channel particle count data and 1 Channel for laser and flow status: linear and log scaling – user selectable
+ Local or remote configuration via web browser and via Dip Switches
+ RoHS compliant
+ Low outgassing and ionics using 3M™ Adhesive Technology
+ Stainless steel enclosure
+ Optional Temp/RH probe
+ Optional external alarm output

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SPECIFICATIONS

AEROTRAK® REMOTE PARTICLE COUNTERS
MODELS 7510-01FV, 7510-02FV AND 7510-A2FV

	7510-01FV, 7510-02FV	7510-A2FV
Size Range	0.5 to 25 µm	0.5 to 25 µm
Channel Sizes	7510-01FV: 0.5, 5.0 µm 7510-02FV: 0.5, 0.7, 1.0, 5.0 µm	0.5, 0.7, 1.0, 5.0 µm Select 2 of the 4 size channels for analog output
Dimensions (L x W x H)	4.5 in. x 1.6 in. x 2.8 in. (11.5 cm x 4.1 cm x 7.2 cm)	4.5 in. x 1.6 in. x 4.25 in. (11.5 cm x 4.1 cm x 14.7 cm)
Weight	0.95 lb (0.43 kg)	1.4 lb (0.63 kg)
Communication Mode	Ethernet (TCP/IP) and serial Modbus output	4-20 mA: Two channel log or linear particle counts, One channel unit status.
Power	Power-over-Ethernet (PoE compliant with IEEE 802.3af) or 12 VDC	24 VDC
Data Storage	3,000 sample records	N/A
Sensor Configuration	Via Ethernet (TCP/IP) Web interface	Via Ethernet (TCP/IP) interface and DIP switch
Light Source	Laser diode	
Counting Efficiency	50% at 0.5 µm; 100% for particles > 0.75 µm (per ISO 21501-4 and JIS)	
Concentration Limits	340,000 particles / ft³ (12,000,000/m³) @ 10% coincidence loss	
Zero Count Level	<1 count / 5 minutes (<2 particles / ft³) (per ISO 21501-4 and JIS)	
Flow Rate	1 CFM (28.3 LPM) with ± 5% accuracy	
Calibration	NIST traceable using TSI calibration system	
Vacuum Requirements	External vacuum > 15" (38.1 cm) of Hg	
Status Indicators	Power, service, sampling	
External Alarm Output	Normal open dry contact rated 0 to 60 V AC/DC 1 Amp	
Sensor Connectivity	Screw terminal	
External Surface	Stainless steel	
Standards	CE, JIS B9921, ISO 21501-4	
Warranty	One year	
Operating Conditions	50° to 104°F (10° to 40°C) / 20% to 95% non-condensing	
Storage Conditions	14° to 122°F (-10° to 50°C) / 20% to 98% non-condensing	
Included Accessories	Operating manual on CD	

Specifications are subject to change without notice.

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