

# AEROTRAK® REMOTE PARTICLE COUNTERS MODELS 7310-A3F & 7510-A2F



The AeroTrak® Remote Particle Counters with 2-Channel 4-20 mA output offer the most features and flexibility of any remote particle counters on the market today. These instruments are easy to install, configure and integrate into your systems. High quality connectors are used to make wiring straightforward. Once wired, users can select either Log or Linear 4-20 mA output signals, as well as which of the four standard supplied size channels are configured for the output. Additional remote configuration is easily completed via a web browser. And, a third 4-20 mA output provides Laser status and flow information. Each Remote Particle Counter with Analog Output includes an alarm output that can be wired directly into a PLC.

These particle counters can also store up to 3,000 sample records providing data redundancy. Each instrument reports up to four particle sizes simultaneously and other key information such as laser current, background light level, date of last calibration, serial number and date of manufacture for easy warranty management.

Digital calibration allows for consistency when managing a large number of instruments. With the optional Temp/RH sensor, users can save cabling and powering a separate sensor into a monitoring or building automation system. Each TSI AeroTrak Remote Particle Counter also includes an alarm output which allows users to alarm directly from the particle counter.

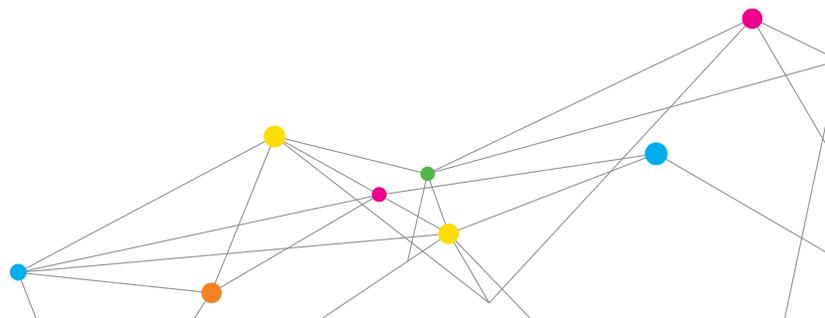
Backed with a standard two-year warranty and TSI commitment for superior service and support, there is no other remote particle counter on the market today with such features and benefits.

## Features and Benefits

- + AeroTrak 7310-A3F: 0.3 to 25  $\mu\text{m}$
- + AeroTrak 7510-A2F: 0.5 to 25  $\mu\text{m}$
- + 1 CFM (28.3 L/min) flow rate
- + 2 Channel 4-20 mA output
- + 1 Channel 4-20 mA output for laser and flow status
- + 4-20 mA linear and log scaling - user selectable
- + ISO 21501-4 compliant
- + 24 VDC power
- + Configuration via web browser and DIP switches
- + Low outgassing and ionics using 3M™ Adhesive Technology
- + Stainless steel enclosure
- + External alarm output
- + Smallest remote particle counter in the market (0.3  $\mu\text{m}$  @ 1 CFM)



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## SPECIFICATIONS

### AEROTRAK® REMOTE PARTICLE COUNTERS MODELS 7310-A3F & 7510-A2F

	7310-A3F	7510-A2F
Size Range	0.3 to 25 µm	0.5 to 25 µm
Channel Sizes	0.3, 0.5, 1.0, 5.0 µm Additional channel sizes available	0.5, 0.7, 1.0, 5.0 µm Additional channel sizes available
Counting Efficiency	50% at 0.3 µm; 100% for particles > 0.45 µm (per ISO 21501-4 and JIS)	50% at 0.5 µm; 100% for particles > 0.75 µm (per ISO 21501-4 and JIS)
Concentration Limits	128,000 particles/ft <sup>3</sup> (4,500,000/m <sup>3</sup> ) @ 10% coincidence loss	340,000 particles/ft <sup>3</sup> (12,000,000/m <sup>3</sup> ) @ 10% coincidence loss
Light Source	Laser diode	
Zero Count Level	<1 count / 5 minutes (<2 particles / ft <sup>3</sup> ) (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	
Communication Mode	4-20 mA: Two channel log or linear particle counts, One channel unit status.	
Sensor Configuration	Via Ethernet (TCP/IP) interface and DIP switch	
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	
Power	24 VDC	
Dimensions (L x W x H)	4.5 in. x 1.6 in. x 4.25 in. (11.5 cm x 4.1 cm x 14.7 cm)	
Weight	1.4 lb (0.63 kg)	
Standards	CE, JIS B9921, ISO 21501-4	
Warranty	Two years. Extended warranties available	
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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