IsoAir® 310P

Aerosol Particle Sensor

The IsoAir 310P Aerosol Particle Sensor makes it easy to monitor air in remote locations or in areas with process restraints. Real-time particle monitoring gives quick notification of particle anomalies, detecting 0.5 and 5.0 μm for GMP and FDA compliance.

A central vacuum is not needed to operate the particle sensor. It features a built in "low noise" blower with HEPA filtered exhaust. It has unparalleled performance in a chemical-resistant and easy-to-disinfect 316L external enclosure, and the passivated stainless steel surface has well defined microbial control characteristics. The clean, reliable internal pump lowers installation costs and the need for costly vacuum system connections.

The instrument is available with a wide range of communications protocol such as Ethernet, Modbus, Wifi, and analog 4-20 mA for full compatibility with the existing monitoring system.

PARTICLE MEASURING SYSTEMS®
a **spectris** company

Without measurement there is no control

BENEFITS

Ensure compliance

- Real-time particle monitoring gives quick notification of particle anomalies
- Queues 3,000 samples in the event of computer system failure
- Detects 0.5 and 5.0 μm for GMP and FDA compliance
- Ethernet, Modbus and 4-20 mA outputs meet 21 CFR Part 11 regulations for data transmission security
- Identifies breakdown in isolator protection

Increase productivity

- Interfaces with optional FacilityPro®, Pharmaceutical Net or Facility Net software for comprehensive management of the cleanroom
- Automatic paging allows rapid response to alarms
- Optional 4-20 mA inputs allow for integration of up to three environmental input sensors
- Easy to remove sensor simplifies calibration and service
- Validation documentation available

Cost-Effective

- Complete monitor is easy to install
- No central vacuum system needed
- Rugged, chemically-resistant, easy-to-disinfect enclosure
- Passivated stainless steel surface has well-defined microbial control characteristics
- Diode laser reduces maintenance requirements

FEATURES

- Four standard channel sizes with 2-channel Pharmaceutical mode
- Flow rate of 1.0 CFM
- Passivated 316L stainless steel enclosure
- Pump with HEPA filtered exhaust
- Automatic shut-off for capped probe
- Compliance with ISO 21501-4 and CE standards
- Two local LEDs for status and activity
- Ethernet or Modbus communications

APPLICATIONS

- Pharmaceutical manufacturing area
- Isolator monitoring
- Cleanroom monitoring
- Aerospace and industrial applications
- Trend analysis
- Statistical process control

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Channels	0.3, 0.5. 1.0 and 5.0 µm channels or can be set for two-channel mode: 0.5 and 5.0 µm
Flow rate	1.0 CFM (28.3 LPM)
Sample probe/tubing	3/8'' ID and up to two meters of 3/8'' tubing can be connected to the inlet
Vacuum source	Internal reciprocal blower is quiet, cool running and long-lived, with no contaminating carbon vanes. Pump output is HEPA filtered, and discharged from the bottom of the enclosure.
Pump shut off	Automatic if pump fails, or if the system detects the sample probe is capped while the pump is on.
Calibration	Calibration materials used are traceable to the US National Institute of Standards and Technology. Unit is calibrated to ISO 21501-4.
Zero count level	≤ 7.07 counts/m^3
Maximum concentration *@ 10% coincidence loss*	1,374,269 particles/ft^3
Exterior surface	Passivated stainless steel (Grade 316L)
Communications	Ethernet (data, instructions); RS-232 (set-up and diagnostics only); Modbus TCP Optional: 4-20 mA output (2 data channels plus 1 status channel) Optional: five (5) solid-state outputs and three (3) 4-20 mA inputs
Controlling software	Pharmaceutical Net, Facility Net, FacilityPro (must purchase separately), Modbus client
Data security	Unalterable data; 21 CFR Part 11 compatible transfer via FacilityPro/Pharmaceutical Net; Backup storage of 3,000 samples
Status indicators	Ethernet Programmable Programmable: 3-color LED Activity: 1-color LED
	4-20 mA Interface Laser and flow status: 3-color LED Activity: 1-color LED
Dimensions (W x D x H)	10 x 12 x 6 in (25 x 30 x 15 cm)
Weight	20 lb (9 kg)
Power	100 – 240 VAC, 1 A, 50 – 60 Hz universal power supply
Environment	Temperature: 39 – 95 °F (4 – 35 °C) Humidity: 5% – 95% Non-condensing Altitude: 0 – 6,562 ft (0 – 2,000 m)
Standard	Sample probe (stainless steel), probe cap and chain; spare fuse(s); tubing
Manual	IsoAir 310P Operations Manual included
Zero count filter	Included

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