

# IsoAir<sup>®</sup> 310P

## Aerosol Particle Sensor



The IsoAir 310P Aerosol Particle Sensor makes aerosol monitoring easy and cost-effective. It has unparalleled performance in a rugged, chemical-resistant, and easy-to-disinfect 316L stainless steel box. The clean, reliable internal pump lowers installation costs and the need for costly vacuum system connections.

### FEATURES

- Four standard channel sizes with two-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
- Optional 4-20 mA output
- Ethernet, MODBUS, or OPC communications
- Optional 4-20 mA input and solid state contact outputs for remote status indication



### 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  $\mu\text{m}$  for GMP and FDA compliance
- Ethernet 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 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 3 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

### APPLICATIONS

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

Without measurement there is no control.

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### specifications

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 ft <sup>3</sup> /min (28.3 L/min)
Sample probe/tubing:	3/8" ID; up to two meters of 3/8 inch tubing can be connected to the inlet
Vacuum source	Internal reciprocal blower is cool running long-lived with no contaminating carbon vanes. Blower output is HEPA filtered with exhaust out bottom of enclosure.
Blower shut off	Automatic if blower fails or if system detects sample probe capped while pump is on
Calibration	Calibration materials used are traceable to the USA National Institute of Standards and Technology (NIST). Unit is calibrated to ISO 21501-4.
Zero count level	≤ 7.07counts/m <sup>3</sup>
Maximum concentration @ 10% coincidence loss	1,374,269/ft <sup>3</sup>
Exterior surface	Passivated stainless steel (Grade 316L)
Communications	Ethernet (data, instructions); RS-232 (set-up and diagnostics only) Modbus TCP; OPC communications Optional 4-20 mA output (2 data channels plus 1 status channel) Optional 5 solid-state outputs and 3 4-20 mA inputs
Controlling software	Pharmaceutical Net, Facility Net (must purchase separately)
Data security	Unalterable data; 21 CFR Part 11 compatible transfer via 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, h, d)	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: 4 – 35 °C; Humidity: 5% – 95% Non-condensing; Altitude: 0 – 2000 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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Particle Measuring Systems, Inc. reserves the right to change specifications without notice.

### AUTHORIZED REPRESENTATIVE



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