

Airnet®

Particle Sensors



Airnet sensors make it easy and cost effective to simultaneously monitor air from multiple locations. These particle sensors offer a small footprint, unparalleled performance, and superior data transmission capabilities.

BENEFITS

Reduce Defects

- Real-time monitoring of defect-causing particles
- Proven technology provides reliable and accurate data
- Users can react immediately to particle contamination events

Increase Productivity

- Low cost solution for multipoint monitoring
- Interfaces with Facility Net or Pharmaceutical Net software for comprehensive management of cleanroom conditions
- System validation documentation available

Cost Effective

- Small footprint and flexible mounting options make it easy to install in cleanrooms and minienvironments
- Easy to clean/wipe down; designed to minimize particle traps
- Rugged, chemical-resistant Kydex® casing
- Diode laser reduces maintenance

APPLICATIONS

- Cleanroom monitoring
- Dedicated monitoring of critical locations
- Trend analysis
- Statistical process control
- Multi-location monitoring

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specifications

	201	310
Size range (μm)	0.2, 0.3, 0.5, 1.0	0.3, 0.5, 1.0, 5.0
Flow rate	0.1 CFM (2.8 LPM)	1.0 CFM (28 LPM)
Counting efficiency ²	70% \pm 10% at 0.220 μm	50% \pm 10% at 0.3 μm
Zero count	Meets JIS standards (less than 1 count per 5 min.)	
Maximum concentration ³	500,000/ft. ³	50,000/ft. ³
Laser source	Diode	
Laser classification	Class 1 per EN60825 (Internally, a Class IIIB laser is used, per EN60825.)	
Exterior surface	Kydex	
Dimensions (l, w, h)	7 x 5 x 5 in. 17 x 12 x 14 cm	7 x 5 x 5 in. 17 x 12 x 14 cm
Weight	5 lbs. (2.3 kg)	5 lbs. (2.3 kg)
Sample probe or tubing	1/8" ID	1/4" ID
Flow system	External vacuum.	
Vacuum source	> 15 in. Hg	> 8 in. Hg
Power	24 VDC, rated 100-240 VAC \pm 10%, 50-60 Hz	
Communication connectors	Ethernet requiring cable type CAT 5 UTP, 4-20 mA (three output channels: two particle data, one instrument status), and RS-232 (configuration and diagnostic tool only, no data)	
Status indicators	Facility Net interface: Programmable status (two-color LED), Activity (one-color LED) 4-20 mA interface: Laser and flow status (two-color LED), Activity (one-color LED)	
Calibration	Calibration materials used are traceable to the National Institute of Standards and Technology (NIST).	
Environment	Temperature: 4-35°C, Humidity: non-condensing	

² Allow \pm 5% variations in sample flow.

³ Greater than 95% accuracy (less than 5% coincidence loss) at maximum recommended ambient concentration.

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Particle Measuring Systems, Inc. reserves the right to change specifications without notice.

AUTHORIZED REPRESENTATIVE



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