

# AirSentry® II

## Point of Use Ion Mobility Spectrometer (IMS)



Particle Measuring Systems' newest Airborne Molecular Contamination (AMC) monitor, the AirSentry II, was designed with performance in mind.

A new Ion Mobility Spectrometry (IMS) cell provides part-per-trillion (ppt) sensitivity, fast response, and increased selectivity. Continuous coverage of a critical monitoring point and a central software platform allow for easy data acquisition and analysis.

By maximizing the value of contamination information delivered, including high-sensitivity uninterrupted data, the AirSentry II allows smarter decisions to be made for locating, controlling, and preventing molecular contamination.

### BENEFITS

- Continuous AMC monitoring of a critical location
- Robust and reliable data acquisition, control, and analysis
- No moving parts
- Infrequent preventive maintenance
- Ethernet, RS-232, 4-20 mA outputs
- Compact size allows placement in any location
- Single external calibration system ensures analyzer to analyzer matching

### APPLICATIONS

- Exposure optics
  - Hazing and lens warranty data
- Reticle stage
  - Reticle hazing
- Resist track
  - Dispense/develop contamination (t-topping)
- Reticle inspection tool and stockers
  - Storage contamination
- Ambient cleanroom monitoring
  - Baseline contamination
- Make-up and recirculated air analysis
  - Contamination movement



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### specifications

Contaminants detected	Individual analyzers to detect Ammonia, Amines, or Acids
Range	0 – 50 ppbv
Sample flow	< 1000 cc/min
LDL (3σ)*	70 ppt
Response time	< 5 min to 95% (Dry)
Cleardown time	< 5 min to 5% (Dry)
Temperature range	Operating: 59 – 86 °F (15 – 30 °C) Storage: - 40 – 122 °F (- 40 – 50 °C)
Humidity range	Operating: 30 – 60% RH Storage: 0 – 90% RH
Dimensions (l, w, h)	12 x 9 x 4 in (31 x 23 x 10 cm)
Weight	5 lb (2.3 kg)
<b>Utility Requirements</b>	
Power	100 – 240 VAC (50/60 Hz), 60 W
Clean Dry Air (CDA)	< 1000 cc/min, - 76 °F (< - 60 °C) dew point, 5 psig precision regulated, no particles > 50 μm, hydrocarbon free
Vacuum	< 33 kPa (absolute)
<b>Communication</b>	
Data output	Ethernet (to Facility Net software), RS-232 (to HyperTerminal), 4-20 mA
User interface	4 LEDs, 2 buttons (Zero/Span Calibration)

\* 5 minute sample averaging, 760 Torr  
AirSentry® is a registered trademark of Particle Measuring Systems, Inc.  
Patents pending.  
Particle Measuring Systems, Inc. reserves the right to change specifications without notice.



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