

# AirSentry® II

## Point of Use Ion Mobility Spectrometer (IMS)



Particle Measuring Systems' newest Airborne Molecular Contamination (AMC) monitor, the AirSentry® II monitor, was designed with performance in mind. The 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 monitor allows smarter decisions to be made for locating, controlling, and preventing molecular contamination.



### BENEFITS

- Continuous monitoring of a critical point-of-use location
- Robust and reliable data acquisition, control, and analysis
- No moving parts
- Infrequent preventative 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

**Without measurement, there is no control.**

# AirSentry II

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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 (3 $\sigma$ )*	70 ppt
Response time	< 5 min. to 95% (Dry)
Cleardown time	< 5 min. to 5% (Dry)
Temperature range	15 to 30°C (Operating), -40 to 50°C (Storage)
Humidity range	30 to 60% RH (Operating), 0 to 90% RH (Storage)
Dimensions (l, w, h)	12 x 9 x 4 in. (31 x 23 x 10 cm)
Weight	5 lbs. (2.3 kg)
<b>Utility Requirements:</b>	
Power	100 - 240 VAC (50/60 Hz), 60 W
Clean Dry Air (CDA)	1000 cc/min, -60°C dew point, 5 psig precision regulated, no particles > 50 $\mu$ m
Vacuum	33 kPa (absolute)
<b>Communication:</b>	
Data output	Ethernet (to Facility Net software), RS-232 (to Hyper Terminal), 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.	



Registration applies to the Boulder, Colorado facility.



Particle Measuring Systems Headquarters  
5475 Airport Blvd., Boulder, CO 80301  
1-303-443-7100 1-800-238-1801 Fax: 1-303-546-7331  
Instrument Service & Support: 1-800-557-6363  
Customer Response Center: 1-877-475-3317

Particle Measuring Systems Europe  
Tel: +44 1684 581000  
PMSEurope@pmeasuring.com

Particle Measuring Systems Japan  
PMSJapan@pmeasuring.com

Particle Measuring Systems Asia Pacific  
PMSAsiaPacific@pmeasuring.com

Particle Measuring Systems Singapore  
Tel: +65-6496 0330  
PMSSingapore@pmeasuring.com

Particle Measuring Systems China  
PMSChina@pmeasuring.com

Particle Measuring Systems Mexico  
PMSMexico@pmeasuring.com

Particle Measuring Systems Puerto Rico  
PMSPuertoRico@pmeasuring.com

### AUTHORIZED REPRESENTATIVE