

Aim[®]-200

Non-Volatile Residue Monitor



The Aim[®]-200 non-volatile residue monitor is the latest development in real-time non-volatile residue (NVR) monitoring. Replacing traditional witness plates, witness optics, and quartz crystal microbalances, the Aim[®]-200 non-volatile residue monitor provides superior sensitivity and sample intervals as low as five seconds. A high frequency, temperature controlled surface acoustic wave (SAW) sensor detects sub-monolayer changes in condensable contamination on critical surfaces caused by organic and inorganic contaminants.

BENEFITS

- SAW sensor sensitivity of 3.2 pg/cm²/Hz
- Temperature controlled sensors to $\pm 0.1^{\circ}\text{C}$
- Ethernet, RS-232, or on-board data storage and communication
- Ambient environment monitoring or pressurized purge gas monitoring options

FEATURES

- Onboard storage of 50,000 samples
- Probes can be mounted four meters away from controller (Optional extension to 30 meters)
- Real-time data collections, monitoring, and alarms via Facility Net
- Up to two probes per controller increase monitoring area covered

APPLICATIONS

- NVR monitoring of...
 - High-bay or low-bay cleanrooms
 - Vehicle and payload assembly areas
 - Laminar flow hoods or workbenches
 - Encapsulation bays

AiM-200

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specifications

SMC collection surfaces	SiO ₂
Nominal mass sensitivity	Sub-monolayer, i.e. detects mass changes of 3.2 pg/cm ² /Hz
Sample interval	From every 5 seconds to every 24 hours
Software requirements	Facility Net (for real-time data recording in a facility management system), HyperTerminal® or Telnet (for stand-alone use only)
Communications	Ethernet, RS-232
Data storage	Store up to 50,000 samples
Temperature stability	Stable within ±0.1°C with temperature control
Relative humidity measurement	±3% RH accuracy and 0.5% RH repeatability
Dimensions (h, w, d)	Controller (7.5 x 4 x 1.5 in.), probe (3.5 x 2 x 1.5 in.), probe and stand (4 x 6 x 4 in.)
Weight	Controller (1.35 lbs. / .62 kg), probe (1.6 lbs. / 7.3 kg), probe and stand (1.7 lbs. / .77 kg)
Power	100-240 VAC power supply
Battery	3.0 V non-rechargeable lithium battery (type CR2450) provides internal data and clock retention for up to 2 months with unit unpowered
Operating temperature	15-35°C (59-95 °F)
Operating relative humidity	20-50% RH

U.S. Patents and applications apply - 5,476,002 and 5,661,226; U.S. and foreign patents pending.
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AUTHORIZED REPRESENTATIVE



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