



AIM3000 Series Continuous Dust Monitor Filter Leak Alarm

AIM3000 continuous dust monitor is an accurate dust concentration measuring system with advanced leak detection capabilities. It continuous real-time measurement and average analysis and recording of dust concentration and gives out early warning of leak for filters and process control. It can be used on all types of dust collectors/bag filters and has a special sensor designed for ESP (Electrostatic

High performance

- Detects solid particles with diameters from 0.3 μ m to 100 μ m.
- Trend monitoring with 4-20mA output.
- Can be calibrated to concentration unit mg/m³.
- Two independent alarm relays for limit or logic configurations.
- Automatic drift compensation.
- High temperature sensor up to 1500°F (815°C).
- High-pressure application up to 20 MPa.
- Buildup on sensor almost has no affect to reading.
- Measurement not affected by particle color

Simple to use

- Requires no special training or skills.
- One touch calibration, quick and simple.
- No manual sensitivity adjustment required.
- LED display for measuring value and manual guide.
- Integral and remote system.
- Changeable probe length from 100 mm to 2000 mm.

Easy-Installation and Maintenance-Free

- Easily installed through NPT thread or flange
- No alignment required
- No moving parts to deteriorate or break down.
- No routine cleaning or recalibration necessary.
- Ragged construction resists corrosion, vibration and abrasion.
- Usually do not need purging air

Features & Benefits

- Continuously monitor and maintain filter or ESP efficiency
- Comply with US and International EPA regulations
- Simple absolute output or correlate to mg/m³ or g/ft³
- Prevent the escape of valuable or hazardous powders
- Low-cost switch with relay output only for leak alarm

Application for Dust-Collecting Equipment and Others:

Cement Factories

- For coal ash and other raw materials.
- For cement and concrete products.
- For kilos, AQC (Air-quality Control) systems, and other equipment.
- For sing- and fly ash.

Steel Plants

- For steel sintering.
- For casting.
- For coke ovens.
- For recycling-related facilities such as those for waste disposal of plastics.

Chemical Factories

- For canalization.
- For smoke removal.

Coal-fired Power Plants

- For coal prepare
- For ESP control.
- For fly ash

Waste incineration Plants

- For monitoring the environment.
- For incinerators.
- For fusion furnaces.
- For high-temperature incinerators used to cut emissions such as dioxins.

Rubber and Carbon Factories

- For monitoring of dust accumulation in ducts.
- For handing raw materials.

Fertilizers Plants

- For preventing mixture of fertilizers.

Spice and Paint Factories

- For traceability-related equipment.

Gas Extraction Equipment for Boilers

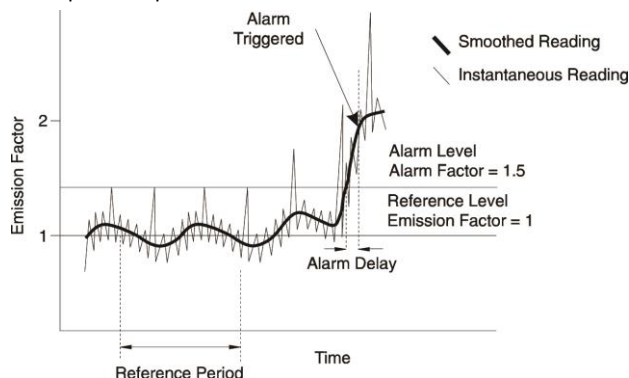
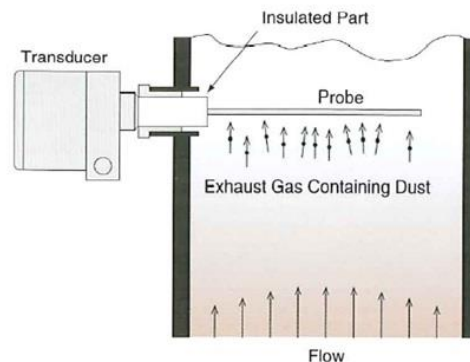
- For generators

Other Dust-collecting Equipment

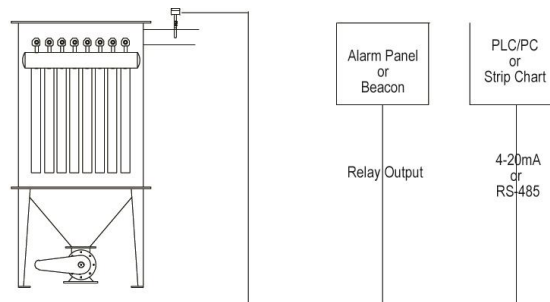


OPERATION PRINCIPLE

AIM3000 series monitors utilize special AC turboelectric measurement principle, the sensor signal comes not only from solid particles contacting the sensor rod but also from those passing through nearby. This technique is very sensitive for small concentration case, which enables the use of both bare and insulated probe. The fully insulated probe is suitable for high humidity gas steam as well as for applications with high conductivity dust loadings. It's suitable for corrosive gases or condensate and almost not affected by particle buildup on the probe.



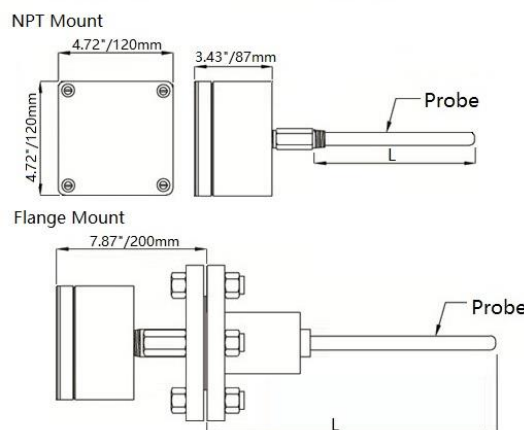
SYSTEM



SPECIFICATIONS

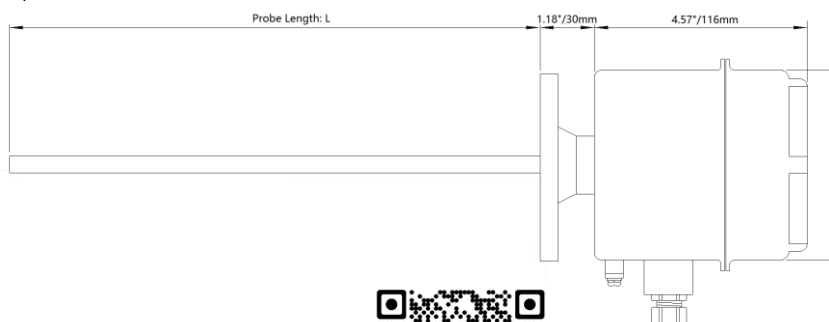
	AIM3000	AIM3005
Measuring range:	0.1mg/m ³ to 1kg/m ³	Same
Particle size:	0.3um min	Same
Relay Output:	2 std. (SPST, 5A@240VAC)	Same
4-20mA Output:	1 std. (Isolated, 12 bit)	Not available
Serial Port:	1 opt (RS485)	Same
Display:	3 digital 7seg LED	LED indicator
Enclosure:	NEMA 4X std., other opt	Same
Ranging:	Log or linear (Auto or manual)	Same
Data averaging:	Standard (user adjustable)	Not available
Output scaling:	To mg/m ³ or gr/ft ³	Not available
Temperature:	-13F to +160F (-25 to 70C)	Same
Power supply:	90 to 240VAC, 50/60Hz or 24VDC	Same

MOUNTING



Sensor:	T31	T32	T33
Length*:		10, 18" std.	
Material:	316SS & Peek	304SS with TFE Layer	316SS & Ceramic
Mounting**:		3/4" NPT or BSP	1-1/2" NPT or BSP
P @ Temp:	13.8bar@232°C (200Psi@450°F)		13.8bar@815°C(200Psi@1500°F)
Housing:		IP66	
Cable***:	300' Max length, 450F Max temp		Special Teflon coaxial

Optional: Explosion proof for Ex d IIC T6



*Other Length Opt.

**Tri-Clamp or Flange opt

*** Remote system only

T34 Sensor for ESP only contact factory.

