

## MILLENNIUM SMOKE & OIL MIST DETECTOR AIR PARTICLE MONITOR (APM)

Explosion-proof Detection of  
Smoke, Oil Mist, Dust and Ash

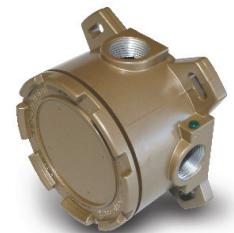


- Explosion-proof, Class 1, Division/Zone 1 Approved
- 2nd Generation Infrared Optical Sensor Technology
- Operating Temperature Range -40°C to +75°C (-40°F to +167°F)
  - Analog or Relay Output Configurations
  - Remote Sensor Separation - 2000 feet
- Intuitive Menu System, Calibrations 90 Seconds From Start to Finish
  - Field Adjustable Sensitivity Settings
- Not Effected By High Volume Air Velocity
- Multi-language, Bright Scrolling LED Display

The Millennium Smoke & Oil Mist Detector (Air Particle Monitor - APM) is the industry's only infrared optical monitor that is certified for use in hazardous areas for constant, reliable monitoring of ambient air for products of combustion such as smoke, oil mist, carbon, dust and ash.

This unique product is the ONLY detector of its kind that's certified explosion proof — ideally suited for a wide variety of industrial applications. Proven installed base includes Class 1, Division 1 areas requiring accurate air particle monitoring such as air ducts, battery rooms, engine rooms, compressor stations, offshore living quarters and HVAC air intake points, to name just a few.

The advanced sensor technology has several key performance features: it utilizes a powerful, single-beam IR lamp with no mirrors to ever become contaminated — sensor performance is not effected by high volume air velocity — it's field adjustable zero level of obscuration and multiple sensitivity settings allows for fine tuning within specific application conditions to optimize performance and eliminate false alarms — and it comes available with multiple installation options to suit any application.



**Termination Box  
Included**

**The Millennium Smoke & Oil Mist Detector is an intelligently designed detector, engineered to the highest standards for performance and quality and ideally suited to withstand the most extreme, high-risk industrial applications.**

# MILLENNIUM SMOKE & OIL MIST DETECTOR

Explosion-proof Airborne Particle Monitor (APM)

BCR-0027-00-0011

## MILLENNIUM APM SENSOR SPECIFICATIONS

Temperature Range	-40°C to +75°C (-40°F to +167°F)
Weight	0.9 Kg (2.0 lbs.)
Enclosure Material	Anodized / Powder coated aluminum (optional stainless steel)
Certifications	• CSA and ANSI-UL/ISA certified for hazardous locations. Class I, Division 1, Groups B, C and D. Temperature code T5. • IEC Rating Ex d IIB+H2 T5 (Class I, Zone 1 Group IIB+H2T5) • Enclosure Type NEMA 4X.
Sensor Warranty	2 Years

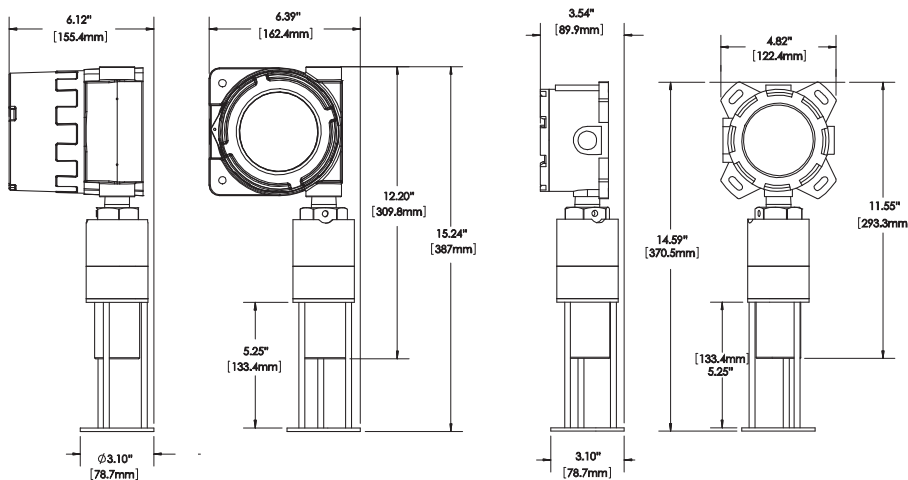
## MILLENNIUM TRANSMITTER/CONTROLLER

SPECIFICATION	MLP "AR" VERSION
Operating Voltage Range	10.5 to 32.0 V dc
Power Consumption (at 24 V dc)	Nominal 74 mA, 2.0 W Maximum 132 mA, 3.6 W
Operating Temperature and Humidity Range	Operational -50°C to +85°C (-58°F to +185°F) / Certified -40°C to +85°C (-40°F to +185°F) 0 to 100% Relative humidity, non-condensing
Output(s)	<b>Analog 4-20 mA:</b> Max. loop impedance of 800 Ohms at 32 V dc or 150 Ohms at 10.5 V dc. Isolated or non-isolated loop supply <b>Relays:</b> 3 Form C contacts for Fault, Window Condition, and Smoke Status. Rated 5 Amp at 30 V dc / 250 V ac Selectable energized/de-energized, latching/non-latching
Enclosure Material	Powder coated Copper Free Cast Aluminium (316 Stainless Steel Optional)
Weight	3.2 Kg (7.0 lbs)
Electronics Warranty	3 Years
Alpha-numeric display	Bright 8-digit LED scrolling type display - English, French and Spanish languages available
Unique Features	Local Power Switch and Meter Test Jacks on faceplate for easy maintenance. Easy to read instructions for one-person, NON-INTRUSIVE calibration.
Certifications	• CSA and ANSI-UL/ISA certified for hazardous locations. Class I, Division 1, Groups B, C and D. Temperature code T4. • IEC Rating Ex d IIB+H2 T4 (Class I, Zone 1 Group IIB+H2 T4) • Enclosure Type NEMA 4X.

## ORDERING INFORMATION

MILLENNIUM PREMIUM	SENSOR ELEMENT	OPTIONS / ACCESSORIES
<b>MLP-AR-   Analog and Relay outputs</b>	<b>APM-OP-SEP   Optical Infrared APM Sensor Sensor Separation Kit Included</b>	<b>-SS   Stainless Steel Sensor Housing</b>

**ORDER EXAMPLE: MLP-AR-APM-OP-SEP-SS** - Millennium Premium Controller, Optical Infrared APM Sensor, Sensor Separation Kit, Stainless Steel Housing Option.



### Mounting Options:

- UN-MK-1 — 2" pipe mounting kit, comes with mounting bracket and hardware (stainless steel) - also allows flushmount option for JB-MP with sensor attached
- UDM-001 — Universal duct mount assembly with 1M inlet sampling pipe (stainless steel) APM Controller or Junction box connects directly to UDM with sensor inside
- UDM-002 — Universal duct mount assembly with 1.5M inlet sampling pipe (stainless steel) APM Controller or Junction box connects directly to UDM with sensor inside
- UDM-003 — Universal duct mount assembly (stainless steel)

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