



## Explosion-Proof Smoke Detector / OPTICAL

# MILLENNIUM SERIES

The Millennium Series is an innovative line of industrial detectors. Its microcontroller provides fast, accurate and continuous monitoring in extreme environments.

Fireguard's Millennium Series, Explosion-Proof Smoke Detector (APM) is an infrared optical monitor. It is used in hazardous industrial applications to monitor ambient air for the presence of particulate matter from products of combustion such as smoke, carbon, ash, or oil mist.

The compact and explosion-proof Millennium features a power disconnect switch to simplify maintenance, a scrolling LED display for calibration and configuration and meter jacks for easy current loop monitoring. The internal circuitry is equally well designed with performance enhancing proprietary circuits and firmware.

We provide products at a competitive price, with superior functionality and demonstrated effectiveness.



Shown: Premium Version with APM and Optical Protection

## FEATURES

Cost effective and Class I, Division 1 rated for industrial and hazardous locations

Scrolling 8-character LED display provides easy to read prompts and instructions (3 languages)

LED display is visible in all lighting conditions (sunlight / darkness)

Handy power switch on Controller allows power disconnect for maintenance

Convenient local and remote reset capability to clear latched alarms

Current loop test jacks to measure current output signal without disconnecting wiring

Easy, non-intrusive, one person calibration, configuration and sensitivity adjustment

Low power consumption for use with 12 or 24 V dc systems

Rugged design includes conformal coated circuit boards and weather-proof housing to withstand extreme conditions

Remote Sensor Separation of up to 2000 feet

Advanced, second generation Infrared Optical sensor technology

3 YEARS FOR ELECTRONICS

WARRANTY



2 YEARS FOR SENSORS

QUALITY


GAS • FIRE • AIR QUALITY • VIDEO/MOTION

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## APM SENSOR SPECIFICATIONS

Operating Temperature Range	-40°C to +85°C (-40F to +185F)
Weight	0.9 Kg (2.0 lb)
Enclosure Material	Anodized / Powder coated aluminum (optional stainless steel)
Certifications	 CSA and NRTL/C certified for hazardous locations Class I, Division 1 Groups B, C and D.  IEC Rating Ex d IIB+H2 T5, NEMA 4X

## TRANSMITTER / CONTROLLER SPECIFICATIONS

MILLENNIUM	PREMIUM "AR"
Operating Voltage Range	10.5 to 32 V dc
Power Consumption (at 24 V dc)	Maximum 3.6 W with APM
Operating Temperature and Humidity Range	-40°C to +85°C (-40F to +185F) / 0 to 100% relative humidity, non-condensing
Unique Features	Local Power Switch and Meter Test Jacks on faceplate for easy maintenance
Enclosure Material	Powder coated Copper Free Cast Aluminum (316 Stainless Steel Optional)
Weight	3.2 Kg (7.0 lbs)
Certifications	CSA and NRTL/C 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). Maximum Operating Ambient of 85°C. Enclosure Type 4X  II2G EEx d IIB+H2 T5 (-40°C Tamb 85°C). NOTE: Electronics only - CSA and NRTL/C certified for hazardous locations Class I, Division 2 Groups A, B, C and D
Outputs	<b>Stepped Analog 4-20 mA:</b> Maximum loop impedance of 800 Ohms at 32 V dc or 150 Ohms at 10.5 V dc Isolated or Non Isolated loop supply <b>Alarm 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
Alpha-numeric display	Bright 8-digit LED scrolling type display - English, Spanish or French languages available
Calibration	Easy to read instructions for one-person, NON-INTRUSIVE calibration

## ORDERING INFORMATION

MILLENNIUM APM			
MLP-AR-APM-NOP-SEP (No Optical Protection)	Millennium Premium version Airborne Particle Monitor Sensor Separation Kit is included		MLP-AR-APM-OP-SEP (Optical Protection)
	Millennium Premium version Airborne Particle Monitor Sensor Separation Kit is included		