

SENSAIR^{CMB}

Heavy Duty Combustible Point Gas Monitor



- FM Certified for Hazardous Classified Area Installation in Division 1 & Division 2 and ATEX Zone 1 & Zone 2
- Explosion Proof 316 Stainless Steel Sensor Housing
- Poison Resistant Catalytic Bead Sensor with Rapid Response
- On-Board Bright LED Display
- Non-Intrusive Zero & Span Adjustments
- Easy Installation and Maintenance in Retrofit or New Applications
- 3-wire Design with 4-20mA Output
- Horizontal or Vertical Installation



SensAir^{CMB} is a heavy duty combustible point gas detector designed to be poison resistant. Sulfides and Silicons are known to poison or inhibit standard catalytic bead sensors at concentrations as low as one part per million (1 PPM). Poisoned catalytic bead sensors are rendered ineffective and unable to detect gas. Advanced sensor technology used in SensAir^{CMB} significantly reduces the effects of poisoning, thereby minimizing the replacement of sensors and costs of ownership, making this product the ideal gas detector for chemical and hydrocarbon processing and manufacturing facilities.

The advanced SensAir^{CMB} catalytic bead sensor employs a pair of pellistors (catalytic beads) that provide uniform electrical resistance in clean air. An active pellistor "catalyzes" combustible gas when present while a reference pellistor compensates for changes in ambient environmental conditions. The difference provides an output that is accurate and linear. This advanced design provides excellent combustible gas sensitivity, rapid response, and extended sensor life.

SensAir^{CMB} is housed in a rugged explosion-proof aluminum enclosure with variable mounting orientation options. The 316 stainless steel sensor housing provides excellent versatility for mounting SensAir^{CMB}. A three-wire, 4-20mA output enables easy installation in retrofit or new applications with interface to common facility communication links. The instrument has an LED display and non-intrusive user interface for easy maintenance and setup.



Left to Right: Flow Block (821-0605-01), Sensor Shield (821-0603-01), and Calibration Adaptor (821-0604-01).

See reverse for product specifications.

Product Ordering Configurator:

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Hazardous Area	Conduit	Calibration
1 Class 1 Division 1	0 Horizontal Orientation	1 Calibrate for Methane
2 Class 1 Division 2	1 Vertical Orientation	2 Calibrate for Propane
		3 Calibrate for specified K-factor

Specifications

Sensor

Poison resistant catalytic bead. SensAir CMB can be used for detection of Methane, Propane, Pentane, Butane and most other common combustible gas detection needs.

Power Requirement

24 VDC, nominal, up to 6 Watts

Voltage Range

12-30 VDC

Current Consumption (Max)

300mA, typical 125mA

Termination Resistance

Less than 500Ω
250Ω recommended

Transmission Link

4-20 mA current source, non-isolated with respect to Common (3 wires)

Operating Temperature

-4° to 167°F (-20° to 75°C)

Storage Temperature

-40° to 122°F (-40° to 50°C)

Operating Humidity

0-95% RH, non-condensing

Oxygen Requirement

10% by volume, minimum

Approvals

FM US and Canadian | NEC/CEC

Class I, Div 1, Groups A, B, C, D T4; Nonincendive for installation in Class 1 Division 2 Groups A, B, C, D (FM6320, C22.2 No. 152)

ATEX

CE 0518 Ex II 2 G Ex d IIC T4 (FM13ATEX0066)

Ex II 3 G Ex nA d IIC T4 (FM13ATEX0084)

For Class I Division 1 and Division 2 approval information, please refer to the approval drawing in the user manual.

Example: 820-0610-01 is a standard orientation (horizontal) SensAir CMB with 4-20mA output calibrated for Methane approved for Class 1 Division 1 hazardous classified areas.

