SC310 Catalytic Bead Combustible Gas Sensor
Millennium II Series Sensors

The SC310 provides versatile, robust and field proven performance in a rugged package designed for the most extreme industrial environments. For all flammable gas types, % LEL detection is fast and reliable with simplified field serviceability using the M2B, M21, or M22 universal transmitters. SensorGuard technology protects against exposures to high gas concentrations allowing a full 5 year warranty on the SC310 sensor.
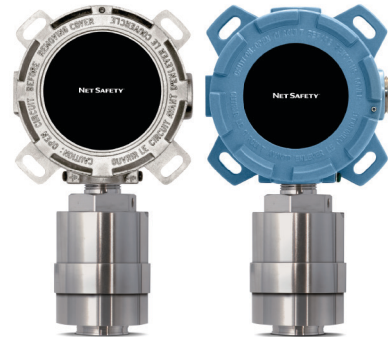
- Lowest power consumption available
- Long range (+2,000 ft.) sensor separation
- Industry leading 5 year sensor warranty
- Non-selective response - detects both hydrocarbon and non-hydrocarbon based combustible gases

ST3 Sensors shown with JB-MPD-A/S.

- Complete profile of correction factors available for accurate calibrations
- Designed to perform in the most extreme industrial environments

Single or Dual Channel Transmitter Available

There's no longer the need to purchase multiple gas specific detectors. You have the option to utilize 1 or 2 toxic and/or combustible gas sensors on a single Millennium II transmitter and easily mix and match any of our sensor technologies.

Sensor Designed for Durability & Performance

Advanced engineering delivers an LEL gas sensor with excellent response times, longevity and sensitivity with negligible zero drift related to pressure, humidity and temperature changes. The housing is designed for optimal resistance to shock and vibration.

SensorGuard Protection System

Oversaturation (> 100 % LEL) is prevented by our advanced microprocessor automatically preventing premature sensor burnout when the presence of concentrated gas remains in the area, which dramatically increases the sensor's lifespan.

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Specifications

Table 1 - SC310 Catalytic Bead Combustible Gas Sensor

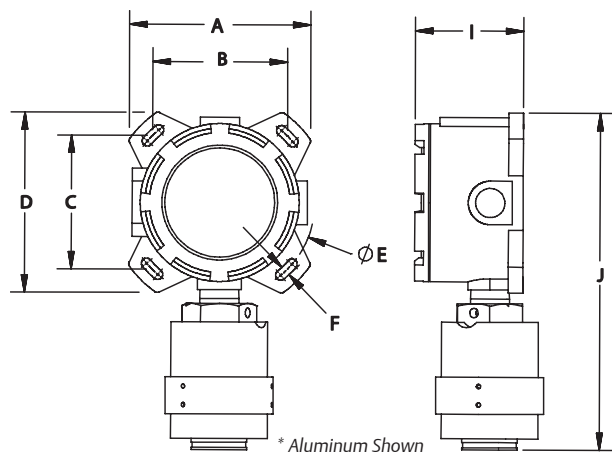| Combustible Gases [% LEL] Catalytic Bead P/N: SC310(A/S)-100-ASSY	
Performance	
Response Time	T50 ≤ 5.5 s T60 ≤ 6 s T90 ≤ 12 s
Accuracy	±3 % < 50 % | ±5 % > 50 %
Detection Range	0–100 % LEL Gases Detected (partial list): Methane, Propane, n-Butane, Isobutylene, Hydrogen, Ethane, Pentane, Hexane, Heptane, Ethylene, Propylene
Zero Drift	±2 % per month
Repeatability	±1 % LEL full scale
Electromagnetic Compatibility (EMC)	IEC 61000-4-3
Environmental	
Temperature	-40°F to +167°F (-40°C to +75°C)
Relative Humidity	0–95 % RH non condensing
Ingress Protection (IP) Rating	IP64
Enclosure	
Enclosure Material	Aluminum (AL6061) or stainless steel (SS316)

Certifications	**North American**
	   Class I, Division 1, Groups BCD T5
	   Class I, Zone 1, AEx/Ex d IIB +H2 T5
	   -40 °C ≤Ta ≤+75 °C
	IECEx
	   Ex d IIB+H2 T5 Gb
	   IECEx FMG 12.0007X
	   -40 °C ≤Ta ≤+75 °C
	INMETRO
	   - Ex d IIB+H2 T4 Gb IP66/67

Sensor Separation	Up to 2,000 feet/600 meters (18 AWG cabling)
Transmitter Required	Millennium II Series (M21, M22, M2B)
Warranty	Five years

Accessories and Ordering Information

Table 2 - SC310 Catalytic Bead Combustible Gas Sensor

JB-MPD-S	Termination Box - Digital Output - Stainless Steel
JB-MPD-A	Termination Box - Digital Output - Aluminum

CCS-1	Calibration Cup/Rain Shield/Splash Guard/Dust Filter with DF-1
CC-INLINE	Inline Calibration Adaptor, allows slip stream of gas to be brought to sensor and vented back into main stream

IPF-001	IP 66/67 Filter for SX3 Series sensors, enhancedsensor protection from contamination by dirt and moisture

Ordering Information
SC310 A-100-ASSY (Aluminum Housing) Combustible Gases, 0–100 % LEL
SC310S-100-ASSY (Stainless Steel Housing) Combustible Gases, 0–100 % LEL

Drawings and Dimensions

* Aluminum Shown

	A		B		C		D		E	
Aluminum Housings	6.3	160	5.6	142	5.4	137	9.7	246	6.0	152
Stainless Steel Housings	5.9	150	5.1	130	4.6	117	8.9	226	6.0	152

	F		G		H		I	
Aluminum Housings	5.7	145	2.6	66	2.9	74	4.1	103
Stainless Steel Housings	5.8	147	2.6	66	2.9	74	3.9	100

EmersonProcess.com/FlameGasDetection

YouTube.com/user/RosemountAnalytical

Analyticexpert.com

Twitter.com/Rosemount_News

Facebook.com/Rosemount

Americas
Emerson Process Management
6021 Innovation Blvd.
Shakopee, MN 55379
USA
T + 1 866 347 3427
F + 1 952 949 7001
Safety.CSC@Emerson.com

Europe
Emerson Process Management AG
Neuhofstrasse 19a P.O. Box 1046
CH-6340 Baar
Switzerland
T + 41 (0) 41 768 6111
F + 41 (0) 41 768 6300
Safety.CSC@Emerson.com

Middle East & Asia
Emerson Process Management
Emerson FZE
Jebel Ali Free Zone
Dubai, UAE
P.O. Box 17033
T + 971 4 811 8100
F + 971 4 886 5465
Safety.CSC@Emerson.com

Asia Pacific
Emerson Process Management
1 Pandan Crescent
Singapore 128461
Singapore
T + 65 777 8211
F + 65 777 0947
Safety.CSC@Emerson.com

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