

SC310 Catalytic Bead Combustible Gas Sensor

Millennium II Series SMART 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 catalyst poisons allowing a full 5 year warranty on the SC310 sensor.



ST3 Sensors shown with JB-MPD-A/S

- SMART Sensor Technology, Transmitter Automatically Recognizes Sensor Configuration
- Lowest Power Consumption Available
- Long Range (+2000ft.) Sensor Separation
- Industry Leading 5 Year Sensor Warranty
- Non-selective Response - Detects Both Hydrocarbon and Non-Hydrocarbon Based Combustible Gases
- Complete Profile of Conversion K 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.

SMART Sensor Technology

SMART (Self Monitoring Analysis and Reporting Technology) sensors are pre-calibrated and easily connected to the transmitter which instantly recognizes a newly fitted sensor, automatically uploading it's specific configuration profile.

Digital Communications

Sensor and transmitter continuously communicate digitally, giving you the confidence of stable, accurate protection with fast response times even over long separation distances.

Global Certifications

The SC3 Series has been approved to international hazardous area safety standards for functional operation and performance.

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. Housing is designed for optimal resistance to shock, vibration, and electromagnetic interference.

SensorGuard Protection System

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

Compatible Transmitters:

M21-A/S
M22-A/S
M2B-A/S



SC310 Catalytic Bead Combustible Gas Sensor Specifications

COMBUSTIBLE GASES [%LEL]
 CATALYTIC BEAD
 P/N: SC310(A/S)-100-ASSY

Performance	
Response Time	T50 ≤ 5.5sec T60 ≤ 6sec T90 ≤ 12sec
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
Environmental	
Temperature	Certified: -40°C to +75°C (-40°F to 167°F) Performance Verified: -55°C to +85°C (-67°F to 185°F)
Relative Humidity	0–99% RH non condensing
IP/NEMA Rating	IP64 - NEMA 4X
Enclosure	
Metallurgy	Aluminum or 316 SS
Certifications	North American - Class I, Division 1, Groups BCD; Class I, Zone 1, Group IIB+H2 - Type 4X, IP64 FM 6310/6320, ANSI/ISA 12.13.01, CSA-C22.2 No152 ATEX - II 2 G Exd IIB+H2 T5 IP64 - IEC61779-1 & IEC61779-4 IECEX (pending) INMETRO - Ex d IIB+H2 T4 Gb IP66/67 GOST-R
Sensor Separation	Up to 2000 feet/600 meters (18 AWG cabling)
Transmitter Req'd	Millennium II Series (M21, M22, M2B)
Warranty	5 years

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Accessories and Ordering Information

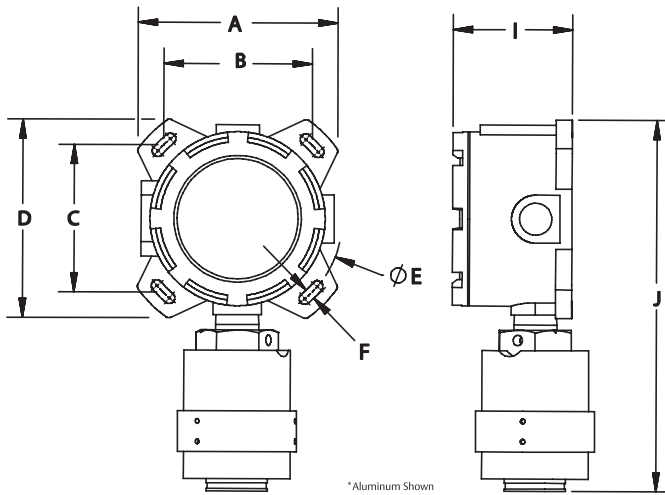
JB-MPD-S	Termination Box - Digital Output - Stainless Steel
JB-MPD-A	Termination Box - Digital Output - Aluminum
CCS-1	Calibration Cup/Rain Shield/Splash Guard/Dust Filter with DF-1
CC-INLINE	Inline Calibration Adaptor, allows slip stream of gas to be brought to sensor and vented back into main stream
DSC-1	Dust / Sand protective clip (includes DF-1 disposable filter)
IPF-001	IP 66/67 Filter for SX3 Series sensors, enhanced sensor protection from contamination by dirt and moisture

ORDERING INFORMATION

SC310A-100-ASSY (Aluminum Housing)
 Combustible Gases, 0-100%LEL

SC310S-100-ASSY (Stainless Steel Housing)
 Combustible Gases, 0-100%LEL

Drawings and Dimensions



	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		

HEADQUARTERS:
FLAME AND GAS DETECTION
Emerson Process Management
Net Safety Monitoring Inc.
2721 Hopewell Place NE
Calgary, Alberta, Canada T1Y 7J7
T +1 (403) 219 0688
T 1 866 FIREGAS
F +1 (403) 219 0694
www.emersonprocess.com/safety



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°Please refer to manuals for complete specifications.