Description

Model SA1 smart sensor modules are designed to detect and monitor various gases in ambient air. The modules consist of a target specific gas detection sensor and a microprocessor-based signal conditioning circuit. Both are housed in a metallic enclosure fitted with gold plated connecting pins. The "Smart Sensor Module" is factory programmed for a specific gas and range of sensitivity. On power up the gas type, measurement range and previous zero and span calibration data points are read by the transmitter facilitating a fully automated startup. The modules can be used with any of Safeguard Analytics gas detection transmitters.

Model SA1-CS2 (Carbon Disulfide)
Specification*

Detector Type	Electrochemical
Detection Method	Diffusion (Discontinuous Measurement)
Range of Sensitivity**	0-100 PPM
Response Time	T90 ≤ 30s
Accuracy	± 2% FS
Zero Drift	< 2% per month
Span Drift	< 2% per month
Temperature Range	-40∘C to +50∘C; -40∘F to 122∘F
Humidity Range	15% to 90% RH non-condensing
Pressure Range	1 atm ±.1
Input Power	3.5 to 5 VDC
Power Consumption	2.64 milliwatts
Detector Life Expectancy	>2 years
Detector Warranty	1 years

*Specifications subject to change without notice **Contact Safeguard Analytics for additional ranges*

Cross Interference Data

Interfering Gas	Concentration	Response	Interfering Gas	Concentration	Response
C_2H_4	100	2	NO	50	0
CO	250	5	NO2	20	0
H2	100	0	PH3	20	0
H2S	20	0	SO2	100	0

Caution: Cross interference data is based on small lot sampling and does not claim to be complete. Referenced data may represent testing conducted by third party sensor suppliers as well as testing conducted by Safeguard Analytics. Interfering gases should not be used for calibration.

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