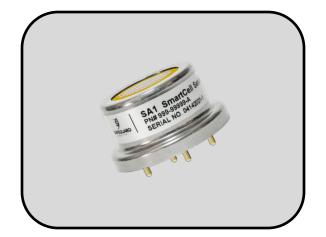


Model SA1-CH4-LEL

Smart Sensor Module



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 microprocessorbased 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.

Specification Model SA1-CH4-LEL	
Detector Type	Non-dispersed Infrared (NDIR)
Detection Method	Diffusion
Range of Sensitivity**	0-100% LEL Methane
Response Time	T90 ≤ 30s
Accuracy	± 3% FS to 50% of FS, ± 5%FS > 50% FS
Zero Drift	< 2% FS per year (In clean air)
Span Drift	< 2% FS per year (In clean air)
Temperature Range	-30°C to +60°C; -°22F to 140°F
Humidity Range	0% to 95% RH non-condensing
Pressure Range	1 atm ±.1
Input Power	~ 3.5 to 5 VDC
Power Consumption	< 300 milliwatts
Detector Life Expectancy	> 5 years
Detector Warranty	5 years

*Specifications subject to change without notice

**Range of Sensitivity Options							
Range	Model No	Range	Model No				
0-5000 ppm CH4	Model SA1-CH4-PPM	0-100 % LEL CH4	Model SA1-CH4-LEL				
0-100 % LEL HC	Model SA1-HC-LEL	0-100 % VOL CH4	Model SA1-CH4-100v				
Contact Safaquard Apolytica for additional ranges of constituity							

Contact Safeguard Analytics for additional ranges of sensitivity

Detectable Hydrocarbon Gases (Partial List)								
Gas Type	Model	Gas Type	Model	Gas Type	Model			
Acetic Acid	SA1-CH3COOH	Ethane	SA1-C2H6	n-Nonane	SA1-C9H20			
Acetone	SA1-C3H6O	Ethylene	SA1-C2H4	n-Octane	SA1-C8H18			
Benzene	SA1-C6H6	Ethyl Benzene	SA1-C6H5C2H5	n-Pentane	SA1-C5H12			
n-Butane	SA1-C4H10	Ethylene Oxide	SA1-C2H4O	Propane	SA1-C3H6			
Cyclohexane	SA1-C6H12	Gasoline	SA1-Gasoline	Iso-Propyl Alcohol	SA1-C3H8O			
Cyclopentane	SA1-C5H10	n-Heptane	SA1-C7H16	Propylene	SA1-CEH6			
Cyclopropane	SA1-C3H6	n-Hexane	SA1-C6H14	Toluene	SA1-C7H8			
Decane	SA1-C10H22	Methane	SA1-CH4	Vinyl Acetate	SA1-C4H6O2			
Diesel	SA1-C12H23	Methanol	SA1-CH3OH	Xylene	SA1-C8H10			

Contact Safeguard Analytics for calibration options and combustible hydrocarbon gas response factors.



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