



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

Specifications* Model SA1-B2H6(Diobrane)

Detector Type	Electrochemical
Detection Method	Diffusion
Range of Sensitivity	0-1.00 ppm
Response Time	T90 ≤ 30s
Accuracy	± 2 % FS
Zero Drift	< 5 % FS per year (In clean air)
Span Drift	< 5 % FS per year (In clean air)
Temperature Range	-20°C to +40°C; -14°F to 122°F
Humidity Range	15% to 90% RH non-condensing
Temperature Range	1 atm ±.1
Input Power	~ 3.5 to 5 VDC
Power Consumption	< 2.5 milliwatts
Sensor Life Expectancy	2 years
Detector Warranty	1 years

* Specifications subject to change without notice

Response to Other Gases

Gas Type	Concentration	Response	Gas Type	Concentration	Response
Ammonia	100 ppm	0 ppm	Carbon Dioxide	5000 ppm	0 ppm
Carbon Monoxide	100 ppm	0 ppm	Chlorine	1 ppm	-.5 ppm
Hydrogen	3000 ppm	.3 ppm	Hydrogen Chloride	10 ppm	0 ppm
Hydrogen Fluoride	7 ppm	0 ppm	Hydrogen Sulfide	20 ppm	2 ppm
Nitrogen Dioxide	8 ppm	-1.6 ppm	Sulfur Dioxide	4 ppm	.2 ppm

Contact Safeguard Analytics for additional gas response factors