

Model SA2-H2 (Hydrogen) Smart Sensor Modules



Description

Model SA2-H2 smart sensor modules are designed to detect and monitor hydrogen gas in ambient air. The modules consist of an electrochemical gas detection sensor and a micro-processor-based signal conditioning circuit. The signal conditioning circuits includes embedded temperature compensation and advanced detection analytics. Both are housed in a metallic enclosure fitted with gold plated connecting pins. The “Smart Sensor Module” is factory programmed for a specific range of sensitivity. On power up gas type, measurement range and previous zero and span calibration data points are read by the transmitter facilitating a fully automated startup. When used with any of Safeguard Analytics gas detection transmitters calibration may be performed on site or remotely and transported to the point of installation pre-calibrated and ready for operation.

Specifications ¹

Sensor Technology	Electrochemical	Input Voltage (Direct)	3.0 to 3.6 VDC
Detection Method	Diffusion	Power Consumption	10 milliwatts
Sensitivity Options	0-200 ppm to 0-50,000 ppm	Signal Output	I ² C Protocol
Response Time	T90 less than 90s	Temperature Range	-20°C to +50°C
Accuracy	± 2% of full scale	Humidity Range	15% to 95% non-condensing
Zero Baseline Shift	< 1% of full scale (-30°C to +50°C)	Pressure Range	1 atmosphere ± .1 atm
Span Drift	< 2% signal loss per year	Warranty	1 Years

¹Specifications subject to change without notice.

*Power consumption is sensor dependent

Order Guide

Model SA2-H2-200	0-200 ppm (2 ppm MDL)	Model SA2-H2-04K	0-4,000 ppm (40 ppm MDL)
Model SA2-H2-500	0-500 ppm (5 ppm MDL)	Model SA2-H2-20K	0-2.00 % (0.2 % MDL)
Model SA2-H2-01K	0-1,000 ppm (10 ppm MDL)	Model SA2-H2-LEL	0-4.00 % (0.4 % MDL)
Model SA2-H2-02K	0-2,000 ppm (20 ppm MDL)	Model SA2-H2-50K	0-5.00 % (0.5 % MDL)