

MODEL SA2-H2 (HYDROGEN)

SMART SENSOR MODULES

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 circuit includes embedded temperature compensation and advanced detection analytics. Both are housed in a metallic enclosure fitted with gold plated connecting pins.

 Gas Type

 Range of Sensitivity

 Serial Number

 Calibration Details
 - last zero cal date
 - last span cal date

 Calibration Level Configuration

 Alarm Point Configuration

 Environmental Data / Compensation


"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 Safeguard Analytics gas detection transmitter, calibration may be performed on site or remotely, and the module transported to the point of installation pre-calibrated and ready for operation.

SPECIFICATIONS¹

Sensor Technology	Electrochemical
Detection Method	Diffusion
Sensitivity Options	0-200 ppm to 0-50,000 ppm
Response Time	T90 less than 90s
Accuracy	±2% of full scale
Zero Baseline Shift	< 1% of full scale (-30 °C to +50 °C)
Span Drift	< 2% signal loss per year

¹ Specifications subject to change without notice.

Input Voltage (Direct)	3.3 to 3.6 VDC
Power Consumption	10 milliwatts
Signal Output	I2C Protocol
Temperature Range	-20 °C to +50 °C
Humidity Range	15% to 95% non-condensing
Pressure Range	1 atmosphere ± 0.1 atm
Warranty	2 Years

² Power consumption is sensor dependent.

ORDER GUIDE

Model SA2-H2-200	0-200 ppm (2 ppm MDL)
Model SA2-H2-500	0-500 ppm (5 ppm MDL)
Model SA2-H2-01K	0-1,000 ppm (10 ppm MDL)

Model SA2-H2-04K	0-4,000 ppm (40 ppm MDL)
Model SA2-H2-20K	0-2.00 % (0.2 % 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)