

Model SA2-NH3 (Ammonia) Smart Sensor Modules



Description

Model SA1-NH3 smart sensor modules are designed to detect and monitor ammonia 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	0-50 ppm to 0-1,000 ppm	Signal Output	I ² C Protocol
Response Time	T90 less than 90s	Temperature Range	-40°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 month	Warranty	2 Years

¹Specifications subject to change without notice.

*Power consumption is sensor dependent

Order Guide

Model SA2-NH3-005	0-5.00 ppm (50 ppb MDL)	Model SA2-NH3-100	0-100 ppm (1 ppm MDL)
Model SA2-NH3-010	0-10.0 ppm (0.1 ppm MDL)	Model SA2-NH3-500	0-500 ppm (5 ppm MDL)
Model SA2-NH3-050	0-50.0 ppm (0.5 ppm MDL)	Model SA2-NH3-01K	0-1,000 ppm (10 ppm MDL)