SAFEGUARD
ANALYTICS

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 detection transmitters.

Model SA1-HCN (Hydrogen Cyanide)
Specification*

Detector Type	Electrochemical
Detection Method	Diffusion
Range of Sensitivity**	0-30 PPM
Response Time	T90 ≤ 30s
Accuracy	± 2% FS
Zero Drift	< 2% per month
Span Drift	< 2% per month
Temperature Range	-20∘C to +50∘C; -4∘F to 122∘F
Humidity Range	15% to 90% RH non-condensing
Pressure Range	1 atm ±.1
Input Power	~ 3.5 to 5 VDC
Power Consumption	2.64 milliwatts
Detector Life Expectancy	>2 years
Detector Warranty	1 years

*Specifications subject to change without notice **Contact Safeguard Analytics for additional ranges*

Cross Interference Data

Interfering Gas	Concentration	Response	Interfering Gas	Concentration	Response
CO	100	2	SO2	20	38
NO	35	0	NO2	5	-12
C2H4	100	0	H2S	15	25
H2	100	2			

Caution: Cross interference data is based on small lot sampling and does not claim to be complete. Referenced data may represent testing conducted by third party sensor suppliers as well as testing conducted by Safeguard Analytics. Interfering gases should not be used for calibration.

SAFEGUARD
ANALYTICS

Phone: 936-342-2300
Email: sales@safeguardanalytics.com
www.safeguardanalytics.com