



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-PH3-5 (Phosphine)

Specification*

| | |
|--------------------------|-------------------------------|
| Detector Type | Electrochemical |
| Detection Method | Diffusion |
| Range of Sensitivity** | 0-5 PPM |
| Response Time | T60 ≤ 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 year |

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

Cross Interference Data

| Interfering Gas | Concentration | Response | Interfering Gas | Concentration | Response |
|-----------------|---------------|----------|-----------------|---------------|----------|
| CO | 1000 | 2 | H2S | 15 | 5 |
| SO2 | 5 | 1 | NO2 | 5 | -1.5 |
| NO | 35 | 0 | H2 | 1000 | 1 |
| NH3 | 35 | 1 | C2H4 | 100 | 0 |

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.