

# MODEL SA2-C2H6O (ALCOHOL)

## SMART SENSOR MODULES

Model SA2-C2H6O smart sensor modules are designed to detect and monitor alcohol gases 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.

## SPECIFICATIONS<sup>1</sup>

|                            |                                       |
|----------------------------|---------------------------------------|
| <b>Sensor Technology</b>   | Electrochemical                       |
| <b>Detection Method</b>    | Diffusion                             |
| <b>Sensitivity Options</b> | 0-10.0 ppm to 0-200 ppm               |
| <b>Response Time</b>       | T90 less than 90s                     |
| <b>Accuracy</b>            | ±2% of full scale                     |
| <b>Zero Baseline Shift</b> | < 1% of full scale (-30 °C to +50 °C) |
| <b>Span Drift</b>          | < 5% signal loss per year             |

|                               |                           |
|-------------------------------|---------------------------|
| <b>Input Voltage (Direct)</b> | 3.3 to 3.6 VDC            |
| <b>Power Consumption</b>      | 10 milliwatts             |
| <b>Signal Output</b>          | I2C Protocol              |
| <b>Temperature Range</b>      | -40 °C to +50 °C          |
| <b>Humidity Range</b>         | 15% to 95% non-condensing |
| <b>Pressure Range</b>         | 1 atmosphere ± 0.1 atm    |
| <b>Warranty</b>               | 2 Years                   |

<sup>1</sup> Specifications subject to change without notice.

<sup>2</sup> Power consumption is sensor dependent.

## ORDER GUIDE

|                            |                          |
|----------------------------|--------------------------|
| <b>Model SA2-C2H6O-010</b> | 0-10.0 ppm (0.1 ppm MDL) |
| <b>Model SA2-C2H6O-050</b> | 0-50 ppm (0.5 ppm MDL)   |

|                            |                       |
|----------------------------|-----------------------|
| <b>Model SA2-C2H6O-100</b> | 0-100 ppm (1 ppm MDL) |
| <b>Model SA2-C2H6O-200</b> | 0-200 ppm (2 ppm MDL) |