

# MODEL SA2-VOC-11.7 (VOLATILE ORGANIC COMPOUNDS (11.7 EV))

## SMART SENSOR MODULES

Model SA2-VOC-11.7 smart sensor modules are designed to detect and monitor volatile organic compounds in ambient air with an ionization potential of 11.7 eV or below. The modules consist of a photoionization 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>   | Photo Ionization Detector (11.7 eV)       |
| <b>Detection Method</b>    | Diffusion                                 |
| <b>Sensitivity Options</b> | 0-100 ppm                                 |
| <b>Response Time</b>       | T90 less than 10s                         |
| <b>Accuracy</b>            | ±2% of full scale                         |
| <b>Zero Baseline Shift</b> | < 1% of full scale                        |
| <b>Span Drift</b>          | < 2% signal loss per month (in clean air) |

|                               |                                       |
|-------------------------------|---------------------------------------|
| <b>Input Voltage (Direct)</b> | 3.3 VDC                               |
| <b>Power Consumption</b>      | 100 milliwatts                        |
| <b>Signal Output</b>          | I2C Protocol                          |
| <b>Temperature Range</b>      | -40 °C to +65 °C                      |
| <b>Humidity Range</b>         | 0% to 99% non-condensing              |
| <b>Pressure Range</b>         | 1 atmosphere ± 0.1 atm                |
| <b>Warranty</b>               | 300-500 hours continuous illumination |

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

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

## ORDER GUIDE

|                               |                         |
|-------------------------------|-------------------------|
| <b>Model SA2-VOC-11.7-100</b> | 0-100 ppm (100 ppb MDL) |
|-------------------------------|-------------------------|