

MODEL SA-XDS

MULTI-SENSOR GAS DETECTION

Highly configurable multi-gas monitoring controller that simultaneously displays the gas type, readings, and status for each channel of gas detection. Designed for monitoring a wide range of gases in ambient air, SA-XDS systems utilize SA2 Smart Sensors, each with a combination of optional gas types, range of sensitivity, and alarm levels. The system controller is equipped with an intuitive full-script Human Machine Interface (HMI) featuring a color LCD. On startup, the system controller automatically configures the installed Smart Sensors, identifying pertinent data for each sensor such as serial number, gas type, sensitivity range, most recent zero and span calibration data points, and last calibration date. User interface is accomplished using a programming magnet and front-panel push-button switches. The system is housed in a rugged NEMA 4X weatherproof enclosure.

SPECIFICATIONS¹

SYSTEM

Detector Type	Model SA2 Smart Sensor Module
Detection Method	Diffusion
Indicator	Power and comm status LEDs
User Interface	Full script color LCD

MECHANICAL

Model SA-2DS	8.0 in W x 10.0 in H x 4.0 in D
Model SA-4DS	10.0 in W x 12.0 in H x 5.0 in D
Model SA-6DS	10.0 in W x 12.0 in H x 5.0 in D

ELECTRICAL

Input Voltage (Direct)	10-30 VDC
Optional Line Power	90-240 VAC 50/60 Hz
Power Consumption	2.5-10 watts (sensor dependent)
Serial Output	RS-485 Modbus RTU
Optional Alarm Relays	2 form "C", 5-amp contacts

AREA CLASSIFICATION

Installation	Safe area installation
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ENVIRONMENTAL

Temperature Range	-40 °C to +60 °C
Humidity Range	0-99% non-condensing
Enclosure Rating	NEMA 4X weatherproof

WARRANTY

System Warranty	2 years
Detector Warranty	Smart sensor dependent

Specifications subject to change without notice.

FEATURES

System Controller

- System capacity 1-6 sensors (model dependent)
- Auto-configuration with Safeguard Analytics smart sensors
- LCD display HMI with color status indicators
- Serial RS-485 Modbus RTU output
- Optional relay output
- Suitable for battery and solar power applications

Environmental & Enclosure

- -40 °C to +60 °C (-40 °F to +140 °F)
- 15% to 95% RH non-condensing
- NEMA 4X weatherproof enclosure
- Area classification: non-hazardous locations

Electrical

- Standard: 10-30 VDC
- Optional 90-240 VAC line power
- Power consumption 2.5 to 10 watts (sensor dependent)

APPLICATIONS

- Combustible gases
- Toxic gases
- Carbon dioxide
- Oxygen deficiency
- Volatile organic compounds (VOCs)