SAFEGUARD ANALYTICS

Model SA-200

Gas Detection Transmitter

Toxics - Oxygen Deficiency - Combustibles - VOCs - Refrigerants

Features - Functions - Benefits

- Intrinsically safe smart sensor interface
- Input voltage 10 to 30 VDC
- Serial output MODBUS RTU 9600 bps
- User interface via OpCheck app
- Low Power Consumption
- Hazardous and Non-Hazardous Options

Typical Applications:

- Oil &Gas Production Sites
- Chemical and Petrochemical Plants
- Mining Industry
- Construction and Reclamation Sites
- Environmental and Safety Monitoring
- Agriculture
- Water and Wastewater Treatment Plants
- Landfills

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Questions about SA-200 Gas Detection Transmitters?

www.safeguardanalytics.com

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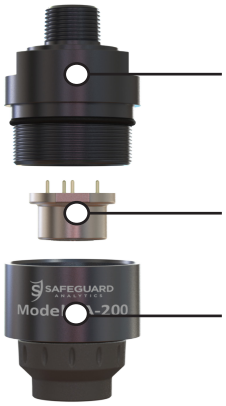
Model SA-200
Gas Detection Transmitter

Anatomy of a SA-200 Transmitter



Universal Transmitter
- Plug and play “smart sensor modules” for a wide range of gases
- Autoconfiguation with Safeguard Analytics control systems
- User interface via Safeguard Analytics OpCheck® application for Android handhelds or serial interface

Integration
- MODBUS RTU output, 9600 bps
- Low power consumption 3-5V DC @ 30 milliwatts to 1.2 watts*
- Suitable for battery and solar power applications

Environmental Durability
- Weatherproof with fully encapsulated electronics
- Environmental Conditions: -40◦C to +60◦C with a range of 0-99% RH
- Housing options: ABS, Aluminum or SS316

Specifications[1]

System	
Detector Type	Model SA2 Smart Sensor Module
Detection Method	Diffusion
User Interface	OpCheck Android Bluetooth App or Serial interface

Mechanical	
Mounting	3/4in NPT
Dimensions	3.55in(90.2mm) H x 2.5in(63.5mm) D

Warranty	
Transmitter	2 Years
Smart Sensor	Sensor technology dependent

[1] Specifications subject to change without notice.

Electrical	
Input Voltage (Direct)	3-5 VDC
Input Voltage (System)	10-30 VDC with connector board
Power Consumption	30 milliwatts to 1.2 watts*
Signal Output	MODBUS RTU 9600 bps (optional UART)

Area Classification

Engineered to comply with Class I, Div 1 standards, certification in progress.

Environmental	
Temperature Range	-40°C to +60°C
Humidity Range	0-99% non-condensing

**Power consumption is sensor dependent*

Standard Gas Types (partial list)

Acetylene (C_2H_2)	Carbon Monoxide (CO)	Hydrogen Chloride (HCl)	Nitrogen Dioxide (NO_2)
Alcohol (EtOH)	Chlorine (Cl2)	Hydrogen Cyanide (HCN)	Ozone (O_3)
Ammonia (NH_3)	Chlorine Dioxide (ClO2)	Hydrogen Sulfide (H_2S)	Phosphine (PH_3)
Bromine (Br_2)	Combustible Gas (LEL)	Methane (CH_4)	Propane (C_3H_8)
Butane (C4H10)	Formaldehyde (CH_2O)	Methanol (CH_3OH)	Sulfur Dioxide (SO_2)
Carbon Monoxide (CO)	Hydrogen (H_2)	Nitric Oxide (NO)	Volatile Organic Compounds (VOC)

Refer to the Model SA2 product guide or contact Safeguard Analytics for additional gas types and range of sensitivity.

Order Guide

Part Number	
910-00101	SA-200 MODBUS output, 10-30 VDC connector board pre-assembled with a rugged ABS weatherproof enclosure
910-00103	SA-200 MODBUS output, 10-30 VDC connector board Class I; Div. 1 hazardous location lead free aluminum enclosure ***
910-00301	SA-200 MODBUS output, 10-30 VDC connector board Class I; Div. 1 hazardous location 316 stainless steel enclosure ***

**** Engineered to comply with Class I, Div 1 standards, certification in progress.*

Safeguard Analytics follows a continuous improvement policy, ensuring ongoing enhancements to its products and manufacturing processes. As a result, specifications are subject to change without prior notice. For the most up-to-date product details, please visit our website at www.safeguardanalytics.com or contact us via email at info@safeguardanalytics.com.

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