SOMA Series Gas Detector

Trustworthy Certification

PROSENSE SOMA Series fixed gas detectors are certified with ATEX and IECEx.

Intrinsically Safe

SOMA Series is an intrinsically safe device that can be used for continuous measurement of toxic and explosive gases safely in hazardous areas.

Robust and Durable

It is ready to use under harsh environmental conditions with the IP65 protection class.

Accurate Readings

Infrared, Pellistor and Electrochemical sensors undoubtedly provide an accurate and sensitive measurement.

Ready to Operate

4-20mA Analog and Modbus RS485 RTU outputs are provided onboard to operate properly without any additional setup.

Easy Maintenance

SOMA Series detectors allow sensor replacement without opening the enclosure with pre-calibrated sensor head thanks to the Procell technology.

LCD Display

The LCD display is easily readable from any angle. User menu provides easy configuration.

Automatic Calibration

Detector calibration can be done automatically via preset values recorded in detector software once calibration requirements are provided.

Pellistor-Saver Mode

Detectors power off the sensor in high gas concentration in order to properly secure the operational lifetime of pellistor sensor.

Applications

- Mining
- Oil&Gas
- Petrochemical
- Onshore/Offshore
- Steel-Metal Industry
- Chemical Industry
- Process Industry
- Gas Distribution Stations
- Water Treatment Plants

Auto Analog Signal Calibration and Monitoring

SOMA Series detectors continuously check the analog output signal level to match the measurement level before promptly transferred to the panel. SOMA Series adjusts the signal level in case of any deviation and generates a fault signal when the adjustment fails.

Zero Suppression

Adjusting, the detector can show a certain measurement level as 0 (zero) to avoid unnecessary concerns.

Simple External Equipment Control

Optional relay module enables you to use it as an independent gas detection system with two arbitrarily adjustable concentration alarms and one fault alarm.

Continuous Self-Test

The detectors check itself continuously to make sure it operates perfectly and indicates a fault in case of any failure.

Adjustable Parameters

All parameters can be easily changed according to the application requirements or facility standards.

Easy Status Recognition

Colored LEDs (green, yellow and red) provide additional alarm and status information.

Maintenance via Software

Prosense provides software to maintain your active system easily and calibrate the gas detectors properly via computer.

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SOMA Series Gas Detector

Specifications	SOMA-IR	SOMA-PEL	SOMA-EEC
Sensing Element	Infrared	Pellistor	Electrochemical
Output Signal	4-20mA Analog | 5-15 Hz Output | RS485 Modbus RTU		
Sensor Warm-up Time	60sec		
Response Time (T90)	<30sec*	<25sec	<30sec**
Accuracy	%±1		
Operating Temperature	-20°C ~ +60°C **		
Humidity	0~ 100%RH ** Non-Condensing		
Input	12 VDC		
Display	128x64 Graphic OLED 3 LED indicator for detector status		
Device Parameters	Ui 14,4 VDC / Ii 2,37mA / Pi 9,84W		
Output Parameters	Vo 6,015 V / Io 0,2125 A / Co 886,6 uF / Lo 9.8 mH		
Optional Relay Outputs	2 Alarms (Programmable) and 1 Fault		
Cable Entry	2xM20		
IP Rating	IP65		
Enclosure	Reinforce Polymer		
Dimensions/Weight	192,75x85x56,37mm / 600gr		
ATEX Marking	**Ex ia I Ma**		
Hazardous Class	Zone 1 - Zone 2 - M1		
Certificates	IEP 22 ATEX 1085X		
Standards	• IEC EN 60079-0 • IEC EN 60079-1 • IEC EN 60079-11		

*When set to continuous measurement.
**Sensor dependent.

XY	Gas	Product Code	Sensor Type	Measuring Range*
31	Methane	SOMA-IR – 3135	Pellistor	0-100%LEL
31	Methane	SOMA-PEL – 3133	Infrared	0-100%LEL
36	Hydrogen	SOMA-EEC – 3634	Pellistor	0-2000PPM
44	Carbon monoxide	SOMA-EEC – 4434	Electrochemical	0-300ppm
44	Carbon monoxide	SOMA-EEC – 4434/B	Electrochemical	0-500ppm
44	Carbon monoxide	SOMA-EEC – 4434/C	Electrochemical	0-1000ppm
44	Carbon monoxide	SOMA-EEC – 4435	Pellistor	0-100%LEL
64	Hydrogen Sulfide	SOMA-EEC – 6434	Electrochemical	0-100ppm
65	Oxygen	SOMA-EEC – 6534	Electrochemical	0-25%VOL
66	Sulphur Dioxide	SOMA-EEC – 6634	Electrochemical	0-10ppm
67	Nitric Oxide	SOMA-EEC – 6734	Electrochemical	0-250ppm
68	Nitrogen Dioxide	SOMA-EEC – 6834	Electrochemical	0-30ppm
71	Carbon Dioxide	SOMA-IR – 7133	Infrared	0-5000ppm
71	Carbon Dioxide	SOMA-IR – 7133/B	Infrared	0-5%VOL

Please consult Prosense sales team for specific measuring ranges and other gases those are not listed here.

For more information please contact with info@prosense.com.tr