

Fixed Gas Detector SI-100

Fixed gas detectors are installed at places where potential gas hazard exists to measure gases such as oxygen, toxic gas and combustible gas. The instrument is capable of detecting the concentration of pertinent gas for which the fixed gas detector has been installed – it provides alert to central office via alarm and visual display when the gas concentration exceeds predefined value. Communication to the controller is based on standard 4-20mA analog output communication.

The fixed gas detector also shows the concentration of gas and diagnostic result of the unit through its LCD display based on built in calibration mode. **SI-100 gas detector is Air, dust and explosion proof.** It is certified with TRTS certification from Russia.

The fixed gas detector is available in options of O₂, CO, H₂S, SO₂, NH₃, H₂ and Combustible gas has to be selected accordingly for gas which is to be monitored in production, commercial or any other specific ambient environment.

Features :

- Easy magnetic bar operations
- Large LCD Display with backlight (blue)
- Explosion proof structure
- water/dust proof

Applications include installation in Petrochemical Plants/Refineries, Steel Plants, Shipbuilding yard, Waste Water treatment plants, Sewage treatment plant, Chemical plants etc.

SI 100C Fixed Gas Detector (Option)

In case of requirement for an economy model, SI100C is available with all parameters remaining same except LCD display is not provided.



Double Alarm Features



Audio LED



Alarm Modes (SI100) :

	External Alarm	LED	LCD	Analog Output
Exceed Low alarm limit	Low alarm	Low	Reading	Based on reading
Exceed High alarm limit	High alarm	High	Reading	Based on reading
Sensor Fail	Low alarm	Fault	"FAIL SEn" message	2mA
Calibration Fail	Low alarm	Fault	"FAIL SEn" message	2mA
Over Range	Low alarm	Fault	"Over" message	2mA

Specifications :

Part No.	SI1000910	SI1000110	SI1000210, SI1000510, SI1000310, SI1000710	SI1000410	
Measuring gas	Combustible		O ₂	CO, H ₂ S, SO ₂ , NH ₃	H ₂
Measuring type	Diffusion Type				
Measuring method	Catalytic	IR	Galvanic	Electrochemical cell	Electrochemical cell
Measuring range	0~100%LEL	0~100%LEL	0~30%VOL	CO : 0~500ppm, H ₂ S : 0~100ppm, SO ₂ : 0~20ppm, NH ₃ : 0~100ppm	0~1,000ppm
Sensor life time	> 5 years	> 2 years	< 2 Years	> 2 years	> 2 years
Response time	< 15sec / 90%scale	<30sec/90% scale (IR)	< 15sec/90% scale	< 30sec/90% scale	< 30sec/90% scale
Accuracy	±3%/Full scale				
Resolution	1%LEL		0.1%VOL	1PPM	1PPM
Parameter Control	SI100: Front 3 magnetic switch(calibration, maintenance, alarm setting) SI100C: One switch interface (calibration), console set available (option)				
Operation mode display	SI100: Digital LCD display with blue backlight, 4 Indicator LED SI100C: 2-LED (operating & zero cal., span cal.)				
Alarm display	Only in SI100: Visual : LCD alarm display with backlight, Indicator LED				
Alarm output signal	Only in SI100: Relay contact(Max 30Vdc, 5A) when Alarm occurred				
Alarm level set	Only in SI100: Programmable within detection range				
Output signal	Analog : 4-20mA				
Cable/Distance	Power + Signal cable : 3-wire CVVSB 1.5sq or AWG20/2,500m max,				
Conduit connection	NPT 3/4" (2way)				
Mounting type	Wall mount				
Program set mode	Only in SI100 { "Alarm value(1,2,3 alarm) Alarm time(instant & delay)1~30min Alarm dead band Relay output on/off				
Operating temperature	-20°C ~ +55°C				
Operating humidity	5% to 95% RH(Non-condensing)				
Operating power	SI100: 10~34VDC 500mA, SI100C : 9~34VDC				
Material	Aluminium, Stainless steel(STS304)				
Size	SI100: WHD 135 × 164 × 110 mm SI100C: WHD 102 x 137 x 87 mm				
Weight	SI100: 1.9kg, SI100C: 1.0kg				
Approval	Ex d IIC T5 (IP65)_korea Ex, IECEx, ATEX, CNEx, INMETRO, PESO				
Options	SI100: Battery type, Built-in Light bar, Moveable SI100C: Console				