



## Ease to use, versatile and reliable

### Reliable ATEX gas detector for indoor and outdoor use

The reliable SI-100 / SI-100C gas detector for use in hazardous areas. Integrated LCD display, easy mounting, high ease of use, reliable detection of gas hazards make the SI series gas detector the first choice of a versatile gas detector.

#### Applications

- Biogas plants
- Construction
- Storage of hazardous materials
- Laboratories
- Utilities
- Oil and gas production
- Chemical plant
- Industry
- Power stations
- Steelworks
- Car industry
- Waste water industry
- Food industry
- Fertiliser production

#### Features SI-100 / SI-100C

**Reliability:** Robust design and simple installation, for the reliable detection of combustible, toxic gases and oxygen.

**Simplicity:** Easy to use, convenient reading of measured values (optional), simple installation, quick and easy calibration.

**Adaptable:** optional integrated LCD display and LED status indicators, integrated alarm contacts, 4-20 mA signal output, RS485 interface.

**Sensors:** Extensive range of sensors for almost all gas types

Cost-effectiveness: Uncompromising and simple price structure

- Powder coated housing
- Water and dustproof
- Easy and quick installation
- Simple menu navigation
- Large backlit LCD display
- LED status display
- Integrated alarm relays pot. free or as switching contact
- Analogue and digital communication



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## SI-100 Detection Gases

Gas		Sensor	Range	A1	A2	R
Oxygen	O <sub>2</sub>	EC	0-30%VOL	19.0%	23%	0.1%
Carbon Monoxide	CO	EC	0-500ppm	30ppm	60ppm	1ppm
Sulfur Dioxide	SO <sub>2</sub>	EC	0-20ppm	2ppm	5ppm	0.1ppm
Hydrogen	H <sub>2</sub>	Catalytic	0-100%LEL	10%	20%	1%
Hydrogen	H <sub>2</sub>	EC	0-1000ppm	100ppm	500ppm	5ppm
Hydrogen sulfide	H <sub>2</sub> S	EC	0-100ppm	10ppm	15ppm	1ppm
Hydrogen sulfide	H <sub>2</sub> S	PID	0-50ppm	10ppm	15ppm	0.1ppm
Combustible	-	Catalytic	0-100%LEL	10%	20%	1%
Combustible	-	IR	0-100%LEL	10%	20%	1%
Ammonia	NH <sub>3</sub>	EC	0-100ppm	25ppm	35ppm	1ppm
Acetylene	C <sub>2</sub> H <sub>2</sub>	Catalytic	0-100%LEL	10%	20%	1%
Ethanol	C <sub>2</sub> H <sub>5</sub> OH	Catalytic	0-100%LEL	10%	20%	1%
Toluene	C <sub>6</sub> H <sub>5</sub> CH <sub>3</sub>	IR	0-100%LEL	10%	20%	1%
Toluene	C <sub>6</sub> H <sub>5</sub> CH <sub>3</sub>	Catalytic	0-100%LEL	10%	20%	1%
Acetic acid	CH <sub>3</sub> COOH	Catalytic	0-100%LEL	10%	20%	1%
Methane	CH <sub>4</sub>	IR	0-9999ppm	5000ppm	6000ppm	20ppm
Methane	CH <sub>4</sub>	IR	0-100%LEL	10%	20%	1%
Methane	CH <sub>4</sub>	IR	0-100%VOL	5%	6%	1%
Chlorine	Cl <sub>2</sub>	EC	0-5ppm	0.5ppm	1ppm	0.1ppm
Chlorine	Cl <sub>2</sub>	EC	0-20ppm	0.5ppm	1ppm	0.1ppm
Carbon Dioxide	CO <sub>2</sub>	IR	0-2000ppm	1000ppm	1500ppm	3ppm
Carbon Dioxide	CO <sub>2</sub>	IR	0-5000ppm	3000ppm	5000ppm	3ppm
Carbon Dioxide	CO <sub>2</sub>	IR	0-5%VOL	0.5%	3%	0.1%
Carbon Dioxide	CO <sub>2</sub>	IR	0-100%VOL	10%	30%	1%
Hydrogen Chloride	HCl	EC	0-10ppm	1ppm	2ppm	0.1ppm
Xylene	C <sub>6</sub> H <sub>4</sub> (CH <sub>3</sub> ) <sub>2</sub>	IR	0-100%LEL	10%	20%	1%

## SI-100 Technical Data

Measuring Gas	Combustible		Toxic Gas	Oxygen
Measuring type	Diffusion Type			
Measuring Method	Catalytic	IR	EC type	Galvanic
Measuring Range	0-100%LEL	0-100%LEL	Refer to table	0-30%VOL
Sensor life time	2 years	2 years	2 years	2 years
Accuracy	3%/Full scale			
Resolution	1%LEL	1%LEL	Refer to table	0.1%VOL
Configuration menu	Calibration, maintenance, alarm setting			
Display	LED status-display			
Measuring value display	Digital LCD Display (4-digit)			
Alarm display	Visual : LCD alarm display, LCD Backlight, Indicator LED			
Alarm output	Relay contact (Max 30Vdc, 5A) when Alarm occurred			
Alarm	Freely configurable			
Output signal	Analog : 4-20mA, Digital : RS-485 (Option)			
Digital interface	RS485 (Option)			
Cable inlet	NPT 3/4" (2way)			
Mounting type	Wall mount			
Temperature/Humidity	-20°C~50°C/ 5% to 95% RH (Non-condensing)			
Power	10-30Vdc 600mA			
Housing	Aluminum, Stainless steel (STS304)			
LCD size	55(W) × 30(H) mm			
Dimensions	135(W) × 164(H) × 110(D) mm			
Weight	1.9 kg			
Approval	Ex d IIC T5 IP65 (IECEX)			

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## SI-100C Detection Gases

Gas	Sensor	Range	A1	A2	R	
Oxygen	O <sub>2</sub>	EC	0-30%VOL	19.0%	23%	0.1%
Carbon Monoxide	CO	EC	0-500ppm	30ppm	60ppm	1ppm
Hydrogen	H <sub>2</sub>	Catalytic	0-100%LEL	10%	20%	1%
Hydrogen	H <sub>2</sub>	EC	0-1000ppm	100ppm	500ppm	5ppm
Hydrogen sulfide	H <sub>2</sub> S	EC	0-100ppm	10ppm	15ppm	1ppm
Combustible	-	Catalytic	0-100%LEL	10%	20%	1%
Ammonia	NH <sub>3</sub>	EC	0-100ppm	25ppm	35ppm	1ppm
Methane	CH <sub>4</sub>	Catalytic	0-100%LEL	10%	20%	1%

## SI-100C Technical Data

Measuring Gas	Combustible		Toxic Gas	Oxygen
Measuring type	Diffusion Type			
Measuring Method	Catalytic	IR	EC type	Galvanic
Measuring Range	0-100%LEL	0-100%LEL	Refer to table	0-30%VOL
Sensor life time	2 years	2 years	2 years	2 years
Accuracy	3%/Full scale			
Resolution	1%LEL	1%LEL	Refer to table	0.1%VOL
Configuration menu	Switch (Calibration), Admin Console (maintenance, OPTION)			
Display	LED status-display			
Alarm output	Relay contact (Max 30Vdc, 5A) when Alarm occurred			
Alarm	Configuration only possible at the factory			
Output signal	Analog : 4-20mA DC			
Conduit connection	NPT 3/4" (2way)			
Mounting type	Wall mount			
Temperature/Humidity	-20°C-50°C/ 5% to 95% RH (Non-condensing)			
Power	7V to 40V INPUT DC (12V or 24V DC 60mA normal )			
Housing	Aluminum, Stainless steel (STS304)			
Dimensions	102(W) × 137(H) × 87(D) mm			
Weight	1.0 kg			
Approval	Ex d IIC T5 IP65 (IECEx)			

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