SI-301

Sampling Type Fixed Gas Detector

DESCRIPTION

SI-301 is a sampling type fixed gas detector, measures the sample gas through a sensor cartridge on a real-time basis. This is a device that helps to prevent or control various gases related accidents including suffocation, intoxication, fire, explosion, corrosion, etc in several semiconductor or industrial sites. The measured gas concentration is transmitted in real time with an output of 4-20 mA and can be configured through three internal relays. In addition, users also can widely benefit from control set of RS-485/ Ethernet/Wireless connection.

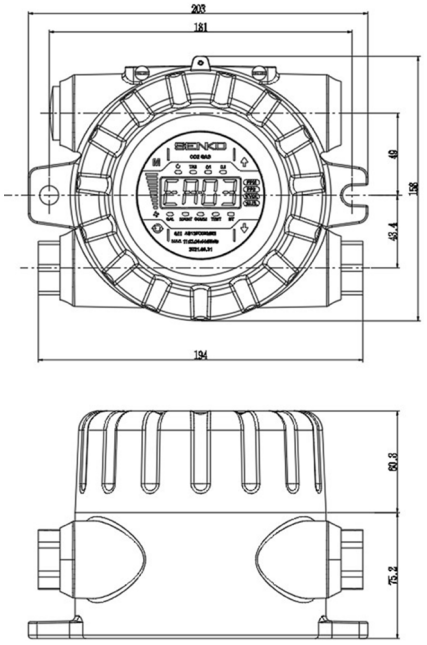
KEY FEATURE

- Explosion-proof structure (IP65)
- Cartridge type sensor – easy maintenance
- Built-in flow control function
- Large LCD with digital concentration indication and digital flow indication
- Control set of 4 buttons / RS-485 / TCP ethernet / Wireless

APPLICATIONS

- Semiconductor industry
- Sewage treatment plant
- Mine
- Petrochemical plant
- Steelworks
- Power supply work

DIMENSION (Unit:mm)



SPECIFICATION

Model	**SI-301**	
Dimension	194 (H) X 152.4 (W) X 136 (D) mm	
Weight	4kg	
Operating Voltage	DC : 24V ±10% PoE : 36V~57V (Typical : 48V)	
Flow Rate	100~1,000ml (Normal 300~500ml/min)	
Power Consumption	Approximately 5.0W	
Measuring Type Display	FND, Gas concentration, Flow rate, Alarm, Device faulty	
Relay	Low Alarm, High Alarm, Fault Alarm	
Output Signal	4-20mA	
Digital Communication	RS-485, TCP Ethernet	
Sampling Distance	Length of input gas tube : Up to 30m Length of exhaust gas tube : Up to 30m	
Input/Output Tube	1/4" SUS tube	
Operating Temperature	-40°C to +55°C	
Control/Set	4 Buttons & RS-485 & Ethernet & Wireless	
Warranty (Device)	2 years	
Warranty (Sensor)	1 year	
Remote Interface	Ethernet, RS-485	
Wiring	4 to 20mA / DC power / Relay : Up to 14 AWG	
Pressure range	90 to 110kPa	
Maximum Sample flow	Max 1,000ml	
Maximum Sample Pressure	3kPa	
Certification	**IECEx**	Ex db IIC T6 Gb
	ATEX	II 2 G Ex db IIC T6 Gb

APPLICABLE SENSOR SPECIFICATIONS

Gas	Sensor	Range	Low Alarm	High Alarm	Resolution
Oxygen (O_2)	Galvanic	0 ~ 30 %Vol	19 %Vol	23 %Vol	0.1 %Vol
Carbon Monoxide (CO)	EC	0 ~ 100 ppm	15 ppm	30 ppm	0.1 ppm
Hydrogen Sulfide (H_2S)	EC	0 ~ 30 ppm	5 ppm	10 ppm	0.1 ppm
Hydrogen Sulfide (H_2S)	EC	0 ~ 100 ppm	10 ppm	15 ppm	0.1 ppm
Hydrogen Sulfide (H_2S)	EC	0 ~ 500 ppm	30 ppm	200 ppm	0.1 ppm
Tetramethylsilane (4MS)	EC	0 ~ 20 ppm	5 ppm	10 ppm	0.1 ppm
Diisopropylaminosilane (DIPAS)	EC	0 ~ 20 ppm	5 ppm	10 ppm	0.1 ppm
Tetraethyl Orthosilicate (TEOS)	EC	0 ~ 30 ppm	5 ppm	10 ppm	0.1 ppm
Carbonyl Sulfide (COS)	EC	0 ~ 100 ppm	15 ppm	30 ppm	0.1 ppm
Trimethylamine (TMA)	EC	0 ~ 20 ppm	5 ppm	10 ppm	0.1 ppm
Silane (SiH_4)	EC	0 ~ 15 ppm	2.5 ppm	5.0 ppm	0.1 ppm
Ammonia (NH_3)	EC	0 ~ 100 ppm	12.5 ppm	25 ppm	0.1 ppm
Propene (C_3H_6)	Catalytic	0 ~ 100 %LEL	12.5 %LEL	25 %LEL	0.1 %LEL
Deuterium (D_2)	Catalytic	0 ~ 100 %LEL	12.5 %LEL	25 %LEL	0.1 %LEL
Isobutylene (C_4H_8)	Catalytic	0 ~ 100 %LEL	12.5 %LEL	25 %LEL	0.1 %LEL
Methane (CH_4)	Catalytic	0 ~ 100 %LEL	12.5 %LEL	25 %LEL	0.1 %LEL
Hydrogen (H_2, %LEL)	Catalytic	0 ~ 100 %LEL	12.5 %LEL	25 %LEL	0.1 %LEL
Hydrogen (H_2, ppm)	EC	0 ~ 1000 ppm	250 ppm	500 ppm	0.1 ppm
Acetylene (C_2H_2)	Catalytic	0 ~ 100 %LEL	12.5 %LEL	25 %LEL	0.1 %LEL
Ethylene (C_2H_4)	Catalytic	0 ~ 100 %LEL	12.5 %LEL	25 %LEL	0.1 %LEL
Disilane (Si_2H_6)	EC	0 ~ 15 ppm	2.5 ppm	5.0 ppm	0.1 ppm
Bis(tert-butylamino)silane (BTBAS)	EC	0 ~ 50 ppm	12.5 ppm	25.0 ppm	0.1 ppm
Bis(diethylamino)silane (BDEAS)	EC	0 ~ 6 ppm	1 ppm	2 ppm	0.1 ppm
TrisDimethylAminoSilane (3DMAS)	EC	0 ~ 100 ppm	15 ppm	30 ppm	0.1 ppm
Methane (CH_4, IR)	IR	0 ~ 100 %LEL	12.5 ppm	25.0 ppm	0.1 ppm
Hydrogen Peroxide (H_2O_2)	EC	0 ~ 20 ppm	3 ppm	5 ppm	0.1 ppm
Phosphine (PH_3)	EC	0 ~ 1.2 ppm	0.15 ppm	0.30 ppm	0.01 ppm
Carbon Dioxide (CO_2)	IR	0 ~ 5 %Vol	0.5 %Vol	1.0 %Vol	0.1 %Vol
Carbon Dioxide (CO_2)	IR	0 ~ 5000 ppm	800 ppm	1000 ppm	1 ppm
Arsine (AsH_3)	EC	0 ~ 1 ppm	0.05 ppm	0.10 ppm	0.01 ppm
Diborane (B_2H_6)	EC	0 ~ 0.4 ppm	0.05 ppm	0.10 ppm	0.01 ppm
Germane (GeH_4)	EC	0 ~ 5 ppm	2 ppm	5 ppm	0.1 ppm
VOC	PID	0 ~ 1000 ppm	50 ppm	100 ppm	0.1 ppm
VOC	PID	0 ~ 20 ppm	5 ppm	10 ppm	0.1 ppm
VOC	PID	0 ~ 40 ppm	10 ppm	20 ppm	0.1 ppm