Explosion Proof Type Diffusion Infrared Gas Detector

GIR-3000

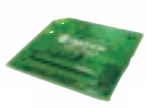
Features

- It detects gases such as combustible gases, CO2, CO, and N2O.
- The infrared measurement principle enables fast response time and long lifespan.
- It is designed with an explosion-proof structure, ensuring there is no risk of secondary explosions.
- Equipped with relay contact output capability.
- A monitoring system can be built using RS-485 Modbus and HART communication.
- Provides a built-in self-diagnostic function.
- Compatible with explosion-proof warning lights (GTL-100) attached to the detector.

Accessories

GTL-100

Rain cover



HART Module

RS-485 Module

Sensor Specification

Measuring method	Infrared			
Measuring gas	Flammable gas	CO2	CO	N2O
Measruing range	0 ~ 100% LEL 0 ~ 9999ppm 0 ~ 100% Vol	0 ~ 5.0% Vol	0 ~ 2.0% Vol	0 ~ 4000ppm
Response time	<5sec / 90% scale <3sec / 50% scale	<5sec / 90% scale <3sec / 50% scale	<5sec / 90% scale <3sec / 50% scale	<5sec / 90% scale <3sec / 50% scale
Material	SUS316	SUS316	SUS316	SUS316

Detector Specification

Measuring type	Diffusion type
Accuracy	±3% / Full scale
Sensor life time	Over 5 years
Parameter control	Non intrusive control with a Magnet bar (Calibration, Maintenance, Alarm setting)
Operation mode display	4-LED (Power, 2-Stage alarm, 1-Trouble)
Measuring value display	LCD display (Built-in back light 2-Line, 16 Characters) / OLED type (Option)
Alarm signal output	2A@30VDC, 0.5A@125VAC (Resistive load) / 3-SPST Relay contact (2 Stage alarm, 1 Trouble)
Output signal	Analog : 4-20mA Analog output | Maintenance signal : 3mA | Calibration signal : 3mA | Fault signal : 0mA Digital : RS-485 Modbus (Option) | mA (HART 7, HART Device description language available, Option)
Material	Aluminium alloy or Stainless steel
Cable entry thread	Standard : PF 3/4", Option : PF 1/2" , M20 x 1.5P , M25 x 1.5P , NPT 1/2" , NPT 3/4"
Mounting type	2" Pole mount, Wall mount, Duct mount
Operating temperature	-40°C ~ 80°C
Operating humidity	5 ~ 99% RH (Non-condensing)
Dimensions	156(W) x 322(H) x 110(D) mm
Weight	3.2Kg (Aluminium alloy) | 4.9Kg (Stainless steel)

Detector Certification

Explosion-Proof Certification	KCs	Korea Explosion Proof Certification	Ex tD A21 IP66 T85°C, Ex d IIC T6, T4		
	ATEX	European Explosion Proof Certification	Ex db IIC Gb T6, T4		
	IECEx	International Explosion Proof Certification	Ex db IIC Gb T6, T4		
	NEPSI	China Explosion Proof Certification	Ex db IIC T6 Gb		
	UL	U.S. Explosion Proof Certification	Class I, Division 1, Groups A,B,C,D		
	PESO	India Explosion Proof Certification	Ex db IIC T6...T4 Gb		
	TIIS	Japan Explosion Proof Certification	Ex db IIC Gb		
	TRCU ex	Russian Explosion Proof Certification	1Ex d IIC T6/T4 Gb X		
	TS	Taiwan Explosion Proof Certification	Ex db IIC Gb T6/T4		
	ECAS Ex	UAE Explosion Proof Certification	Ex db IIC Gb T6/T4		
Classification Society Certification	KR	Korea Classification Society Certification	Other Certifications	KC	Korea Electromagnetic Certification
	MED	European Classification Society Certification		SIL2	Safety Integrity Certification
	ABS	U.S. Classification Society Certification		CE(EMC)	European Electromagnetic Certification
	BV	France Classification Society Certification		CPA	China Measuring Instrument Certification
	DNV	Norwegian Classification Society Certification		-	Thailand Ministry of Energy Certification
	CCS	China Classification Society Certification		CHINA S Mark	China Fire Safety Certification
	RS	Russian Classification Society Certification		HART	Communication Protocol Certification
	LR	UK Classification Society Certification		PAC	Russia Measuring Instrument Certification
	RINA	Italian Classification Society Certification		KFI	Korea Fire Safety Certification
	-	-		CE(RoHS)	European Hazardous Substances Certification