

GIR-3000**Explosion Proof Type Diffusion Infrared Gas Detector****Description**

GIR-3000 is an explosion-proof gas detector designed to detect combustible gases, CO₂, CO, and N₂O. It utilizes an infrared sensor to deliver fast response and long service life, and supports 4–20 mA, RS-485 Modbus, and HART communication, along with relay output for stable and reliable field operation.

Key Features

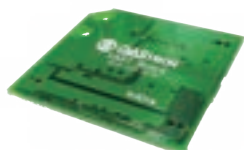
- ▶ Detects combustible gases, CO₂, CO, and N₂O.
- ▶ Infrared sensing for fast response and long life.
- ▶ Explosion-proof design prevents secondary explosions.
- ▶ Relay output supported.
- ▶ RS-485 Modbus and HART communication available.
- ▶ Built-in self-diagnostics.
- ▶ Supports explosion-proof warning light (GTL-100).

Additional Information**| Accessories**

GTL-100



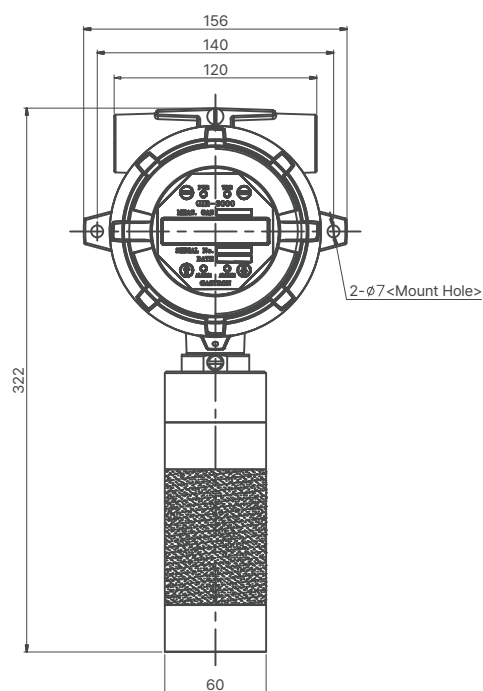
Rain cover



HART Module



RS-485 Module

| Drawing

Product Specification

Measuring method	Multibeam Dual Compensated Infrared Absorption with heated Optics			
Measuring gas	Flammable gas	CO ₂	CO	N ₂ O
Measuring range & Resolution	0 ~ 100% LEL / 1% LEL 0 ~ 9999ppm / 1ppm 0 ~ 100% Vol / 1% Vol	0 ~ 5.0% Vol / 0.1% Vol	0 ~ 2.0% Vol / 0.1% Vol	0 ~ 4000ppm / 1ppm
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
Sensor housing material	SUS316	SUS316	SUS316	SUS316
Accuracy & Repeatability	±2% / Full scale			
Sensor life time	6 to 7 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 (Source/ Sink) Maintenance signal : 3mA Calibration signal : 3mA Fault signal : 0mA Digital : RS-485 Modbus (Option) mA (HART 7, HART Device description language available, Option)			
Housing 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 Voltage	24V DC (18V DC to 32V DC)			
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)			

Product Certification

Explosion-proof Certification	KCs, ATEX, IECEx, NEPSI, UL, PESO, TIIS, TRCU ex, TS, ECAS Ex	IP 66 / 67
Classification Society Certification	KR, MED, ABS, BV, DNV, CCS, RS, LR, RINA	-
Other Certifications	KC, SIL2, CE(EMC), CPA, CHINA S Mark, HART, PAC, CE(RoHS)	