

Flame Proof Type Diffusion Infrared Gas Detector

GIR-3000 Series

Feature

- ▷ Continuous detection of flammable, CO₂, CO and N₂O gases in explosion hazardous area with flame proof structure
- ▷ State-of-the art infrared detection principle
- ▷ Long service life time(more than 5 years)
- ▷ Low operation cost due to maintenance free
- ▷ Operation in non oxygen environment
- ▷ Self diagnosis function with built-in Microprocessor
- ▷ Fast response time(<3 sec)
- ▷ Built-in back light LCD or OLED display
- ▷ Auto calibration and program setting with a magnet bar
- ▷ 2-stage alarm, 1-trouble display and relay contact output
- ▷ 4-20mA DC output signal
- ▷ Easy configuration of monitoring system by RS-485 Modbus isolated serial data communication or HART communication(Optional)
- ▷ With the alarm unit, GTL-100
 - Normal : Green LED
 - Alarm : Red LED, Buzzer(95dB)
 - Trouble : Yellow LED
- ▷ Calibration and maintenance by one-man

Special Application



Alarm Beacon Type
(Alarm device)



SIL2

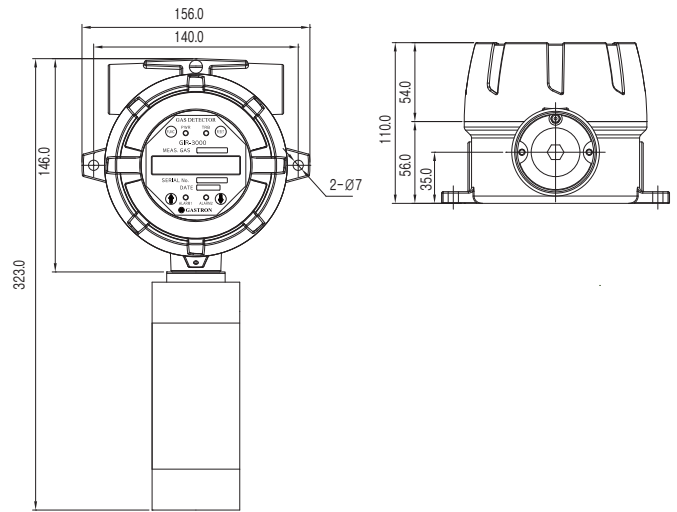
IEC 61508
Safety Integrity Level

HART
COMMUNICATION PROTOCOL



General

Dimension (Unit:mm)



Accessories



HART module



RS-485 module



Rain cover



GTL-100
(Flame Proof Type Alarm device)

Specification

※Specifications are subject to be changed without prior notice.

FLAME PROOF TYPE DIFFUSION INFRARED GAS DETECTOR	
Model	GIR-3000
Measuring gas	Hydrocarbon gases (LNG, LPG, Methane, Butane & etc) CO ₂ CO, N ₂ O
Measuring type	Diffusion type
Measuring method	Infrared type
Measuring range	0~100% LEL 0~5000ppm 0~100% Vol 0~2.0% Vol 0~5.0% Vol, 0~4000ppm
Sensor life time	Over 5 years
Response time	<6sec / 90% scale, <3sec / 50% scale
Accuracy	±3% / Full scale
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	250V 1A/3-SPST Relay contact (2-stage alarm, 1-trouble)
Output signal	Analog : Measuring signal : 4~20mA DC Maintenance signal : 3mA DC Calibration signal : 3mA DC Fault signal : 0mA DC Digital : RS-485 Modbus (Option) 2mA (HART 7, HART Device Description Language available, Option)
Cable / Distance	Power + signal cable : 3 wire >1.5sq(AWG16) / 500m normal RS-485 data communication cable : 1 pair (UL2919 RS-485) / 1000m max
Material	Housing : ALDC, SUS316(Optional) / Sensor : SUS316
Conduit connection	G. Rc. NPT 1/2", 3/4" & M20 (G 3/4" : standard)
Mounting type	2" Pole mount, Wall mount, Duct mount
Operating temperature	-20°C ~ +60°C / -40°C ~ +80°C (Option)
Operating humidity	5 ~ 99% RH (non-condensing)
Operating power	18 ~ 31V DC (24V DC normal) / 400mA max.
Dimensions	156 X 323 X 110 (W X H X D)mm
Weight	3kg
Approval	Explosion proof type (Ex d IIC T6) KCs / IP66/67 Explosion proof type (Ex d IIC Gb T4-T6) ATEX, IECEx Explosion proof type (Ex d IIC T6 Gb) NEPSI Marine : KR, MED, ABS, DNV KFI, CE, HART, SIL 2