

# TOTAL SOLUTION FOR GAS DETECTION SYSTEM

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## GIR-300 Series

INFRA RED TYPE GAS DETECTOR



- Continuous detection of combustible & CO<sub>2</sub> gas in explosion hazardous area with flame proof structure
- State of art Infra red detection principle
- Long service life (more than 5 years)
- Low operation cost due to maintenance free
- Operation at no oxygen environment
- Self diagnosis function with built-in Microprocessor
- Rapid response time (with 10 secs)
- Built-in Back light LCD display
- Auto calibration and program setting with magnet bar
- 2 stages Alarm, 1 Trouble display and realy output
- 4-20mA DC output signal
- RS-485 Modbus(isolated) communication  
Easy configuration of monitoring by serial data communication

### GENERAL

- GIR-300 has flame proof structure and can be installed in explosion hazardous area, explosive gas might be present in, and continuously detects combustible and CO<sub>2</sub> gas
- With state of art Infra red principle, GIR-300 can work more than 5 years and rapidly respond to gas leakage (within 10 sec). Also, initial sensitivity is lasting for a long time
- GIR-300 has 4 LEDs and built-in back light LCD (2 X 16 characters) Operating status and gas density can be checked from the display.
- User can set programs (calibration, maintenance and alarm) with magnetic bar and LCD display
- Calibration and maintenance is performed by one person.
- GIR-300 produces 2-alarm and Trouble output (SPST relay contact) to interlock with other devices (gas shut-off valve, beacon and venting FAN) when alarm is occurred.
- GIR-300 has guaranteed reliability and minimized influences of temperature, pressure, humidity and electrical noise.
- Analog output (4-20mA DC) and RS-485 Modbus (isolated) digital output can be delivered to controller, DCS & PLC and gas monitoring system.
- There are various accessories for each onsite condition (Optional item)



### [Accessories]



## SPECIFICATION

### INFRA RED TYPE COMBUSTIBLE & CO<sub>2</sub> GAS DETECTOR

Model	GIR-300 (Hydrocarbon)	GIR-300 (CO <sub>2</sub> )
Measuring gas	Combustible gas (LNG, LPG, H <sub>2</sub> , Methane, Buthane & etc)	Carbon dioxide (CO <sub>2</sub> )
Measuring type	Diffusion type	
Sensor type	Infrared type	
Measuring range	0-10,000ppm & 0-100% LEL	0-10,000 ppm & 0-5.0% Vol
Sensor life time	Over 5 years	
Response time	<10sec / 90% scale	
Accuracy	±3% / Full scale	
Parameter control	Non intrusive control with Magnet bar (calibration, maintenance, alarm setting)	
Operation mode display	4-LED (Power, 2-Alarm, 1-Trouble)	
Measuring value display	LCD display (Built-in Back light 2-Line, 16 characters)	
Alarm signal output	250V 1A / 3-SPST Relay contact (2-Alarm, 1-Trouble)	
Output signal	Analog output : Measuring signal : 4-20mA DC Maintenance signal : 3mA DC Calibration signal : 2mA DC Fault signal : 0mA DC Digital output : RS-485 Modbus (Option)	
Cable / Distance	Power + signal cable : 3 wire (above CVVS 1.5sq) / 2,500m max. RS-485 data communication cable: 1par (UL2919 RS-485) / 1,000m max.	
Conduit connection	1/2" & 3/4" PF, NPT (3/4" : standard)	
Mounting type	2" Pole mount, Wall mount, Duct mount	
Operating temperature	-20°C ~ +50°C	
Operating humidity	5 ~ 99% RH (non-condensing)	
Operating power	18 ~ 31V DC (24V DC normal) / 300mA max.	
Dimensions	301.5 X 152 X 109 (W X H X D)	
Weight	2.5kg	
Approval	Flame proof type (Ex d IIC T6)	

GIR-300

※ Specifications are subject to change without prior notice.

## DIMENSION (unit : mm)

