



GTD-300IR Series **SMART TYPE IR GAS DETECTOR**



- **Smart-Type Gas Detector, having a Built-In Micro Processor**
- **Continuous Measuring of Combustible & CO₂ Gas**
- **Excellent Measurement Sensitivity and Stability**
- **Integral alarm and fault relays**
- **Calibration, Maintenance & Normal Measurement Modes**
- **Display Gas Name, Range, Units & Operation mode**
- **RS-485 Output, MODBUS RTU protocol**
- **2-Line/16 Characters LCD display that Indicates the Density of Leaked Gas in Field, having Built-in Back Light**
- **Magnetic Non-intrusive Interface**
- **Magnetic Interface to configure Alarm**
- **3-wires Connection**
- **4-20 mA Signal output**
- **Calibration by One Person and Easy maintenance**

GENERAL SPECIFICATION

- GTD-300IR series is intelligent-type Combustible & CO₂ gas detectors, applying the technology of microprocessor. Likewise, it can detect gas lower explosive limit (LEL) and volume (%), applying IR sensor
- It indicates the density of leaked gas in field, and gives an alarm, and transmits the signal of fault relays, applying the technology of micro processor.
- It is a product that minimizes the influence from the exterior environment (temperature, humidity, pressure, electrical noise, etc) ; at the same time, it was manufactured to guarantee long life, high sensitivity, linearity, reproducibility, etc on a long-term basis.
- The serial output uses RS-485 MODBUS RTU protocol, and a 4~20mA output also provided, in addition to three SPDT alarm relays.
- The expanded user interface is magnetic bar, and functional testing, calibration and alarm setting are menu driven. The back-lighted LCD display is used to lead the user through all functions, in addition to normally indicating the value, measuring units, and gas name. Four LEDs are provided for alarm annunciation.

PRODUCT SPECIFICATION

Sensor Type:	Continuous Diffusion
Function:	Local LCD display type Intelligent set-up function Transmitter type
Service area:	Indoor or outdoor locations Including hazardous areas
Measuring range1:	0~100%LEL IR HC cell
Measuring range2:	0~5%Volume IR CO ₂ cell
Sensor life:	5 years typical
Accuracy:	±3% of full scall
Response time:	T90 < 20sec. With 100%LEL
Zero drift:	Less then 3% of full scale per year
Electrical Classification:	Explosion-proof, Ex d IIC T6
Warranty:	One year
Approval:	Korea Occupational Safety Association

ENVIRONMENTAL SPECIFICATION

Operating Temperature range:	-40℃~70℃
Storage Temperature range:	-20℃ to 70℃
Operating Humidity range:	5 to 95% RH
Operating pressure range:	ATM. ±10%

MECHANICAL SPECIFICATION

Weight:	2.5kg
Material(housing):	Cast aluminum
Material(Sensor):	SUS 304
Mounting Type:	2" Pipe mount/surface mount

ELECTRICAL SPECIFICATION

Input power:	DC 24V ±10% / 250mA max
Output signal:	4-20mA (Load 600 ohms max.)
	Malfunction 0mA
	Setup Mode 3mA
	Calibration 3mA
Alarm signal:	3 x SPDT (2 Alarms and 1 trouble)
Cable Requirements:	3-wire shield cable. Max distance 2500M
Digital communication:	RS-485 MODBUS Stop Bits : 1
Baud Rate:	9600
Parity:	Even
Data Bits:	8

DIMENSIONS

