



# 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 CO2 cell

Sensor life: 5 years typical Accuracy: ±3% of full scall

Response time: T90 < 20sec. With 100%LEL

Less then 3% of full scale per year Output signal: Zero drift: **Electrical Classification:** 

Explosion-proof, Ex d II C T6 Warranty: One year

Approval: Korea Occupational Safety

Association

## **ENVIRONMENTAL SPECIFICATION**

Operating Temperature range: -40 ℃ ~70 ℃ Storage Temperature range: -20°C to 70°C 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

2"Pipe mount/surface mount **Mounting Type:** 

# **ELECTRICAL SPECIFICATION**

Input power: DC 24V ±10% / 250mA max 4-20mA (Load 600 ohms max.)

> Malfunction 0mA

Setup Mode 3mA

Calibration 3mA

3 x SPDT (2 Alarms and 1 trouble) Alarm signal:

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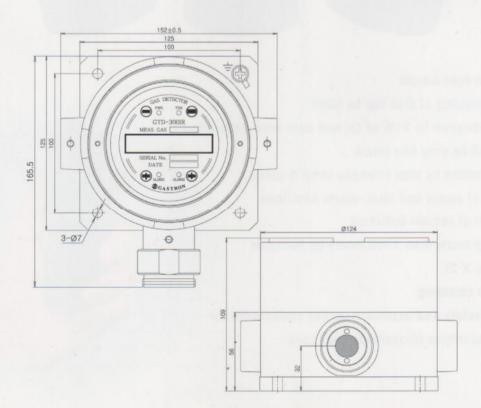
Cable Requirements: 3-wire shield cable.

Max distance 2500M

RS-485 MODBUS Stop Bits: 1 Digital communication:

**Baud Rate:** 9600 Parity: Even

DIMENSIONS



**Data Bits:**