



- **Smart-Type Gas Detector, having a Built-In Micro Processor**
- **Continuous Measuring of Combustible Gas and Vapours**
- **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 Black Light**
- **Magnetic Non-intrusive Interface**
- **Magnetic Interface to configure Alarm**
- **3-wires connection**
- **4-20mA Signal output**
- **Calibration by One Person and Easy Maintenance**

GENERAL SPECIFICATION

- GTD-200Ex series is intelligent-type combustible gas detector, applying the technology of micro processor. Likewise, it can detect part per million (PPM), lower explosive limit (LEL) and volume (%), applying semiconductor sensor, catalytic sensor and thermal conductivity 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, 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 is also provided, in addition to two SPDT alarm relays.
- The expanded user interface is magnetic, 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. Three LEDs are provided for alarm annunciation.

TOTAL SOLUTION FOR GAS DETECTION SYSTEM

Design, Development, Manufacture, Installation and Servicing for Gas Detection System.

PRODUCT SPECIFICATION

Sensor type:	Continuous Diffusion
Function:	Local LCD display type Intelligent set-up function Transmitter type
Service:	Indoor or outdoor locations Including hazardous areas
Measuring range1:	0-2000 ppm Semiconductor cell
Measuring range2:	0-100% LEL Catalytic cell
Measuring range3:	0-100% Volume Thermal conductivity cell
Sensor life:	3 to 5 years typical
Accuracy:	± 3% of full scale
Response time:	T90 < 15 sec. With 100% LEL methane applied
Zero drift:	Less than 3% of full scale per year
Electrical Classification:	Explosion-proof, Ex d IIC T5
Warranty:	One year
Approval:	Korea Occupational Safety Association

ENVIRONMENTAL SPECIFICATION

Operating Temperature range:	Electronics -40 °C to 70 °C Standard sensor -50 °C to 80 °C High Temp sensor -50 °C to 250 °C
Storage Temperature range:	-40 °C to 70 °C
Operating Humidity range:	5 to 100% 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:	24V.DC nominal 18 to 27V.DC/230mA max.
Output signal:	4-20mA(600 ohms max. loac 0 mA) Malfunction 2mA Setup mode 2mA Calibration 0mA
Alarm signal:	2 x SPDT
Cable Requirements:	3-wire shield cable. Max distance 2000M
Digital communication:	RS-485 MODBUS Stop Bits: 1
Baud Rate:	9600
Parity:	Even
Date Bits:	8

DIMENSIONS

