

DETECTORS / SMART TRANSMITTERS

FLAMMABLE / TOXIC GAS

2010 Series

HELPING TO CREATE A SAFE AND CLEAN ENVIRONMENT
BY THE STATE OF THE ART TECHNOLOGIES

2 Independent Programmable Alarm Output

IR source Remote Calibration and programming

Pre-calibrated Smart Sensor

Digital Communication available

LED Digital Display

Wide variety of the Sensor

Good Reliability



WISE[®]

WISE CONTROL

Total Safety & Environmental Solutions

Let's create a safe environment

WISE control is an industry leader in detecting the potential dangers from Combustible and Toxic gases that pose a threat people and property.

We response to demands for safe and environment by developing and manufacturing quality detection instruments with advanced performance and reliability.

Series is...

GT-2010 • GX-2010

- Calibration and Sensor Sensitivity Check can be performed by Remote Calibrator.
- Simplified combination transmitter which can function as a Single Indicator Unit.
- Reduce the cost of Installation if applied with Digital Communication signal as a field bus system.
- Various applied concentrations of the standard gas is possible with programming from the Remote Calibrator.
- 7 segment 4 digit LED Display shows clear Measuring Value.
- The 2010 Series Detector consists of the Sensor, Terminal, Remote Calibrator and Explosion Proof Housing.
- Remote or integrated cell. The GT/X-2010D version allows the cell to be used in remote mode up to 15 meters.
- Smart Sensor are made of 316L stainless steel, robust and resistance to corrosive agents.

Pre-calibrated sensors can be disconnected by turning the head of the unit.

The sensors, which are equipped with a printed circuit, can be calibrated outside hazardous areas on a bench.

- The Microprocessor in the PCB provides a linear 4 to 20 mA signal which corresponds to measuring range of gas.



Series Feature

GT/X-2010D

- Local 4 digit LED display
- Two independent Programmable Alarm Settings.
- Isolated Output Signal can be connected with any kind of controller, including DCS.
- State-of-the-Art technology, MCP based circuits provide continuous self-diagnostics and automatic Fault Identification.
- Two independent output Relays are programmable for Latching and Non-Latching operation
- Non Volatile Memory retains Program Values and Calibration Factors during loss
- Easy maintenance and calibration using Remote Calibrator
- Pre-calibrated Sensor (GX-2010, GT/X-2010D)
- Linear DC 4~20 mA Output can be connected to Various Kinds of receivers
- Explosion Proof Housing (Ex d IIC T6)
- Two conduit port are offered with ? NPT, PT or PF
- Fast Response



Measuring Gases

Gases	Type of Sensor	Range(in ppm)	Accuracy	Life(month)	T(50)	TLV(ppm)
O ₂	Elxctrochemical	30,00%	+ / - 1.5%	28	10	-
CO	Elxctrochemical	100 / 300 / 1000	+ / - 1.5%	36	15	50
H ₂ S	Elxctrochemical	30,0 / 100 / 1000	+ / - 1.5%	36	15	10
NO	Elxctrochemical	100 / 300 / 1000	+ / - 1.5%	36	15	25
NO ₂	Elxctrochemical	10,0 / 30,0	+ / - 1.5%	24	20	-
SO ₂	Elxctrochemical	10,0 / 30,0 / 100	+ / - 1.5%	36	15	5
Cl ₂	Elxctrochemical	10,0	+ / - 1.5%	24	50	1
H ₂	Elxctrochemical	2000	+ / - 1.5%	24	50	-
HCl	Elxctrochemical	30,0 / 100	+ / - 1.5%	24	50	5
HCN	Elxctrochemical	10,0 / 30,0	+ / - 2%	24	30	10
HF	Elxctrochemical	10,0	+ / - 3%	18	50	3
NH ₃	Elxctrochemical	100 / 1000	+ / - 3%	24	50	25
ETO/PO	Elxctrochemical	30,0	+ / - 3%	36	50	50
O ₃	Elxctrochemical	1,00	+ / - 3%	18	40	0.1
PH ₃	Elxctrochemical	1,00	+ / - 3%	18	40	0.3
ClO ₂	Elxctrochemical	3,00	+ / - 2%	24	50	0.1
SiH ₄	Elxctrochemical	50	+ / - 3%	18	40	5
COCl ₂	Elxctrochemical	3	+ / - 3%	18	50	0.1
CH ₄	Catharometer	0 - 100% Vol	+ / - 1.5%	60	5	-
H ₂	Catharometer	0 - 100% Vol	+ / - 1.5%	60	5	-
NH ₃	Catalytic	0 - 5000	+ / - 1.5%	36	8	25
Flammable	Catalytic	0 - 100% Vol	+ / - 1.5%	60	5	-

※ Other gases without mentioned are available, Please contact us.

Series Optional Items

- Remote calibrator (GR 2000)
- Weather Protection Cover
- 2" Yoke Mounting Bracket
- Splash Guard
- Calibration Gas



Technical Characteristics

Detectors	GT-2010	GX-2010	GT/X-2010D
Measuring Gas	Flammable Gas	Toxic Gas	Flammable / Toxic Gas
Measuring Range	0 ~ 100% LEL	ppm	0 ~ 100% LEL / ppm
Detection Principle	Catalytic combustion	Electrochemical	Catalytic / chemical
Display	4 ½ digit LED	4 ½ digit LED	4 ½ digit LED
Calibration	IR Remote controller	IR Remote controller	IR Remote controller
Sampling	Diffusion	Diffusion	Diffusion
Power	18 to 30 VDC, max. 0.5A	18 to 30 VDC, max. 0.5A	18 to 30 VDC, max. 0.5A
Retransmission	Isolated DC 4 to 20 mA	Isolated DC 4 to 20 mA	Isolated DC 4 to 20 mA
	RS 485	RS 485	RS 485
	(modbus protocol)	(modbus protocol)	(modbus protocol)
Load Impedance	600 Ω	250 Ω	250 Ω
Alarm Set Points	Two Independent (H, HH)	Two Independent (H, HH)	Two Independent (H, HH)
Set Value	0 to F.S. programmable	0 to F.S. programmable	0 to F.S. programmable
Output	2 x SPST (N.O. or N.C.)	2 x SPST (N.O. or N.C.)	2 x SPST (N.O. or N.C.)
Rating	AC 250V 3A	AC 250V 3A	AC 250V 3A
Functions	Test / Measuring Range /	Test / Measuring Range /	Test / Measuring Range /
	Alarm Output Hold /	Alarm Output Hold /	Alarm Output Hold /
	Latch or Non-Latch /	Latch or Non-Latch /	Latch or Non-Latch /
	Digital Communication /	Digital Communication /	Digital Communication /
	Gas concentration prog. /	Gas concentration prog. /	Gas concentration prog. /
	Auto Zero/Span Calibration	Auto Zero/Span Calibration	Auto Zero/Span Calibration
Local Calibration	Yes	Yes	Yes
Explosion Proof	Ex d IIC T6	Ex d IIC T6	Ex d IIC T6
		Ex ia IIC T4	Ex ia IIC T4
Detector Housing	Aluminium Diecasting	Aluminium Diecasting	Aluminium Diecasting
Sensor Housing	SUS 316 L	SUS 316 L	SUS 316 L
Wiring Connection	PF 3/4" (PT, NPT available)	PF 3/4" (PT, NPT available)	PF 3/4" (PT, NPT available)
Response Time	Less than 20 secs at T90	Depending on the Sensor	Depending on the Sensor
Zero/Span Drift	+/-3% offset / month	+/-3% offset / month	+/-3% offset / month
Expected Life	36 to 60 month	12 to 48 month	12 to 48 month
Temperature Range	-30 to 50° C	-25 to 55° C	-25 to 55° C
Humidity Range	Below 95% R.H.	Below 95% R.H.	Below 95% R.H.

► GT-2010



► GX-2010



► GT/X-2010D



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