

## Explosion Proof Type interference gas filtering Gas Detector

# GTD-5100F



### Features

- It detects gases such as combustible, toxic, freon, oxygen and VOCs.
- With its high-performance pump, it rapidly identifies gas in the designated area.
- The filtering algorithm for the semiconductor process PM material & ETC is applied.
- It is designed with an explosion-proof structure, ensuring there is no risk of secondary explosions.
- A monitoring system can be built using 4-20 mA, RS-485, or PoE communication protocols.
- Equipped with relay contacts for enhanced operational control.

### Accessories



Micro filter



Mounting bracket



Cable gland



Male connector



RS-485 Module

## Sensor Specification

\* = Refer to Toxic gas measuring range

Measuring method	Measurable gas	Measuring range	Response time
Infrared	Freon gas	0 ~ 2000ppm	< 15sec / 90% scale
	Flammable gas	0 ~ 100% LEL	< 15sec / 90% scale
	Toxic gas	*	< 15sec / 90% scale
	Precursor gas	*	< 15sec (Default) < 50sec (TEOS, OMCTS)
Catalytic cell	Flammable gas	0 ~ 100% LEL	< 15sec / 90% scale
Hot wire semiconductor cell	Flammable gas	0 ~ 2000ppm	< 20sec / 90% scale
Thermal conductivity cell	Flammable gas	*	< 15sec / 90% scale
Galvanic cell	O2	*	< 15sec / 90% scale
Electrochemical cell	O2	*	< 15sec / 90% scale
	Toxic gas	*	< 45sec (Default) / < 60sec (O3) < 70sec (HCl) / < 100sec (HF)
Photo-Ionization Detector(PID)	VOC gas	*	Varies by gas

## Detector Specification

Measuring type	Auto sampling type
Accuracy	±3% / Full Scale
Parameter control	Non intrusive control with a Magnet bar (Calibration, Maintenance, Alarm setting)
Operation mode display	GTD-5100F : Alarm / Trouble LED flow rate   LED indicator (Power, 2-Stage alarm, 1-Trouble) GTD-5100F LCD Version : 2.0" Color TFT LCD (Detector status, Gas info, Error code etc.)   LED indicator (Power, 2-Stage alarm, 1-Trouble)
Measuring value display	GTD-5100F : FND display (4-Digit)   GTD-5100F LCD Version : 2.0" Color TFT LCD (Gas value, Flow rate etc.)
Alarm signal output	3.5A@30VDC, 3.5A@125VAC (Resistive load) / 3-SPST Relay contact (2-Stage alarm, 1-Trouble)
Output signal	Analog 4-20mA, Relay, RS-485 Modbus (Option), PoE (Option)
Sampling method	Diaphragm pump
Sampling line	OD 1/4 " (Standard)
Flow rate	0 ~ 1000mL/min (Normal 500mL/min)
Material	Steel
Conduit connection	Standard : PF 3/4"   Option : NPT 3/4" M25   PF 1/2" NPT 1/2" M20 (With Explosion proof reducer)
Mounting type	Wall mount
Operating temperature	-10 ~ 60℃
Operating humidity	5 ~ 99% RH (Non-condensing)
Dimensions	200(W) × 161(H) × 139(D) mm
Weight	4kg
Operating power	Standard type : 9.6W @24VDC (Max) PoE type : 10.1W @48VDC (Max)

## Detector Certification

Explosion-Proof Certification	KCs	Korea Explosion Proof Certification	Ex d IIC T6
	IECEX	International Explosion Proof Certification	Ex db IIC T6/T5 Gb
	ATEX	European Explosion Proof Certification	Ex db IIC T6/T5 Gb
	NEPSI	China Explosion Proof Certification	Ex db IIC T5/T6 Gb
	UL	U.S. Explosion Proof Certification	Class I, Division 1, Groups A,B,C,D
	TS	Taiwan Explosion Proof Certification	Ex db IIC T6/T5
Other Certifications	KC	Korea Electromagnetic Certification	-
	CE(EMC)	European Electromagnetic Certification	
	-	Thailand Ministry of Energy Certification	
	CPA	China Measuring Instrument Certification	
	KFI	Korea Fire Safety Certification	