

# TOTAL SOLUTION FOR GAS DETECTION SYSTEM

TOTAL SOLUTION FOR GAS DETECTION SYSTEM

TOTAL SOLUTION FOR GAS DETECTION SYSTEM

## TS-5100 Series

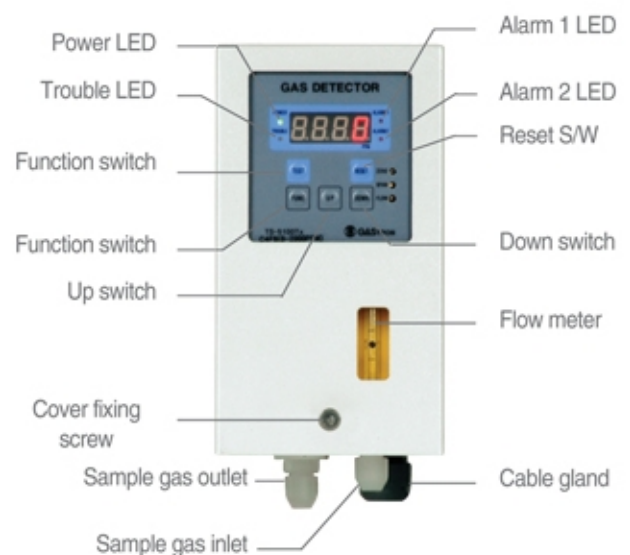
SMART & NON-EXPLOSION PROOF TYPE



- Rapid detection of gas leakage with high efficient pump inside
- Detection of combustible, oxygen & toxic gas from low to high concentration owing to various detection principle
- Stable quality and proved detection principle for service life
- Excellent selectivity by adapting detection principle only for oxygen & toxic gas
- Superior performance for detecting gas below TLV
- Gas concentration display by built-in FND
- Digital display of gas concentration with 4 Digit
- 4-20mA DC output signal
- RS-485 Modbus communication Easy configuration of monitoring by Serial data communication
- 3-wire connection
- 2 stages Alarm, 1 Trouble display and realy output
- Calibration and maintenance by one person

### GENERAL

- TS-5100 series have high efficient diaphragm pump having long service life
- It has excellent selectivity to react only with corresponding gas. Therefore, it minimizes malfunctioning due to interfering gas
- Also it shows excellent performance for detecting very low gas concentration (below TLV)
- Detected gas concentration can be checked from digital display. Calibration is performed by front calibration VR with checking gas concentration
- It produces 2-alarm and Trouble output (SPST relay contact) to interlock with other devices (gas shut-off valve, beacon and venting FAN) when alarm is occurred.
- It has guaranteed reliability and minimized influences of temperature, pressure, humidity and electrical noise.
- Analog output (4-20mA DC) and RS-485 Modbus (isolated) digital output can be delivered to controller, DCS & PLC and gas monitoring system
- It is 3 wire type and installation is easier than existing products (5~6 wire type) with low cost
- There are various accessories for each onsite condition (Optional item)



**MF** 名發科技有限公司  
MingFa Technical co.,LTD.

#### [Accessories]



Dust filter

## SPECIFICATION

### SMART, NON-EXPLOSION PROOF & AUTO SAMPLING TYPE COMB. OXYGEN & TOXIC GAS DETECTOR

Model	TS-5100	
Measuring gas	Combustible gas (LNG, LPG, H <sub>2</sub> , Methane, Butane & etc)	Toxic gas (O <sub>2</sub> , CO, CL <sub>2</sub> , NH <sub>3</sub> & etc)
Measuring type	Auto sampling type	
Measuring method	Hot wire semiconductor cell, Catalytic cell, Thermal conductivity cell	semiconductor cell, Electrochemical cell
Measuring range	0~2000ppm, 0~100% LEL, 0~100% Vol.	Refer to Ordering information (70 page)
Response time	<15sec / 90% scale	<45sec / 90% scale
Accuracy	±3% / Full scale	
Parameter control	Front switch (calibration, maintenance, alarm setting)	
Operation mode display	4-LED (Power, 2-stages Alarm, 1-Trouble)	
Measuring value display	FND display (4-digit)	
Alarm signal output	250V 1A / 3-SPST Relay contact (2-Alarm, 1-Trouble)	
Output signal	Analog output : 4-20mA DC Digital output : RS-485 Modbus (option)	
Sampling method	Diaphragm Pump	
Sampling line	OD 1/4"	
Flow rate	0-2000 ml/min max	
Cable/Distance	Power + signal cable : 3 wire (Above CVVS 1.5sq) / 2,500m max. RS-485 data communication cable : 1par (UL2919 RS-485) / 1,000m max.	
Conduit connection	Cable gland (PG-13.5)	
Mounting type	2" Pole mount, Wall mount	
Operating temperature	-20°C ~ +50°C	
Operating humidity	5 ~ 99%.RH (non-condensing)	
Operating power	18 ~ 31V DC (24V DC normal) / 250mA max. AC 110/220V(option)	
Dimensions	100 x 207 x 155 (W X H X D)	
Weight	2.5kg	
Approval	CE, USTC	

TS-5100

## DIMENSION (unit : mm)

