



# MST F100

## Gas Detection Transmitter

### Product introduction

MST-F100 series gas detector adopts the most advanced ultra-large-scale integrated circuit technology and is designed by the international standard intelligent technology level. It is a completely intelligent gas detection transmitter designed by digital and analog mixed communication technology. This intelligent gas detection transmitter has advanced technology, excellent performance, high stability, and communication and self-diagnosis functions. It is easy to install and maintain, fully demonstrates the advanced performance of typical intelligent field monitoring instruments, and greatly meets the requirements of industrial field safety monitoring for high reliability of equipment. It is widely used in petroleum, chemical, metallurgy, refining, gas transmission and distribution, biochemical medicine and other industries. The instrument is compatible with various control alarm systems, PLC, DCS and other control systems, which can realize remote detection, control and alarm.

The product is in accordance with the general technical requirements of GB12358-2006 workplace ambient gas detection alarm device, and is expected to meet the relevant requirements of the verification regulations of JJG915-2008 carbon monoxide detection alarm, JJG695-2003 hydrogen sulfide gas detector, JJG693-2011 combustible gas alarm and JJG365-2008 electrochemical oxygen analyzer.

### Features and benefits

- (12-30) V DC power supply
- Equipped with 1 relay output
- 3-wire 4-20mA signal output. RS485 or 2-wire 4-20mA for optional
- Independent sound and light alarm active output interface
- With LCD screen, unique large character design and display the the clear value
- The display panel has function buttons to operate some Settings
- Optioal infrared remote-control, it convenient to have long-distance operation
- Alarm threshold can be set. It has zeroing and span-calibration

## Technical parameters

General gas detection range:

Detection gas	Range	Low-point alarm	High-point alarm	Resolution
Oxygen	0-30%VOL	19.5	23.5	0.1%VOL
Flammable	0-100%LEL	20	50	1%LEL
Carbon monoxide	0-1000PPM	50	150	1PPM
Hydrogen sulfide	0-100PPM	10	20	1/0.1PPM
Ammonia	0-100PPM	20	50	1/0.1PPM
Hydrogen	0-1000PPM	200	500	1/0.1PPM
Chlorine	0-20PPM	5	10	1/0.1PPM
Hydrogen chloride	0-20PPM	5	10	1/0.1PPM
Sulfur dioxide	0-20PPM	5	10	1/0.1PPM
Nitric oxide	0-250PPM	50	125	1/0.1PPM
Nitrogen dioxide	0-20PPM	5	10	1/0.1PPM
Ethyl alcohol(C <sub>2</sub> H <sub>5</sub> OH)	0-100PPM/100%LEL	/	/	0.1PPM/1%LEL

\*Please contact us for other customized gases.

<b>Power supply voltage</b>	DC 12V ~ 30V, 500mA, power ripple is less than 20mV
<b>Output error</b>	<1% (4 ~ 20mA part)
<b>Relay capacity</b>	DC30V 1A
<b>Environmental range</b>	(-40 ~ 70) ° C (flammable) (-20 ~ 55) ° C (adjusted according to specific business needs. To achieve this value, temperature compensation is required.) (10 ~ 95) % RH without condensation
<b>Atmospheric pressure</b>	90 ~ 110Kpa
<b>Dimension</b>	193mm × 139mm × 92mm (L × W × H)
<b>Housing material</b>	Die-cast aluminum, explosion-proof and anti-corrosion
<b>Weight</b>	≈1.5 Kg (net weight of the instrument)
<b>Explosion-proof mark</b>	Ex d IIC T6 Gb

**Random standard accessories:**

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1. Gas detection transmitter (host) \*1
2. User manual \*1, certificate \*1
3. A bracket for fixing

**Optional accessories:**

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1. External sound and light alarm
2. Sensor extension probe(1.5m)
3. 24VDC power adapter