



MST101

Portable single gas alarm detector

MST101 series portable gas detector is a reliable detection instrument with small size and supports customization for various toxic or harmful gases. It comes with fall alarm function, OLED display screen. The shell is designed with rubber coated which has a protection grade of IP66. The use of anti-static materials can meet the explosion-proof requirements. It can continuously detect the realtime concentration of toxic gases or oxygen in the ambient air of industrial and mining enterprises, with sensitive reaction and convenient carrying. It has been widely used in iron and steel metallurgy, chemical plant, petrochemical industry, emergency rescue, industrial safety and other industries.

Features and benefits

- Compact size, easy to carry
- Automatic zero calibration
- Automatic detection of equipment faults
- Unit of ppm, mg/m3, umol/mol, vol%
- Fall alarm
- Display can be inverted

- Sound, light and vibration alarm method, With mute function
- Calibration countdown reminder
- Adjustable alarm threshold
- Rechargeable lithium-ion polymer batteries
- Anti-static shell covered with rubber

Specifications and configuration

Sensor	Electrochemical, NDIR					
Sampling Type	Diffussion					
Safety Certifications	Ex ib IIC T4 Gb ATEX® II 1G Ex ia IIC T4 Ga C€ 2014/30/EU (Electromagnetic Compatibility)					
IP Grade	IP66					
Carried standard	GB12358-2006					
Working Temp.	-20℃~55℃					
Humidity	0%~95%,noncondensing					
Screen	OLED display					
Display Content	Gas symbol, gas unit, real-time value, battery, calibration information, temperature, time					
Alarm mode	95dB/10cm buzzer,red and yellow LEDs flash,built-in vibration					
Alarm project	High Conc./Low Conc./TWA/STEL/Overrange/Low battery/Fall alarms					
Alarm set point	Alarm threshold can be set freely					
Calibration method	Zero/ span gas calibration					
Typical working time	Full charged working >20 days, Recharges < 4 hours					
Battery Parameter	Rechargeable lithium-ion explosion-proof battery, 3.7V-500mAh					
Charging temp.	0°C~40°C					
Shell Material	ABS, anti-static TPE					

Size	93mm×52mm×30mm(Contains no clip)			
Weight	About 98g			

Sensor Parameter

Gas	Principle	Range	Resolution	Accuracy	Low Alarm	High Alarm	STEL	TWA
со	Electrochemical	0~1000PPM	1PPM	±10%	24 PPM	200 PPM	200 PPM	35 PPM
H2S	Electrochemical	0~100PPM	1PPM	±10%	10 PPM	15 PPM	15 PPM	10 PPM
SO2	Electrochemical	0~100PPM	1PPM	±10%	2 PPM	5 PPM	5 PPM	2 PPM
NH3	Electrochemical	0~100PPM	1PPM	±10%	25PPM	50 PPM	30 PPM	25 PPM
CL2	Electrochemical	0~50.0PPM	0.1PPM	±10%	0.5 PPM	1 PPM	1 PPM	0.5 PPM
HCN	Electrochemical	0~30.0PPM	0.1PPM	±10%	4.7 PPM	10.0 PPM	10 PPM	4.7 PPM
HF	Electrochemical	0~10.0PPM	0.1PPM	±10%	2.0 PPM	4.0 PPM	4.0 PPM	2.0 PPM
NO2	Electrochemical	0~100PPM	0.1PPM	±10%	2.0 PPM	5.0 PPM	2.0 PPM	5.0PPM
02	Electrochemical	0~30.0%vol	0.1PPM	±3.0%FS	19.5%vol	23.5%vol		
H2	Electrochemical	0~1000PPM	1PPM	±10%	100 PPM	500 PPM	500 PPM	100 PPM
CO2	NDIR	0~5.00%vol	0.01%vol	±5%FS	0.5%vol	1.0%vol	1.0%vol	0.5%vol
CH4	NDIR	0~5.00%vol	0.01%vol	±5%FS	0.5%vol	1.0%vol	1.0%vol	0.5%vol
VOCS	Electrochemical	0~100PPM	1PPM	±5%FS	10PPM	20PPM	20PPM	10PPM

Note: Please contact us for further customized gas or range if not listed in table.

Accessories









Operation manual

Calibration cover

Charger

Calibration certificate

^{*} Due to ongoing research and product improvement, specifications are subject to change without notice.