

# 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

<b>Sensor</b>	Electrochemical, NDIR
<b>Sampling Type</b>	Diffusion
<b>Safety Certifications</b>	 <b>Ex ib IIC T4 Gb</b> <b>II 1G Ex ia IIC T4 Ga</b> <b>2014/30/EU (Electromagnetic Compatibility)</b>
<b>IP Grade</b>	IP66
<b>Carried standard</b>	GB12358-2006
<b>Working Temp.</b>	-20°C~55°C
<b>Humidity</b>	0%~95%, noncondensing
<b>Screen</b>	OLED display
<b>Display Content</b>	Gas symbol, gas unit, real-time value, battery, calibration information, temperature, time
<b>Alarm mode</b>	95dB/10cm buzzer, red and yellow LEDs flash, built-in vibration
<b>Alarm project</b>	High Conc./Low Conc./TWA/STEL/Overrange/Low battery/Fall down alarms
<b>Alarm set point</b>	Alarm threshold can be set freely
<b>Calibration method</b>	Zero/span gas calibration
<b>Working current</b>	Normal current: ≤0.1 mA (when the screen is off), Alarm instantaneous current: ≤100 mA
<b>Battery Type</b>	Li-On rechargeable
<b>Battery Parameter</b>	Rated voltage 3.7V, nominal capacity 500mAh

<b>Charging temp.</b>	0°C~40°C
<b>Shell Material</b>	ABS, anti-static TPE
<b>Size</b>	93mm×52mm×30mm( Contains no clip)
<b>Weight</b>	About 98g

## Sensor Parameter

Gas	Principle	Range	Resolution	Accuracy	Low Alarm	High Alarm	STEL	TWA
CO	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
O2	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.*

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

## Accessories



Operation manual



Calibration cover



Charger



Calibration certificate