

MST410

Portable multi-gas detector



MST410 gas detector is a sophisticated device capable of measuring up to 5 different gases. This compact easily used detector provides accurate, reliable measurements of combustible, oxygen and many kinds of toxic gases or vapors such as Cl₂, CO, CO₂, H₂, H₂S, HCN, NH₃, NO, NO₂, PH₃, SO₂, O₃, VOC and so on. It has built-in settings and smart sensors, which allows users to change sensors to measure different gases. The device is equipped with 4 buttons that can perform a variety of functions without additional PC applications. The detector comes with data storage capabilities and Bluetooth data transmission. Colorful HD screen makes worker view data clearly even in the bright sun. The durable shell with anti-static rubber coated makes it in IP66 and meets the explosion-proof level, used for harsh environments or extreme temperatures. MST410 device has been widely used in metal smelting, petrochemical, emergency rescue, chemical production to improve life safety.

Features and benefits

- Up to 5 gases measurement, smart sensors
- Datalog & events
- Unit: ppm, mg/m³, LEL%, vol%
- Built-in settings for many functions
- With temperature compensation
- Calibration overdue reminder
- More than 3 years sensor life (Oxygen sensor 2 years)
- Bluetooth to transmit data (PC software)
- All function self-test, failure reminder (including sensor fault detection)
- Rechargeable lithium-ion polymer batteries
- IP66 durable shell with anti-static rubber coated
- Fall alarm

Specifications and configuration

Sensor principle	Electrochemical, Infrared, Catalytic oxidation, Galvanic cell and PID
Sampling method	Diffusion
Working temp.	-20°C~55°C
Working humidity	0~95%, noncondensing
Screen	Colorful TFT LCD
Display content	Gas symbol, Gas unit, Real-time value, Battery indicator, Calibration information, Time
Alarm signal	95dB/30cm buzzer / red and yellow LEDs flash / built-in vibration
Alarm model	High Alarm / Low Alarm / TWA / STEL / Overrange / Low battery / Fall alarm / SOS alarm
Alarm settings	Users can adjust the alarm threshold according to requirements
Calibration	Auto-zeroing / Zeroing / Span gas calibration
Datalog & events	1660pcs datalog + 999pcs events
Battery	Polymer lithium-ion rechargeable battery, full charge working more than 20 hours
Battery Parameter	Rated voltage 3.7V / Capacity 3000mAh
Charging temp.	0°C~40°C
Working current	Normal working current: ≤100mA Alarm current: ≤240mA

IP Grade	IP-66
Safety Certifications	 Ex ib IIC T4 Gb  II 1G Ex ia IIC T4 Ga  2014/30/EU (Electromagnetic Compatibility)
Shell Material	ABS, PC, anti-static TPE
Size	130mm×74mm×37mm
Weight	About 275g
Warranty	1 Year after sale (including sensors)

Sensor Parameter

Gas	Principle*	Range	Resolution	Accuracy	Low Alarm	High Alarm	STEL	TWA
CO	EL	0~1000ppm	1ppm	±10%	35 ppm	200 ppm	200 ppm	35 ppm
H2S	EL	0~100ppm	1ppm	±10%	10 ppm	15 ppm	15 ppm	10 ppm
SO2	EL	0~100ppm	0.1ppm	±10%	2 ppm	5 ppm	5 ppm	2 ppm
NH3	EL	0~100ppm	1ppm	±10%	25ppm	50 ppm	30 ppm	25 ppm
CL2	EL	0~10ppm	0.1ppm	±10%	0.5 ppm	1 ppm	1 ppm	0.5 ppm
HCN	EL	0~50ppm	0.1ppm	±10%	4.7 ppm	10 ppm	10 ppm	4.7 ppm
HCL	EL	0~20ppm	0.1ppm	±20%	4.6 ppm	9.2 ppm	9.2 ppm	4.6 ppm
VOC	EL / PID	0~50ppm	0.1ppm	±10%fs	3.5ppm	7 ppm	7 ppm	3.5 ppm
NO2	EL	0~100ppm	0.1ppm	±10%	3 ppm	5 ppm	5 ppm	3 ppm
CO2	NDIR	0~5.00%vol	0.005%vol	±5%fs	0.5%vol	1%vol	— —	— —
EX	Ct / NDIR	0~100%LEL	1%LEL	±5%fs	25%LEL	50%LEL	— —	— —
H2	EL	0~1000ppm	1ppm	±10%	100 ppm	500 ppm	500 ppm	100 ppm
O2	EL	0~30.0%vol	0.1%vol	±3%fs	19.5%vol	23.5%vol	— —	— —

*EL stands for electrochemistry. Ct stands for Catalytic combustion.
 NDIR stands for non-dispersive infrared absorption. PID stands for Photoionization.

Note: We can customize the detection for other gases or ranges not listed in the table. Should you require any further information, please feel free to reach out to us.

Accessories



Operation manual



Calibration cover



Charger



Calibration certificate



Optional leather bag

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