



MST410P

Portable pump multi-gas detector

MST410P is a pump-type gas detector capable of continuously detecting the concentrations of multiple gases for personal protection. The color TFT screen displays the concentration of the detected gas and other relevant information. High-decibel buzzers, alarm lights, and vibrations can alert users when the current gas concentration exceeds the preset alarm point. Notably, the detector employs smart sensors that are convenient to replace and maintain. It features a built-in program to achieve multiple functions, with optional data storage and Bluetooth data transfer. Additionally, MST410P can be paired with a wireless module to enable remote data transmission and personnel location functions. The MST410P detector is widely utilized in ferrous metallurgy, petrochemical, emergency rescue, and chemical production industries to enhance life safety.

Features and benefits

- The pump can be turned off and started quickly in order to save electricity during use.
- It has blocking pump detection. The detector alerts the user when the pump is blocked in use.
- It supports up to 5 gases (CO/H₂S must be selected in this case of 5 gases).
- The smart sensor can be inserted in any position and is automatically recognized, it's easy to maintenance.
- Optional data storage(event recording and data recording) and Bluetooth data transfer.
- Fall alarm, SOS button.
- Gas concentration units can be selected, LEL%, vol%, ppm or mg/m³.
- The detector can monitor its own working state, alarm and indication when it fails.
- With calibration overdue reminder.
- Show sensors temperature, sensor with temperature compensation.
- The color TFT display.
- Following gravity, the screen is always positive when the meter is turned upside down.
- With rubber antistatic shell, durable, anti-static.

Technical parameter

Battery parameters	Rated voltage 3.7V Nominal capacity 5200mAh
Working current	Normal current: ≤150mA (when the screen is off)
	Alarm current: ≤270mA
Explosion-proof grade	 Ex ib IIC T4 Gb  II 1G Ex ia IIC T4 Ga  2014/30/EU (Electromagnetic Compatibility)
Sensor type	Combustible gas: catalytic combustion or NDIR(Non-Dispersive Infrared) CO2: NDIR(Non-Dispersive Infrared) CO, H ₂ S, NH ₃ , CL ₂ , NO ₂ , HCN, PH ₃ , O ₂ , HCL, HF, SO ₂ and etc. toxic gas: electrochemistry
Detection method	Pump
Response time	Combustible gas: T90<30s Oxygen: T90<30s Toxic gas ammonia, hydrocyanic acid within 120s, phosphine within 60s, other toxic gas response time within 30s
Continuous working time of full charge	≥15 hours
Accuracy	CO: ±10% H ₂ S: ±10% LEL: ±5%FS O ₂ : ±3.0%FS Other toxic gases: ±10% (displayed value) or ±5% (full scale) within the maximum
Use environment	Temperature: -20℃ ~ 55℃ Relative humidity: 0% ~ 95%, no condensation
Storage environment	Temperature: -40℃ ~ 55℃ Relative humidity ≤90%, no condensation
Charging temperature range	0℃ ~ 40℃
Implementation standards	GB12358-2006, GB/T3836.1-2021, GB/T3836.4-2021
Shell material	ABS, PC, antistatic TPE
Overall dimension	161mm×76mm×57mm (including back clip thickness)
Weight	About 450g

Gas type and measuring range

NO.	Gas type	Range
1.	carbon monoxide(CO)	0-2000 ppm
2.	hydrogen sulfide(H ₂ S)	0-100 ppm
3.	oxygen(O ₂)	0-30.0%vol
4.	combustible gas(LEL)	0-100%LEL
5.	ammonia(NH ₃)	0-100 ppm
6.	chlorine(CL ₂)	0-10.0 ppm
7.	hydrocyanic acid(HCN)	0-30.0 ppm
8.	nitrogen dioxide(NO ₂)	0-100.0 ppm
9.	phosphine(PH ₃)	0-10.0 ppm
10.	hydrogen(H ₂)	0-1000 ppm
11.	sulfur dioxide(SO ₂)	0-100 ppm
12.	hydrogen fluoride(HF)	0-10.0 ppm
13.	hydrogen chloride(HCL)	0-20.0 ppm

***For other gas customization, please contact us.**

Accessories



Packing box



Operation manual



Charger



Calibration certificate



Sampling probe



Hose & Waterproof
and dustproof filter



Float



Leather bag
(It need extra cost)