

#### **Multi-Gas Personal Detector**





### 1 Product description:

Portable multi-gas alarm is a continuous detection of multi-gas (combustible gases, oxygen and toxic gases) concentration, easy to use personal protective gas detector. The color OLED display shows the measured gas concentration and other information. The decibel buzzer, alarm indicator and vibration alarm indicate that the current gas concentration has exceeded the set alarm point.

## **TOXIC/FLAMMABLE GAS DETECTION**



#### 2 Features and benefits:



- The color OLED display continuously displays the gas concentration in real time
- Automatic zero adjustment and calibration function
- Automatically start full-function test (including sensor fault detection) when power on
- Gas concentration curve browsing function, intuitive and convenient (optional, factory settings)
- The screen display content can be flip over (optional, need to customize)
- Event record function (optional, to be customized)
- Detection of toxic gas types can be set (optional, to be customized)
- Sound, light, vibration 3 kinds of alarm
- Rechargeable lithium-ion polymer battery design
- Explosion-proof design

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#### 3 Gas types and measurement range:

#### A Gas types:

Combustible gas included	Oxygen, CO, Combustible gas, H2S
Carbon dioxide included	Oxygen, Carbon dioxide, Carbon monoxide
Toxic gases can be replaced with	Ammonia, Sulfur dioxide, Chlorine, Ozone, Nitric oxide, Nitrogen dioxide, Hydrocyanic acid, Phosphine, Hydrogen and other gases (to be customized)

**Please be noted:** Oxygen and combustible gases are not replaceable All types of gas can be closed as a separate channel.

#### **B Measurement range:**

Gas types	measurement range	Gas types	measurement range	Gas types	measurement range
Carbon monoxide	1000 µmol / mol	Hydrogen	1000 × 10-6	Combustible gas	100% LEL
Hydrogen sulfide	100 × 10-6	Ammonia	100 × 10-6	Chlorine	50 × 10-6
Oxygen	30.0%	Sulfur dioxide	100 × 10-6	phosphine	10 × 10-6
Hydrogen cyanide	30 × 10-6	Ozone	1 × 10-6	Nitrogen dioxide	50 × 10-6
Nitric oxide	100 x 10-6	Carbon dioxide	5.0%		

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### 4 Technical parameters:

Battery type		Lithium-ion polymer		
Battery parameters:		Rated voltage 3.7V, nominal capacity 1800mAh		
Working current:		Normal current: ≤ 100mA Alarm current: ≤190mA		
Explosion-proof grade		ExdibIIBT3 Gb		
Sensor type:	Carbon dioxide	Infrared		
	Combustible Gas:	Catalytic combustion		
	Oxygen	Galvani an Battery		
	Toxic gas	Electrochemical		
Detection method:		Diffusion type		
	Carbon dioxide:	T90 <30s		
Response time:	Combustible gas:	T90 <30s		
	Oxygen:	T90 <20s		
	Toxic gas:	T90 <60s General		
Full charge continuous working hours:		≥14 hours (including combustible gas) ≥48 hours (excluding combustible gas)		
	Carbon dioxide:	± 0.1% (volume ratio)		
	Carbon monoxide:	± 10%		
Error:	Hydrogen sulfide:	± 5% FS		
	Combustible gas:	± 5% FS		
	Oxygen:	Soil 3.0% FS		
	Other toxic gases	± 10% (display) or ± 5% (full scale) within, take large		
Working Environment:		Temperature: -20 $^{\circ}$ C ~ 40 $^{\circ}$ C Relative humidity: 15% -95%, no condensation		
Storage environment:		Temperature: -20 °C ~ 60 °C Relative humidity ≤ 90%, no condensation		
Charging temperature range:		0 °C ~ 40 °C		
Protection class:		IP65		
Material:		PC, ABS, anti-static TPE		
Dimensions		130mm × 72mm × 36mm		
Weight:		310 grams		

## 5 Application:

Oil &Petrochemical Metallurgy

Chemical industryEnvironmental protectionPapermakingPrinting and dyeing Municipal

Research &Education National defense