





SKY3000 —— Portable gas detector

# **SKY3000** Portable gas detector

SKY3000 series is a high-performance portable gas detect or that can detect multiple gases (Oxygen, combustible gas and toxic gas) at the same time and has man down alarm function. The device has humanized operation functions such as one-key security detection, one-key storage, automatic image flipping, as well as the man down alarm function. It is IECEX, ATEX explosion-proof certificated and passed the anti-static test. Its protection level reaches IP67. With safer product design and the module design which makes the detection faster, and the compact ergonomic design makes the device easy carrying. What' s more, the device is also a suction and diffusion dual-purpose instrument. The instrument is mainly working in suction mode. When the air pump fails or in special emergency situations, it can automatically switch to the diffusion sampling method, thereby improving the protection.

The explosion-proof Grade of the SKY3000 series is Ex ia IIC T4 Ga, which is applicable to the explosive gas mixture zone 0, zone 1, and zone 2 of the factory with grades IIA, IIB, and IIC and temperature group T1~T4.



# Product Advantage

### **Rugged and durable**

- The instrument can effectively resist a three-meter drop
- The protection level of the instrument reaches IP67
- The instrument has passed the EMC anti-static interference test and can work normally in the walkie-talkie environment

## Explosion-proof circuit design, safe and reliable

• The instrument has got IECEX, ATEX, Chinese explosion-proof certificates and the explosion-proof level reaches Exia IICT4 Ga

### Multiple security protection

- The man down alarm function has upgraded the safety of underground operators
- Password protection function prevents non-operators from modifying menu parameters
- With safety reminder function, sound and light vibration alarm function, let operators work without worries
- The high and low alarm latched function allows the operator to better capture the sudden change of the gas concentration value

# Simultaneous measurement of multiple gases, multiple numerical display

- The instrument can detect 1-4 gases at the same time
- Real-time value, TWA, STEL, MAX, MIN multiple numerical display





## Large screen display, flexible detection system, multiple filtering devices

- The screen can be automatically turned 180 degrees, which is convenient for viewing in special operating environments
- Built-in powerful sampling pump, fast detection speed
- Can be connected 20m sampling tube externally, which is convenient for long-distance or confined space detection
- Pump suction and diffusion dual use, to provide operators with more reliable protection
- With a water trap filter, it can effectively filter water, oil, dust and other impurities. It can also be used in harsh industrial environments such as coal mines and petroleum fields

#### Powerful function, more user-friendly operation

- Beautiful and friendly user interface, reasonable and easy-to-use interactive mode
- Optional Bluetooth function, data can be transmitted to the mobile phone or PC in real time
- Standard storage function, one-click data export, convenient for users to analyze
- Unique modifiable ID identification function, convenient for users to allocate and manage the instrument
- A full range of automatic detection functions, automatic prompts for voltage, pump failure alarms, etc., more comfortable to use One-key security detection
- one-key open storage, automatic image flip
- Support PPM and mg/m3 gas unit switch, the concentration value is automatically converted by the system
- Support each channel sensor to restore the factory setting separately
- Support multi-language including English. Chinese and etc.

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Sampling method	pump suction & diffusion dual-use type			
Gas type	Oxygen, Combustible gas, Carbon monoxide, Hydrogen sulfide			
Measure range	0-30%VOL、0-100%LEL、0-1000PPM、0-100PPM			
Resolution	0.01%VOL、1%LEL、1PPM、1PPM			
Response time	≤30 seconds			
Precsiion	≤ ±2%F.S except for special gases			
Language	Chinese/English (More language can be customized)			
Automatically test and calibrate after power-on	Including reset, maximum value (MAX), minimum value (MIN), STEL, TWA value			
Unit	PPM and mg/m <sup>3</sup> can be switched and displayed by one key, and the concentration value is automatically converted by the system			
Disaply	monochrome graphics (160 x96) ,screen can be automatically flipped			
Backlight	The backlight time can be manually set, and will be turned on automatically when an alarm is issued			
Data record	Can store 100,000 sets data, the storage interval is adjustable from 5 to 3600 seconds, data can be exported, with data cable			
Alarm	95dB buzzer (@30cm), vibration alarm and flashing red LED and alarm status indication on the screen, alarm latched; diagnostic alarm and battery undervoltage alarm, pump block alarm; man down alarm, with early warning and optional real-time remote Bluetooth notification function			

# **Product specifications**

3.7V rechargeable lithium battery, battery capacity 2200mA				
More than 15 hours in continuous pumping mode				
Travel charger with DC interface, charging time $\geq$ 4 hours				
IECEx: Ex ia IIC T4 Ga 🛛 ATEX: 😡 II 1G Ex ia IIC T4 Ga				
2004/34/UE (ATEX)				
IP67				
-20℃~+50℃				
0~90%RH (no condensation)				
86~106Kpa				
157*84.5*59.5mm (including back clip/water trap filter) (length * width * height)				
365g (including battery, belt clip and filter)				

## Normal gas types and paramaters ( Other gases are not listed can be customized )

Detected gas	measure range	Optional ranges	Resolution	Response time
Flammable gas ( EX )	0-100%LEL	0-100%VOL	0.1%LEL/0.1%VOL	≤10S
Oxygen ( O2 )	0-30%VOL	0-25%VOL	0.01%VOL/0.1%VOL	≤10S
Carbon monoxide ( CO )	0-1000ppm	0-2000ppm	0.1ppm/1ppm	≤10S
Hydrogen sulfide (H2S)	0-100ppm	0-1000ppm	0.01ppm/0.1ppm	≤10S
Ammonia (NH3)	0-100ppm	0-200ppm	0.01ppm/0.1ppm	≤10S
Chlorine ( CL2 )	0-10ppm	0-100ppm	0.01ppm/0.1ppm	≤10S
Hydrogen Chloride (HCL)	0-20ppm	0-100ppm	0.01ppm/0.1ppm	≤10S
Nitric oxide ( NO )	0-100ppm	0-250ppm	0.01ppm/0.1ppm	≤10S
Nitrogen dioxide ( NO2 )	0-20ppm	0-100ppm	0.01ppm/0.1ppm	≤10S
formaldehyde ( CH2O )	0-10ppm	0-50ppm	0.01ppm/0.1ppm	≤10S
Ozone ( O3 )	0-10ppm	0-100ppm	0.01ppm/0.1ppm	≤10S
Carbon dioxide ( CO2 )	0-2000ppm	0-100%VOL	1ppm/0.01%VOL	≤10S

# **Product configuration**

#### Standard accessories:

- Gas detector 1 piece
- 12V/1A DC power adapter 1 piece
- USB cable 1 piece
- User manual 1 piece
- warranty card 1 piece
- Filter 1 piece
- Aluminum suitcase 1 piece



# Application



▲ Petrochemical & Chemcial Industry



▲ Electronic



▲ Municipal Engineering & Utilities



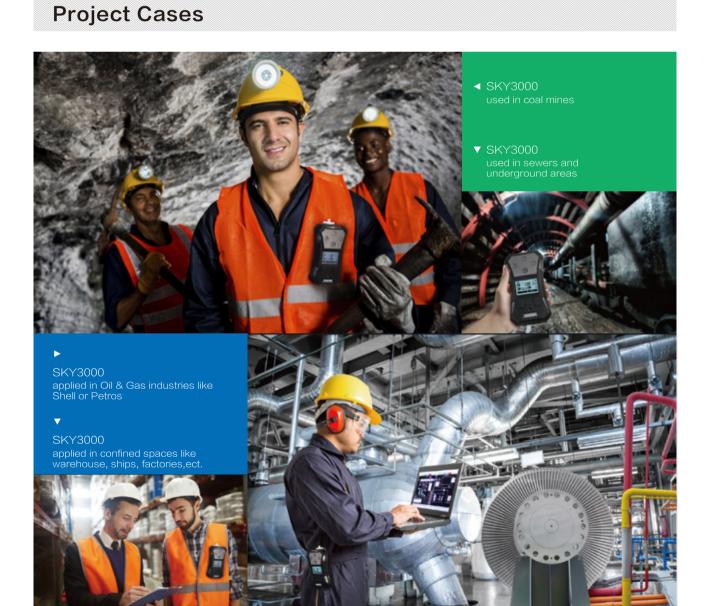
▲ Food & Pharmaceutical Industry



Agricultral & Environmental Protection



▲ Other Industries



## More Application

- Furniture, Floor, Wallpaper, Coating, Gardening, Interior Decoration and Renovation, Dyestuff, Papermaking, Pharmacy, Health Care, Foodstuff, Antiseptic.
- Disinfection, Chemical Fertilizer, Resin, Adhesive, Pesticide, Raw Material, Sample, Technological Process, Livestock Farm, Refuse Processing Plant, Perm Place.
- Bio-pharmaceutical Plant, Green Household, Livestock Breeding, Green House Cultivating, Warehouse Logistics, Brewing And Fermentation, Agricultural Production.