



## Customized Single Gas Detector Bluetooth Module with Mobile APP/K60-B and Trustworthy

### Our Product Introduction

#### Basic Information

- Minimum Order Quantity: 1PC
- Price: \$50-500 PC
- Stock: 1PC



#### Product Specification

- Model NO.: K60-B
- Item: Single Gas Detector
- Sampling: Diffusion
- Working Voltage: Gas Operating Voltage 3.7 V
- Alarm Type: High/Low Two-Level Acousto-Optic Alarm, Vibration
- Stability: Less Than +\_- 2%/Month
- Sensor Life: 24 Months
- Repeatability: Less Than 2%
- Working Temperature: -10°C - +40°C
- Humidity Range: 15% Rh - 90% Rh
- Air Pressure: 86 Kpa - 106 Kpa
- Storage Temperature: -40°C - +45°C
- Transport Package: 1 Set/ Carton
- Specification: 109x56x38mm/4.291"x2.205"x1.496"



#### More Images



**Product Description****K60B Portable Single Gas Detector**

The K60B portable gas detector is a single gas detector that can be flexibly configured. It can be equipped with an oxygen sensor, combustible gas sensor, carbon monoxide sensor, hydrogen sulfide sensor, and other types of toxic gas sensors (see Table 1 for specific gas types). It has functions such as on-site gas detection, on-site alarm, and wireless communication (optional: 1. Send via the Bluetooth module with mobile APP. 2. Send to the web platform and mobile APP wirelessly via the NB/GPS positioning module.)

**Technical Specification**

<b>Item:</b>	portable single gas detector
<b>Model NO.:</b>	K60
Sensors:	UK sensors (brand CITY, Alphasense, Dynamant etc.), US (brand Honeywell), Japan and Germany sensors, ensuring high stability & sensitivity
Sensor service life:	2 years
Operating voltage:	3V lithium battery
Display:	LCD display
Alarm buzzer:	90db
Alarm mode:	acousto optic alarm
Ambient temperature:	- 20 ° C ~ + 50 ° C
Relative humidity:	15~90%RH(non condensation)
Material:	ABS, slip silicone
Detecting method:	diffusion
Dimension(mm):	109×56×38mm
Explosion-proof grade:	ExdII CT3
Weight :	120g
Package:	carton
Pcs/ctn:	1pc/ctn
Ctn size:	150x105x47mm
Payment terms:	T/T
Warranty:	1 year

Gas Types	Detection range	Response Time	Resolution	Alarm Values
O <sub>2</sub>	0-25%vol/30%vol	T90≤20s	0.1%vol	18.0%vol/23.0%vol
LEL	0-100%LEL	T90≤30s	1%LEL	25.0%LEL/50.0%LEL
CO	0-1000 ppm/2000ppm	T90≤30s	1 ppm	50ppm/100ppm
H <sub>2</sub> S	0-200 ppm	T90≤30s	0.1 ppm	10ppm/20ppm
SO <sub>2</sub>	0-200ppm	T90≤30s	0.1 ppm	2 ppm /10 ppm
Cl <sub>2</sub>	0-20 ppm	T90≤30s	0.1 ppm	1 ppm /10 ppm
NH <sub>3</sub>	0-100ppm/2000ppm	T90≤50s	1 ppm	25 ppm /50 ppm
NO <sub>2</sub>	0-200ppm	T90≤25s	0.1 ppm	3 ppm /10 ppm
NO	0-1000 ppm	T90≤50s	1 ppm	25 ppm /50 ppm

O <sub>3</sub>	0-1ppm/10ppm	T90≤30s	0.1ppm	0.3ppm/5ppm
PH <sub>3</sub>	0-10ppm	T90≤60s	0.1ppm	0.3ppm/5ppm
H <sub>2</sub>	0-2000ppm/4%vol	T90≤50s	1 ppm	50ppm /100ppm
HF	0-10ppm	T90≤50s	0.1ppm	3ppm /10ppm
HCL	0-30ppm/200ppm	T90≤50s	0.1 ppm	5ppm /10ppm
HCN	0-200ppm	T90≤200s	0.1ppm	10 ppm /20 ppm
CH <sub>4</sub> (IR)	0-5.00%vol	T90≤60s	0.01%vol	1.00%vol/2.00%vol
VOCs	0-1999ppm	T90≤20s	0.1ppm	1000ppm/1500ppm
CO <sub>2</sub> (IR)	0-5.00%vol (0-1%vol)	T90≤60s	0.01%vol (0.001%vol)	1.00%vol/2.00%vol (customize)
C <sub>2</sub> H <sub>4</sub>	0-100ppm	T90≤60s	0.1ppm	10ppm/20ppm
C <sub>3</sub> H <sub>8</sub> (IR)	0-5.00%vol )	T90≤60s	0.01%Vol	1.00%vol/2.00%vol

**Mark: CUSTOMIZED gas detectors and OEM/ODM services are welcome.**

## Working Principle

The electrochemical sensor works based on the principle of controlled potential electrolysis. It is constructed by placing three electrodes in an electrolytic tank, namely, the working electrode, the counter electrode, and the reference electrode, which are applied on a certain bias voltage, and isolated from the outside by a membrane. There is an electrolyte in the tank. The measured gas passes through the membrane to the working electrode and there is a redox reaction occurred, in which the current generated is proportional to the measured gas concentration. The catalytic combustion sensor adopts the latest generation of low power consumption and high anti-interference carrier catalytic element. It forms a detection bridge with two fixed resistors. When the combustible gas in the air diffuses to the surface of the detection element, the non-flame combustion proceeds rapidly under the action of the catalyst on the surface of the detection element. The reaction heat increases the resistance of the platinum wire of the detection element, and the detection bridge outputs a differential pressure signal. The magnitude of the voltage signal is directly proportional to the concentration of the combustible gas.

When the current signal sampled by the gas sensor passes through the current-voltage conversion circuit and the voltage amplifier circuit, a voltage signal is obtained. The voltage of the signal is linearly related to the concentration of the measured gas. Meanwhile, the single-chip microcomputer carries out high-frequency sampling, data processing, and alarming points comparison for this signal, and finally controls the LCD circuit to display the corresponding concentration value. Moreover, by comparison with the alarm setpoint, it controls the alarm circuit to give out an acousto-optic and vibration alarm. The Bluetooth module or the NB-IOT/GPS positioning module (optional) wirelessly transmits the signal to the web platform or mobile APP via the Telecom NB Cloud and Telecom Cloud Server. NB-IoT refers to the cell-based narrowband internet of things technology. It is an emerging branch of technology in the IoT field that supports low-power cellular data connection in wide-area networks, also known as low-power wide-area networks (LPWAN). NB-IoT works in the licensed spectrum and can be deployed directly on the GSM, UMTS, and LTE networks, co-existing with existing networks, with a bandwidth of about 180kHz.

Along with the K700, a China Telecom industry-grade NB-IOT sim card will be offered! The card contains a fee worth of 20 yuan for one year use and can be used directly, providing 20,000 connections a year. ( Note: the connection number is calculated through the connection management platform, which mainly calculates the number of business connections in the application layer, including sending and receiving, but not the connection number of signaling connections in the network layer.)

*Note: The NB-IoT card can only be used for data transmission, not for functions such as making phone calls and sending SMS messages (the SMS function is set up on the web gas platform after connecting to the gas platform). The billing time for the NB-IoT card is calculated from the first use. If you need to renew the service after connecting more than 20,000 times or one year, please contact the company's customer service staff for the top-up. The top-up fee is 20,000 connections/20 yuan per year.*

## Certifications

Certificate – Сертификат – 證明書 – Certificat – 증명서 – شهادة –

## Verification of Compliance

No. EC.1282.00140417.NKSQX44



**Certificate's Holder:** Nanjing KELISAIKE Safety Equipment Co., Ltd.  
No. 9 Gaohu Road, Jiangning District, Nanjing, 211100, China

**Product:** Portable Gas Detector  
**Model(s):** K60-CO, K60-O<sub>2</sub>, K60-H<sub>2</sub>S, K60-H<sub>2</sub>, K60-NH<sub>3</sub>,  
K60-CH<sub>4</sub>, K60-EX, K60-PH<sub>3</sub>, K60-NO<sub>2</sub>, K60-NO,  
K60-SO<sub>2</sub>, K60-CL<sub>2</sub>

**Verification to**  
**Standard:**  
EN 61000-3-2:2006+A1:2009+A2:2009,  
EN 61000-3-3:2013, EN 61000-6-1: 2007,  
EN 61000-6-3:2007+A1:2011+AC:2012.

**related to:**  
Directive 2004/108/EC (Electromagnetic Compatibility)

**Remark:** This Verification of Compliance has been issued on a voluntary basis. ECM confirms that a Technical Construction File (TCF) is existent for the above listed product(s).  
The TCF satisfactorily covers the essential requirements of the above listed standards related to Directive 2004/108/EC (Electromagnetic Compatibility).  
Other relevant Directives have to be observed in case they are applicable.  
This Document is only valid for the equipment and configuration described and in conjunction with the TCF detailed above. Whereas the Manufacturer is responsible of the certification of the product(s) and not exempted to perform all the necessary activities before placing the product(s) on the market.  
The Manufacturer is also responsible of the internal production control to ensure the product(s) are in compliance with the essential requirements of the above mentioned Directive(s).  
This certificate can be checked for validity at [www.entecerma.org](http://www.entecerma.org)

Date of issue APRIL 2014

Certification Chief Manager

Tim Mahan



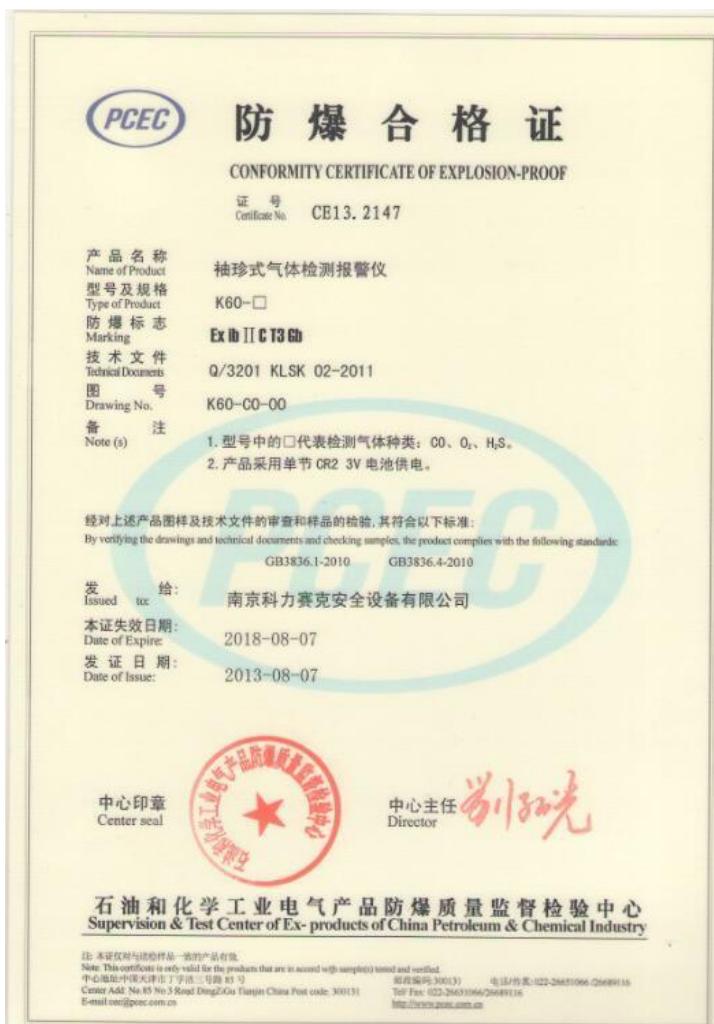
Expiry date APRIL 2019

Certification Deputy Manager

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## Service

1. For all our customers, our products have 1 year warranty, and life-long maintenance.
2. All inquiries will be replied in 24 hours.
3. We will provide technical support, our engineers will help to solve the problems you met.
4. We can provide OEM and ODM service.
5. Our factory is located in Nanjing city, welcome to visit our factory.
6. All products will be well checked and well packed before shipment, and qualification certificate will be provided.

## Why choose KELISAIKE?

1. Mutual benefit : We are a factory, our price will be cheaper in the same quality.
2. Professional engineers: We have 3 engineers who have more than 10 years' experience and over 5 engineer assistants in gas detection line, with Hi-Tech equipments, we make more accurate and stable products.
3. Customize : We have strong R&D team, can custom product as your request.
4. Free OEM service : (a) Silk-printing your Logo( $\geq 100$ PCS). (b) Design your color box( $\geq 500$ PCS).
5. Mix order : We accept mix order, different model and small quantity order.
6. After service: (a) 1 Year warranty. (b) If you found any inferior-quality products from us, we will send new ones to replace for free in your next order after confirmed.

## FAQ

Q: Are you a manufacturer?

A: Yes, we are the professional safety equipment manufacturer, we have over 12 years' production and market experience in this field.

Q: Do you provide customization?

A: Yes, including gas type, gas detection range, gas alarm point etc. please contact us about the detailed specifications.

Q: Can I order one piece for sample to test the quality?

A: Yes, we recommend to check the sample before ordering.

Q: If I order big quantity, what's the good price?

A: Please send the details inquiry to us, such as the Item Number, Quantity for each item, Quality request, Logo, Payment Terms, Transport method, Discharge place etc. We will make the accurate quotation to you as soon as possible.

## Company View



**Nanjing KELISAIKE company** is one of the largest safety equipment manufactures, possesing the most complete production range and specifications in the safety equipment industry of mainland China. Nanjing KELISAIKE was founded in 2004, including three subsidiaries in Beijing, Xi'an and Xinjiang, and more than 30 domestic sales service centers, with total registered capital of 5.16 million Yuan. We are the leader enterprise of the science and technology, persisting in creating core competencies by the core technology. In the company, there is one professional and technical talent team who masters core technology, including more than 10 senior technicians and masters. Standard products and services cover the portable gas detector, fixed gas transmitter, wall-mounted gas detector, gas detector control unit, air breathing apparatus etc. Also Nanjing KELISAIKE is an experienced factory for OEM service, providing professional design and construction of the customize products. The products are widely used in fields of petroleum, chemical, gas transmission and distribution, warehousing, municipal gas, fire fighting, environmental protection, metallurgy, pharmacy, energy and power industry.



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