Malodorous Gas Sensor Module

（Model：ZE807-CS2）

User's Manual

Version：1.2

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Zhengzhou Winsen Electronic Technology Co., Ltd

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Zhengzhou Winsen Electronics Technology CO., LTD

ZE807-CS2 Malodorous Gas Sensor Module

Description

ZE807-CS2 Malodorous Gases Sensor Module uses high-precision electrochemical sensors, specialized instrument amplifiers, high-precision processors, and intelligent algorithms to convert the detected ammonia gas concentration into recognizable digital signals, which are transmitted through serial ports. Convenient for users to use and debug, shortening their design and development cycle.

The module is equipped with sensors with good linearity, high precision, high sensitivity, strong anti-interference ability, excellent repeatability and stability, and combined with temperature and humidity compensation algorithms, greatly improving the reliability of the module.

Natural diffusion type   Integrated pump type

Characteristic

Small size

Dual signal output (UART signal, analog voltage signal)

High stability, high anti-interference

Temperature and humidity compensation

Sampling method can be selected: natural diffusion or integrated pumping

Application

Mainly used in gas monitoring, Internet of Things, UAV, atmospheric environment monitoring instrument, micro air quality monitoring station, toxic gas detection and other fields.

Technical Data

Model No.	ZE807-CS2
Detection Gas	CS2
Detection Range	0 ～ 10 PPM
Working voltage	DC 5±0.1V
Working Current	≤10mA
Output Signal	UART（TTL Level 3.3 V）、Analog signal（0-5V）
Accuracy	≤±3%
Repeatability	≤±3%
Response Time	T90≤30s
Preheat Time	30s
Resolution	0.001 ppm
Working Environment	Temperature：-20 ～ 50°C, Humidity：15% ～ 93%RH No condensation
Storage Environment	Temperature：-20 ～ 60°C, Humidity：15% ～ 75%RH
Dimension	Φ22mm * 30.5mm

Sheet 1

Leading gas sensing solutions supplier in China!
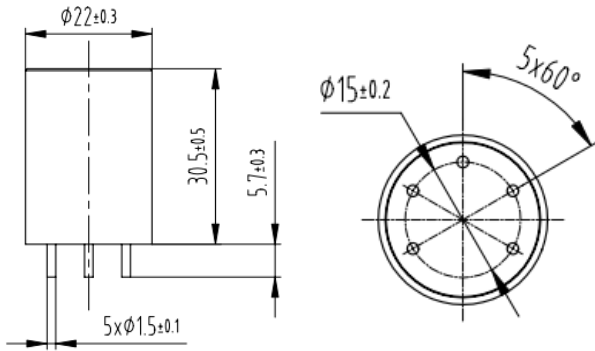
Picture 1：Module side and bottom views

Note：Error：±0.25mm
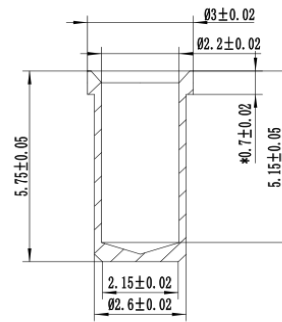
Picture 2：Tube base dimension for module matching

Pin definition

<div align="center">

Table 2

VCC	Voltage supply
VO	Analog signal
RXD	Serial port input
TXD	Serial port ouput

</div>
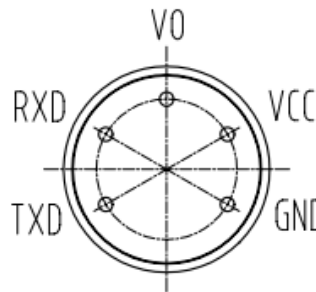
Note

1. After long-term storage, the module needs to be energized for a longer time to achieve stability before use, and the module needs to be aged for at least 48 hours for the first time.

2. Direct welding of the pins of the module is prohibited. The tube seat of the pins can be welded, and the size of the tube seat is shown in Figure 2.

3. The module can not withstand excessive impact or vibration.

4. Do not apply this module to the system involving personal safety.

5. Do not install the module in strong air convection environment.

6．To determine whether the module communication is normal, it is recommended to use the USB to TTL tool (communication level 3.3V), observe and judge according to the communication protocol through the serial debugging assistant software.

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