

Formaldehyde Sensor Module CB-HCHO



Description

CB-HCHO formaldehyde sensor is an electrode electrochemical type sensor. It measures the gas concentration through the diffusion principle. It has better selectivity to formaldehyde, but it can also respond to the alcohol, benzene and naphthalene and other gases. With signal amplification circuit, single power supply, serial signal output, fast and convenient use.

Main features

- ✧ High sensitivity, good stability
- ✧ Low power consumption, strong anti-interference ability
- ✧ Temperature compensation algorithm, good linearity

Application

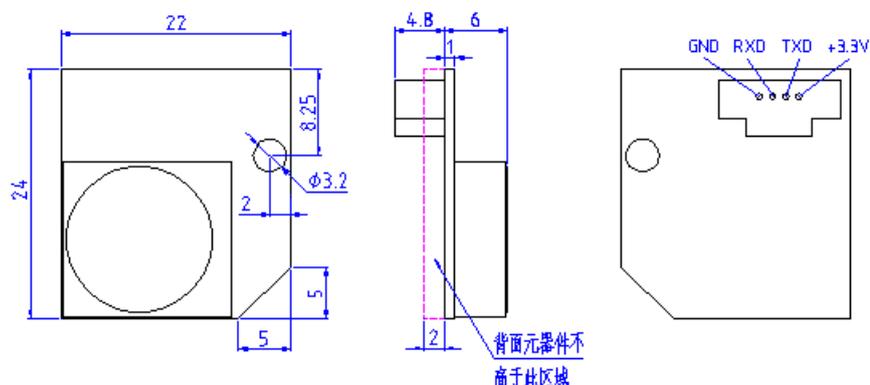
- ✧ Portable instrumentation
- ✧ Desktop air quality monitoring equipment
- ✧ Air Purifier
- ✧ HVAC
- ✧ Air conditioning
- ✧ Smart home equipment

Table 1.Specification

Power supply	3.3 ~ 5.0VDC
Working current	< 10mA
Working temperature	-10 ~ +40 ℃
Working humidity	0 ~ 95%RH, non-condensing
Storage temperature	-20 ~ + 60 ℃
Dimension	24×22×6(mm), exclude pins
Measurement range	0 ~ 3ppm
Sensitivity	0.01ppm
Preheating time	≤30s
Accuracy	0 ~ 0.2 ppm: ±0.05; >0.2 ppm: ±30%
Life span	≤2 years
Output protocol	UART_TTL, 3.3V, support calibration by command

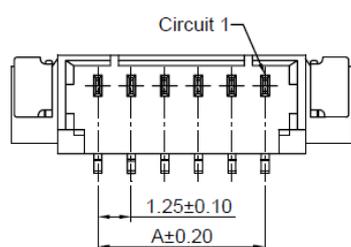
Dimensions and Pin Definition

Dimensions: 24mmx22mmx6mm (Un-concluding connector) ,

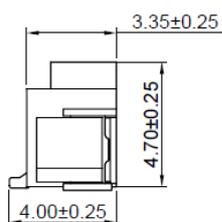
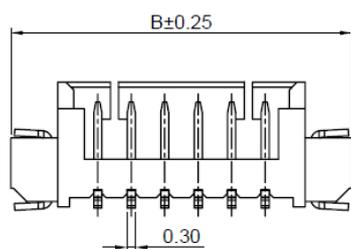


Pin definition

No.	Pin	Description
Pin1	+3.3~5.0V	Power input(+)
Pin2	TXD	Signal output
Pin3	RXD	Signal reception
Pin4	GND	Power output(-)

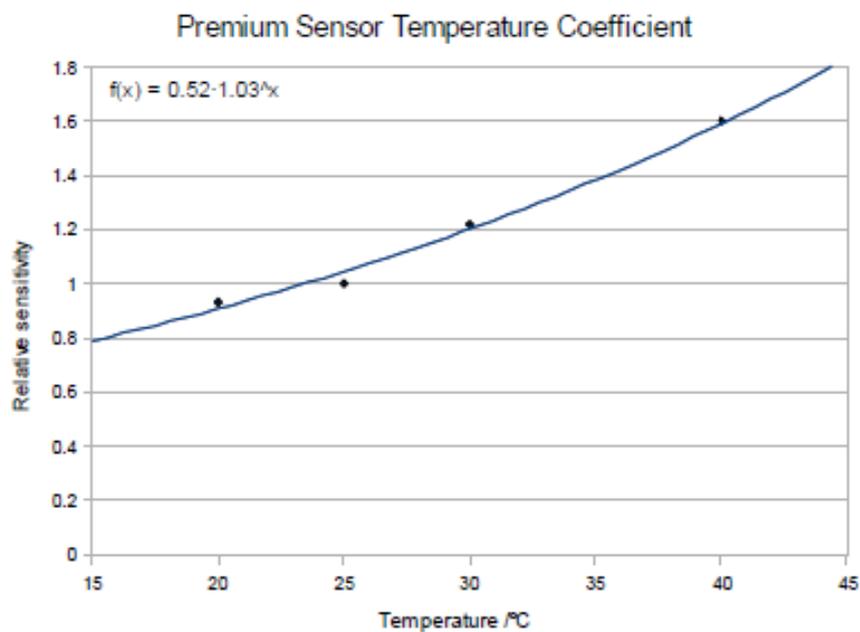


PART NO.	Dimensions	
	A	B
A1251WV-S-4P	3.75	10.25



Note: The connector model is A1251WV-S-4P, the above schematic diagram is 6Pin, the actual of the model is 4Pin.

Temperature correction coefficient curve



Gas selectivity

Substance	Relative sensitivity
Reference: formaldehyde	100
Ammonia	0.0
Water vapour	0.0
Carbon dioxide	0.0
Acetone	0.0
Methyl ethyl ketone	0.0
Benzene	0.0
Toluene	0.0
Methane	0.0
Ethyl acetate	0.0
hydrogen	0.1
chlorine	-3
Carbon monoxide	1
Phenol	8
Sulfur dioxide	12
Ethanol, methanol	50

Notice

- 1) Do not use this module in systems that related to personal safety;
- 2) Do not put the module for a long time in high concentrations of organic gases, or it is likely to cause damage to the sensor;
- 3) Do not install the module in a strong air convection environment;
- 4) Diffusion sampling, the air circulation of the measurement point should be ensured.
- 5) To ensure the measuring accuracy of formaldehyde, should be avoid to use in the environment of perfume, cooking wine and other alcohol-heavy environment.

After-sales services and consultancy

TEL: 86-27-8162 8827

ADD: Fenghuang No.3 Road, Fenghuang Industrial Park, Eastlake Hi-tech Development
Zone, Wuhan 430205, China

Zip: 430205

fax: 86-27-8740 1159

Website: <http://www.gassensor.com.cn>

E-mail: info@gassensor.com.cn