



Air-Quality Detection Module

(Model: ZP07-10)

User's Manual

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Zhengzhou Winsen Electronics Technology Co., Ltd

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Zhengzhou Winsen Electronics Technology CO., LTD.

Air-Quality Detection Module

Product Description

ZP07-10 air-quality module adopts flat surface semiconductor gas sensor. The module has good sensitivity to volatile organic gases such as formaldehyde, benzene, carbon monoxide, ammonia, hydrogen, alcohol and smoke of cigarette, essence &etc. The module has good consistency and high sensitivity after aging, debugged, adjusted and calibrated.

Features

High sensitivity, excellent long-term stability
Calibrated before shipment
Low power consumption, long life
High cost-effective

Application

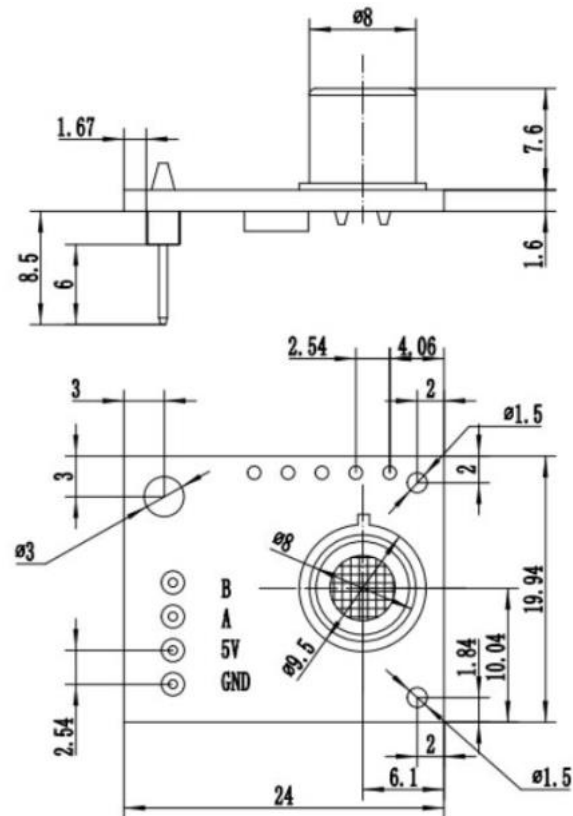
Air cleaner, fresh-air system, intelligent integrated ceiling, air quality detector, ventilator, air-condition.



Technical Index

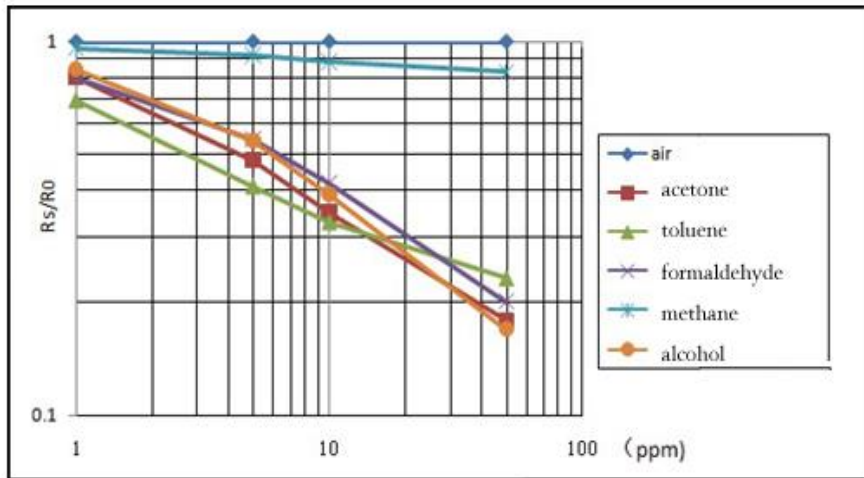
Table 1

Model No.	ZP07-10
Detection Gas	formaldehyde, benzene, carbon monoxide, hydrogen, alcohol, ammonia, smoke of cigarette, essence &etc.
Physical Interface	XH2.54-4P pins
Output Data	0~0 grades pollution level
Working Voltage	5.0±0.2V DC (No voltage reverse connect protection)
Output Data	TTL level (200 Ω protected resistance inside)
Working Current	≤60mA
Warm-up Time	≤3 min
Response Time	≤20s
Recovery Time	≤60s
Operating Temperature	0~50℃
Operating Humidity	≤95%RH
Storage Temperature	-20~60℃
Storage Humidity	≤60%RH
Weight	≤ 20g



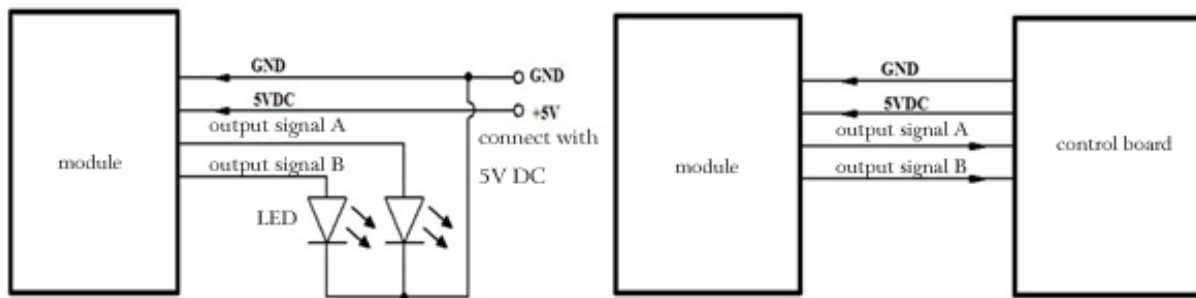
Picture 1:Module structure diagram
(Dimension tolerance ±0.2mm)

Sensitivity Characteristics



Picture 2: Contrast of the sensitivity in different gases

Application of schematic diagram



Picture 3: Module application diagram

Pin definition Table2.

Pin	Name	Function
1	GND	Input power -
2	5V	Input power +
3	A	Output signal A
4	B	Output signal B (reserved by factory)

A Output Signal Table3.

High ms	Low ms	Pollution Level
0	100	0
10	90	1
20	80	2
30	70	3
40	60	4
50	50	5
60	40	6
70	30	7
80	20	8
90	10	9
100	0	10

Cautions

- Please do not put the module in organic solvent (include silica gel and other cementing compound), painting, medicament, oils and fuels, high concentration gas etc.
- Please do not impact or vibrate the module seriously.
- Please warm up for 5 min before first using.
- Please do not use the module related with personal safety.
- Please do not install the module in the severe convection environment.
- Please do not put in the module in high concentration organic gas for long time.
- Please power the module strictly according to the power supply voltage of the module. If the voltage exceeds 5.5V, the module will be irreversibly damaged.