



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

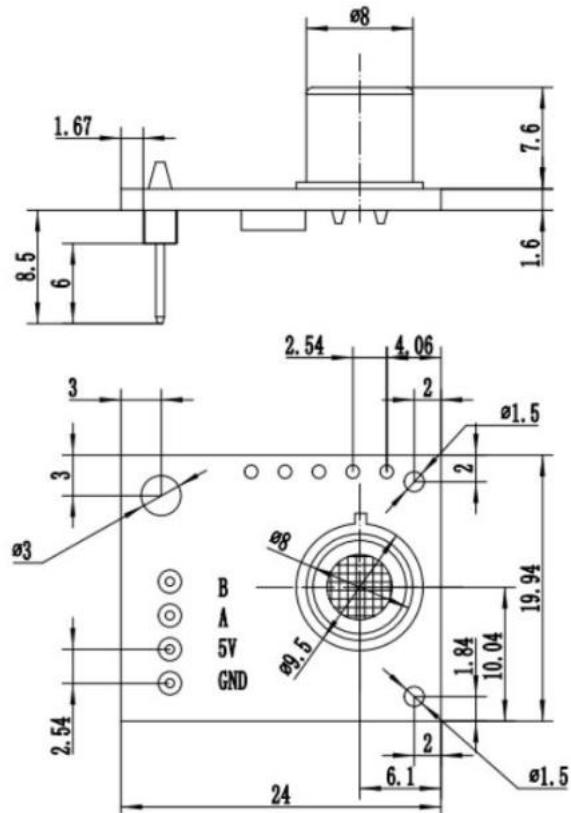
Application

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

Technical Index

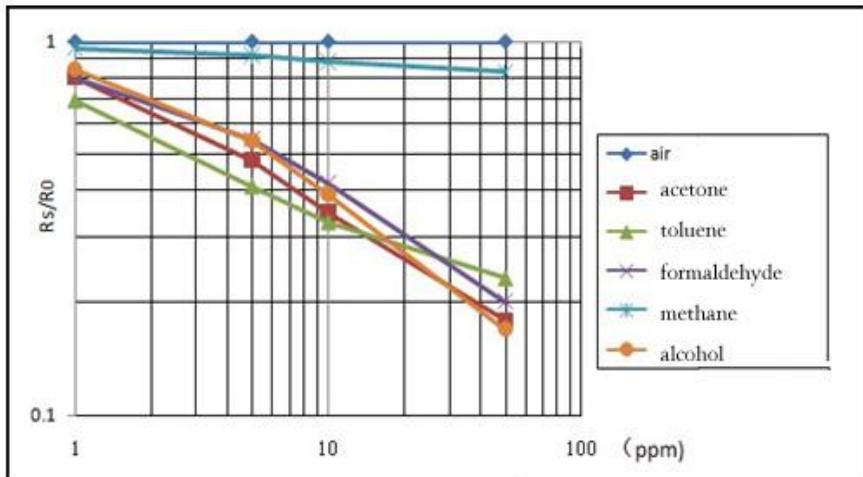
Table 1

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	\leq 60mA
Warm-up Time	\leq 3 min
Response Time	\leq 20s
Recovery Time	\leq 60s
Operating Temperature	0~50°C
Operating Humidity	\leq 95% RH
Storage Temperature	-20~60°C
Storage Humidity	\leq 60% RH
Weight	\leq 20g



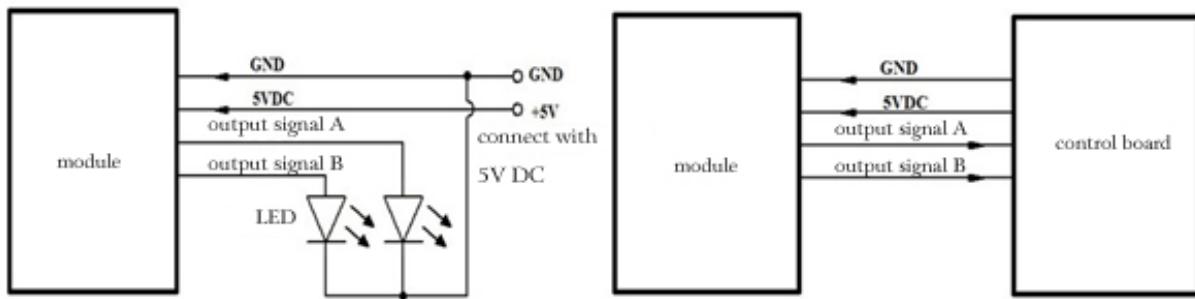
Picture 1:Module structure diagram
(Dimension tolerance \pm 0.2mm)

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.