

Air-Quality Detection Module

(Model: ZP07-MP901)

User's Manual

Version: 1.1

Valid from 2014-11-10

Zhengzhou Winsen Electronics Technology Co., Ltd

Statement

This manual's copyright belongs to Zhengzhou Winsen Electronics Technology Co., LTD. Without the written permission, any part of this manual shall not be copied, translated, stored in database or retrieval system, also can't spread through electronic, copying, record ways.

Thanks for purchasing our product. In order to let customers use it better and reduce the faults caused by misuse, please read the manual carefully and operate it correctly in accordance with the instructions. If users disobey the terms or remove, disassemble, change the components inside of the sensor, we shall not be responsible for the loss.

The specific such as color, appearance, sizes &etc., please in kind prevail.

We are devoting ourselves to products development and technical innovation, so we reserve the right to improve the products without notice. Please confirm it is the valid version before using this manual. At the same time, users' comments on optimized using way are welcome.

Please keep the manual properly, in order to get help if you have questions during the usage in the future.

Zhengzhou Winsen Electronics Technology CO., LTD.

May 1st, 2014



ZP07-MP901 Air-Quality Detection Module

Product Description

ZP07 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 been aging, debugged, adjusted and calibrated. So it has good consistency and high sensitivity.

Features

High sensitivity

Low power consumption, long life

Calibrated before shipment

10 seconds to 3 minutes with auto-preheating function

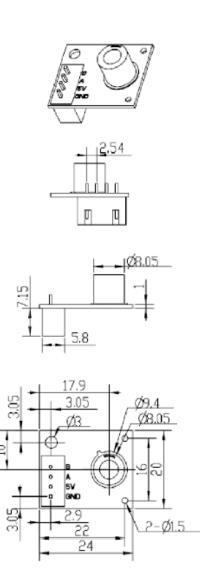
Faulty auto-check, High cost-effective

Application

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

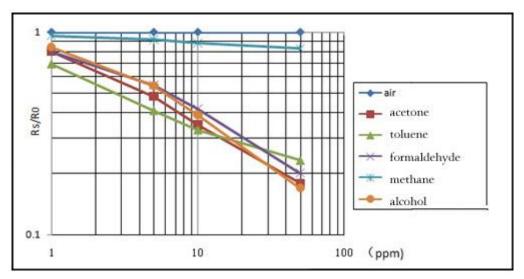
Parameters

Model	ZP07-MP901	
Sensor	Air quality sensor	
Target Gas	formaldehyde, benzene, carbon monoxide, ammonia, hydrogen,	
	alcohol, smoke of cigarette, essence &etc.	
Physical Interface	XH2.54-4P terminal sockets	
Output Data	0-10 grade pollution signal	
Working Voltage	5.0±0.2V DC (No voltage reverse	
	connect protection)	
Output Data	TTL level (200ohm protected	
Output Data	resistance inside)	
Working Current	≤60mA	
Warm Up Time	≤3 mins	
Response Time	≤20s	
Recovery Time	≤60s	
Operating Temperature	0~50℃	
Operating Humidity	≤95%RH	
Storage Temperature	−20~60℃	
Storage Humidity	≤60%RH	
Size	24×20×15mm(L×W×H)	
Weight	≤ 20g	
Sensitivity Attenuator	≤1%/year	
Life Span	≥5 years	



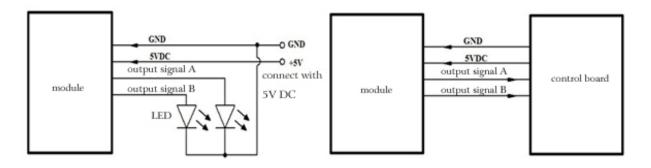
Tel: 86-371-67169097/67169670 Fax: 86-371-60932988 Email: sales@winsensor.com

Sensitivity Characteristics



Contrast of the sensitivity in different gases

Application of schematic diagram



Pin definition Stable2.

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

Tel: 86-371-67169097/67169670 Fax: 86-371-60932988 Email: <u>sales@winsensor.com</u>



A Output Signal Stable3.

High ms	Low ms	Pollution Class
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.

Note: To keep continual product development, we reserve the right to change design features without prior notice.

Zhengzhou Winsen Electronics Technology Co., Ltd

Add: No.299, Jinsuo Road, National Hi-Tech Zone,

Zhengzhou 450001 China **Tel:** +86-371-67169097/67169670

Fax: +86-371-60932988

E-mail: sales@winsensor.com

Website: www.winsen-sensor.com

Tel: 86-371-67169097/67169670 Fax: 86-371-60932988 Email: sales@winsensor.com