





#### BEIJING WEIGUO INTELLIGENT TECHNOLOGY CO.,LTD

Headquarter: 15A08, Block B, Building 103, Huizhong Lane, Chaoyang District, Beijing, China Factory address: No.169 Xuesong Road, National High-Tech zone, Zhengzhou, 450001, China

Tel: +86-371-67169566

Email: sales1@airradio.cn

Web: http://www.weiguopay.com





Henan Hanwei Electronics Co.,Ltd.(Stock no.:300007) founded in 1998, is a trustworthy innovative technology company, and the largest gas sensors and instruments manufacturer in China and listed on China's Growth Enterprise Board in the first batch, devoting ourselves to promise a safe, environmental friendly, healthy and smart working and living environment. Based on IOT industry, Hanwei Electronics will combine sensors, intelligent terminals, communication technology, cloud computing and geographic information IOT technology together closely to create Hanwei cloud so as to establish a complete IOT industry chain. Hanwei Electronics focuses on the customer value oriented, provide perfect solutions for smart city, production safety, environmental protection, health of the people's livelihood.





Beijing Weiguo Intelligent Technology Co., Ltd, is an innovative technology company in China and is the pillar enterprise of the healthy home business division of Hanwei Electronics (stock number: 300007). Focusing on the complete chain of design, R&D, production and sales of "AirRadio" air quality products, we strive to supply air health service for the human beings in the world.











# AIR QUALITY MONITOR

A1 / A2 / A2-SE / E1-pro / E2

# GAS ALARM

R1 / R2 / I1 / N1

# SENSOR

Pm2.5 laser sensor
Formaldehyde sensor
Infrared carbon dioxide sensor
Formaldehyde module







Monitor PM2.5 / PM10, CO<sub>2</sub>, VOC, temperature, humidity simultaneously; Dot matrix LED display, real time monitoring;

Anodized aluminum oxide and ABS engineering plastics combined technology; High precision PM2.5 laser sensor, WIFI module, infrared module and CO<sub>2</sub> sensor; App, WeChat remote monitoring;

Interactive control with smart socket, air purifier and ventilation system.

PM2.5	Range	0~1000ug/m3
	Precision	≤ ± 10%
VOC	Range	0~100
	Precision	≤ ± 5%
CO <sub>2</sub>	Range	0~5000ppm
	Precision	≤ ± 5%
Temperature	Range	−20~70°C
	Precision	≤ ±2°C
Humidity	Range	0~100%RH
	Precision	≤ ± 3%
Power Supply		DC5V/1A 800mAh
Net Weight		173g
Dimension		125mm x 65mm x 28mm

### A2







#### **FEATURES**

7 in one detection-PM2.5, CO2, formaldehyde, temperature, humidity, illumination, noise;

High illumination LED dot matrix display;

APP, WeChat remote monitoring, intelligent interactive control;

Record storage and review function;

"One button" to adapt to network, re-connect automatically when disconnected; Support WIFI, infrared conversion and other means of communication.

PM2.5	Range	0~1000ug/m3
	Precision	≤ ± 10%
Formaldehyde	Range	0~3mg/m3
	Precision	≤ ± 5%
CO <sub>2</sub>	Range	0~5000ppm
	Precision	≤ ± 5%
Noise	Range	30~130dB
Noise	Precision	≤ ± 5dB
Illumination	Range	0~60000lux
	Precision	≤ ± 5%
Temperature	Range	-40~120℃
	Precision	≤±1°C
Humidity	Range	0~100%RH
	Precision	≤ ± 3%
Power Supply		Optional AC110~220V 50HZ or DC5V/1A 800mAh
Net Weight		200g
Dimension		86mm x 86mm x 33mm

# A2-SE







#### **FEATURES**

High precision PM2.5 laser sensor;

Accurate and stable algorithm with self-owned intellectual property patent; Multi-color strip lights indicating the air quality levels;

App, WeChat remote monitoring, intelligent interactive control;

Support WIFI / Bluetooth communication.

PM2.5	Range	0~500ug/m3
	Precision	≤ ± 10%
PM10	Range	0~500ug/m3
	Precision	≤ ± 10%
Temperature	Range	−20~70°C
	Precision	≤ ± 2℃
Humidity	Range	0~100%RH
	Precision	≤ ± 5%
Power Supply		DC5V/1A 800mAh
Net Weight		60g
Dimension		Φ61mm x 80.5mm







Portable detector, one button operation;

LCD display;

Auto calibrating to decrease the false alarm;

Anodized aluminum oxide and ABS engineering plastics combined technology.

Formoldobydo	Range	0~3mg/m3
Formaldehyde	Precision	≤ ± 5%
Temperature	Range	-40~120°C
	Precision	≤ ±1°C
Llumidity	Range	0~100%RH
Humidity	Precision	≤ ± 3%
Power Supply		DC5V/1A 920mAh
Charging Time		4h~6h
Working Time		≥48h continuously
Net Weight		150g
Dimension		125mm x 65mm x 28mm







High precision detection, intelligent anti-interference;

Dry cell, long time standby;

Portable detector, easy to carry;

One button to start, fast detect;

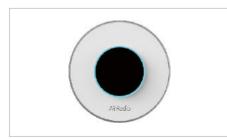
HD digital display;

Hardware and software avoiding false alarm;

Target gas	Formaldehyde, TVOC
Formaldehyde Range	0~3mg/m3
TVOC Range	0~100ppm
Net Weight	70g
Dimension	36mm x 103mm x 18mm

## R1 GAS ALARM







#### **FEATURES**

Detect natural gas and carbon monoxide gas simultaneously;

Electrochemical CO sensor and flat surface semiconductor gas sensor with UL approval;

Anodized aluminum oxide and ABS engineering plastics combined shell; Self-test and false alert function;

Plug in the socket directly, no need to install;

WIFI communication, App remote monitor.

Model Number	R1
Sensor Type	Semiconductor and electrochemical
Gas Sampling	Natural diffusion
Detect Range	Natural gas: 0~100%LEL, CO: 0~1000ppm
Presetting Alarm Level	Natural gas:7%LEL, CO: 100ppm
Warm-up Time	180 ± 10S
Response Time	(t90)≤30S
Restore Time	≤30S
Working Voltage	AC90V~265V
Alarm Volume	≥70dB
Alarm Method	Visual and audible
Working Environment	Temperature: -10 ~ 50℃, Humidity: <95%RH (No dew)
Atmospheric Pressure	86kPa~106kPa
Storage Temperature	-25 ~ 55°C
Lifespan	3~5 Years
Net Weight	200g
Dimension	Ф120mm X 26.5mm







20000 times vibration test, 28 days long aging time;
Back sticker design, installation flexibility, no damage to the wall;
Could be linked to electromagnetic valve;
APP remote monitoring, WeChat binding support.

Model Number	R2
Target Gas	Natural gas ( CH4, Methane)
Working Environment	Temperature: 0 ~ 40 ℃ Humidity: <95%RH (No frost)
Gas Sampling	Natural diffusion
Detecting Range	0~100% LEL
Presetting Alarm Level	7% LEL
Warm-up Time	180 ± 10S
Sensor Type	Semiconductor
Lifespan	5 Years
Working Voltage	AC90V~265V
Alarm Method	Visual, audible, message
Alarm Volume	≥70dB
Net Weight	150g
Dimension	85.0mm x 85.0mm x 40.5mm







Optional for natural gas or LPG;

100% gas sensing platinum electrode, high resolution to avoid false alarm; Visible and audible alarm;

Low power consumption, 2KWH per year;

Up to 70dB alarm sound, ring warning light design.

Model Number	I1
Target Gas	Natural gas ( CH4, Methane) / LPG ( C3H8, Propane)
Working Environment	Temperature: 0 ~ 40°C Humidity: <95%RH (No frost)
Gas Sampling	Natural diffusion
Detecting Range	0~100% LEL
Presetting Alarm Level	7% LEL
Warm-up Time	180S
Sensor Type	Semiconductor
Lifespan	5 Years
Working Voltage	AC90V~265V
Alarm Method	Visible and audible
Alarm Volume	70dB
Net Weight	100g
Dimension	59mm x 59mm x 40mm







99.9% gas sensing platinum electrode, highly resolution to avoid false alarm; Ring alarm indicator design; Low power consumption, 2KWH per year; App remote monitor.

Model Number	N1
Target Gas	Natural gas ( CH4, Methane)
Working Environment	Temperature: 0 ~ 40 degree Celsius Humidity: <95%RH (No Frost)
Gas Sampling	Natural diffusion
Detecting Range	0~100% LEL
Presetting Alarm Level	7% LEL
Warm-up Time	180 ± 10S
Sensor Type	Semiconductor
Lifespan	5 Years
Working Voltage	AC90V~265V
Alarm Method	Visual and audible
Alarm Volume	70dB
Net Weight	190g
Dimension	Ф90mm x 40mm

#### PM2.5 Laser Sensor

High sensitivity

Hiah resolution Low

#### SPECIFICATION

**Range** 1~1000ug/m3

**Precision** -10%~+10%

Communication Interface UART@3.3V

Working Current <100mA

Dimension 50\*33\*20.5mm

**Resolution** 1ug/m3

Response Time ≤3s

Working Voltage 5V

Working Temperature  $10^{\circ}\text{C} \sim 60^{\circ}\text{C}$ 

Lifetime >30000h

#### Formaldehyde Sensor



Response Time 60s

Output Signal 300 ± 50nA / ppm

Pressure ±10%

**Lifetime** 2 years

Range 0-10ppm

Working Temperature −20°C~5°C

Repeatability ≤2

#### Infrared Carbon Dioxide Sensor



#### SPECIFICATION

Sensor Technology NDIR

Warm Up Time <120s

Response Time (T90) <45s

Operating Voltage 4.0~5.5 VDC

Range Optional 0~2000ppm,0~5000ppm, 0~10000ppm, 0~~50000ppm

Working Current 15mA

Peak Current 160mA

**UART Interface** 3.3 VDC

**PWM Output** Cycle:1004ms, Pulse Width: PPM/2 + 2ms

### Formaldehyde Module

Real-time response

Accurate



#### **SPECIFICATION**

Sensor Electrochemical

Target Gas Formaldehyde

Range 0~5ppm

Working Voltage 3.3V~5V

**Resolution** 0.01ppm

Response Time 30S

Maximum load 30ppm

Output Signa UART(3V), Simulation Signal: 0.4~2V

Working Temperature −20°C~50°C

**Lifetime** ≥3 years