

IAQ Sensors

PAS CO2 Sensor

- Small size
- High precision
- Low power consumption



H101-CO2-Z8S-U-40kP

Detection range	400-5000ppm, can be extended to 40000ppm
Working voltage	light supply DC(5.0±0.05)V, system supply DC(3.3±0.3)V
Average current	<15mA (@5V power supply), <2mA (@3.3V power supply)
Response time (T63%)	<60s
Output signal	Serial Port (UART)(TTL level 3.3V)
Working temperature	-10 to 60 °C
Lifespan	>10 years
Size	20x15x7.8mm

NDIR CO2 Sensor

- >10 years lifespan
- High cost-effectiveness
- Excellent consistency

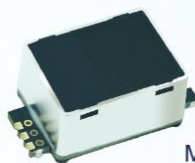


MH-Z1911A

Detection range	400-10000 ppm(optional)
Working voltage	5.0±0.1 V DC
Average current	<30 mA (@5V supply)
Accuracy	±(50 ppm+5% reading)
Response time (T ₉₀)	< 120 s
Output	Serial Port (UART) (TTL level 3.3V); IIC
	PWM
Lifespan	>10 years
Size	32.9×19.7×10.8 mm

NDIR CO2 Sensor

- Ultra low power
- Long lifespan
- High accuracy



MH-Z1311A

Detection range	0-10000 ppm(optional)
Working voltage	5.0±0.1 V DC
Average current	150 uA (@5V power supply)
Accuracy	± (30 ppm+3% reading value)(15 to 35°C) ± (10 % reading value)(-10 to 15°C, 35 to 50°C)
Response time (T ₉₀)	< 60 s
Output	Serial Port (UART) (TTL level 3.3V)
Lifespan	> 15 years
Size	32.3×19.5×11.4 mm

Air Quality VOC Module

- Factory calibrated
- Low power
- High sensitivity



ZP07

Detection target	CH ₂ O, C ₆ H ₆ , CO, H ₂ , C ₂ H ₅ OH, NH ₃ , smoke, essence &etc.
Working voltage	5.0±0.2 V DC
Working current	≤60 mA
Output	TTL level signal (built-in 200Ω protection resistor)
Response time	≤20 s
Working temperature	0-50 °C
Working humidity	≤95 %RH
Lifespan	> 5 years
Size	24.0×19.9×9.2 mm

Infrad Dust Sensor

- High cost-effectiveness
- Easy to install
- High Stability



ZPH04B

Detection range	0-500 µg/m ³
Particle size range	1-15µm
Accuracy	± 25 % or ± 25 ug/m ³ whichever is greater
Output	UART_TTL output PWM output
Working voltage	5.0 ± 0.2 V DC
Working current	≤150mA
Warm-up time	1 min (Device warming-up time)
Working temperature	0-50 °C
Working humidity	0-95 %RH (no condensation)
Physical interface	EH2.54-5P (Terminal socket)
Size	59×45×20 mm

Laser Dust Sensor

- Quick response
- Low cost
- Small size



ZH06

Detection range	0-1000µg/m ³
Particle size range	0.3-10µm
Accuracy	0-100 µg/m ³ : ±15µg/m ³ 101-1000 µg/m ³ : ± 15% Reading (Test Condition: 25 ± 2 °C, 50 ± 10% RH, TS18530, Cigarette, GBT18801-2015)
Output	UART_TTL Output (3.3V level) PWM Output (3.3V level)
Working voltage	4.9V-5.5V DC
Working current	< 120mA
Response time (T ₉₀)	T ₉₀ < 45s
Working temperature	-10 to 60 °C
Working humidity	0-80%RH (No Condensation)
MTTF	Continuous > 10000H or >40000H
Size	47×37×12.2mm

Electrochemical CH2O Module

- PPB digital reading
- High accuracy
- Fully pre-calibrated



ZE08K

Detection range	0-5 ppm
Working voltage	3.7-5.5V
Resolution	≤0.01 ppm
Response time	≤60 s
Output	DAC (0.4-2V voltage signal corresponding concentration: 0-5PPM) UART output (3V TTL level)
Working temperature	-20-50 °C
Lifespan	5 years (in clean air 18 °C-25 °C)
Size	25.5×23.0×7.0 mm

Electrochemical O3 Module

- PPB level reading
- Temperature compensation
- High sensitivity



ZE25A-O3

Detection range	0-2 ppm
Working voltage	3.7-5.5 V
Resolution	0.001 ppm
Response time	≤90 s
Output	UART output (3V level)
Working temperature	-10-55 °C
Lifespan	2 years (in air)
Size	25.5×23.0×7.0 mm

Multi-in-one Air Quality Sensor Modules

9-in-1 Air Quality Module

Integrated laser-dust, NDIR-CO₂, electrochemical-HCHO & O₃ & CO, MEMS-NO₂, MOX-VOC, T.&H. sensors



ZPHS01B

Detection range	CO ₂ : 0-5000 ppm PM2.5: 0-1000 µg/m ³ HCHO: 0-6.250 mg/m ³ O ₃ : 0-10 ppm CO: 0-500 ppm	TVOC: 0-3 grades NO ₂ : 0.1-10 ppm Temperature: -20 to 65 °C Humidity: 0-100%RH
Working voltage	5 V DC	
Average current	< 300 mA	
Output	UART(TTL)	
Working temperature	-10 to 50°C	
Size	135.0×50.0×26.2 mm	

Dust +T.&H.+ VOC Integrated Module

Integrated laser-dust, MEMS-VOC, Temp.&Humi. sensors, good consistency and stability.



ZH10

PM2.5 size & effective range	0.3-10 µm, 0-1000 µg/m ³
VOC output	0-500 level pollution signal
Output	UART_TTL or PWM output (3.3V level)
Working voltage	5.0±0.5 V DC, ripple ≤50 mV
Working current	< 150 mA
Temperature	-10-60 °C: ±1 °C
Humidity	15%-90 %RH (no condensation); ±5 %RH
Size	38.0×35.0×12.0 mm

Electrochemical HCHO Detection Module

- Temp. & Humi. Compensation
- High resolution
- Excellent linear output



ZE510

Detection range	0-5 ppm
Working Voltage	3.7-5.5 V
Resolution	≤0.001ppm
Response time	≤60 s
Output	UART output (3V TTL Electrical Level)
Working Temp. & accuracy	-20 to 50 °C, ±0.5 °C (0 °C-50 °C)
Working Hum. & accuracy	15%-90% RH, ±5 %RH
Lifespan	5 years (in air 18 °C-25 °C)
Size	25.5×23.0×5.3 mm

5-in-1 Air Quality Module

Integrated laser-dust, NDIR-CO₂, T.&H., MOX-VOC or electrochemical-HCHO sensors



ZPHS01C

Detection range	CO ₂ : 400-5000 ppm PM2.5: 0-000 ug/m ³ HCHO: 0-6 ppm TVOC: 4 grades Temperature: 0-65 °C Humidity: 0-100% RH
Working voltage	5 V DC
Average current	< 500 mA
Output	UART(TTL)
Working temperature	0-50 °C
Size	62.5×61.0×25.0 mm

Digital Type VOC, T.&H. Module

Good sensitivity to HCHO, benzene, alcohol, CO, NH₃, H₂, cigarette smoke, etc.



ZPS20

Detection range	0-10mg/m ³
VOC index output	0-500
Working voltage	5.0±0.1V DC
Working current	≤70mA
Response time	≤30s
Working temperature	0-50 °C
Working humidity	15%RH-95%RH (no condensation)
Size	32mm×24mm×11mm

MEMS Temp. & Humi. Sensor

- Low cost
- Compact size
- High precision

WHT30

Detection range	0-100%RH; -45 to 130 °C
Working voltage	2.2-5.5V
Resolution	0.01%RH; 0.015 °C
Response time (T63%)	humidity<8s; temperature>2s
Accuracy	±3.0%RH; ±0.5 °C
Repeatability	±0.1%RH; 0.24 °C
Lifespan	5-10 years
Size	2.5×2.5×0.9mm

Air Conditioner

HVAC System

Air Purifier

Air Quality Monitors

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