

Indoor Air Quality Detector

PM2.5, PM10, CO₂, TVOC, Air temperature and RH

HWM-MAQ Green Building Series



Product Detail

- Imbedded IoT (Internet of Things) platform
- Real time detection and transmission of six parameters
- Suitable for intelligent buildings, air quality data collection systems, green building evaluation systems as well as ventilation control systems.
- Smart glowing light ring indication in the middle can be assigned to any parameter which changes colour with respect to the change in the parameter value
- High accuracy laser particle detection for PM2.5 and PM10
- Wi-Fi or Modbus RS485 interface
- CE-approval

Features

- + Designed for measuring ambient TVOC, carbon dioxide, PM2.5, PM10, temperature and relative humidity
- + NDIR infrared CO₂ sensor inside with auto calibration logic
- + Long life CO₂ sensor (greater than 10 years life)
- + All parameters are measured with high output resolution and accuracy
- + Three colour light ring indicating different level of indoor air quality, the light ring can also be turned off
- + High precision laser particle sensor used to measure PM2.5 (0-400 µg/m³) and PM10 (0-500µg/m³)
- + Remote calibration through Wifi or Modbus commands
- + Digital auto compensation for temperature and relative humidity
- + Ceiling mounted type with easy installation
- + Modbus RS485 or Wi-Fi communication
- + 240VAC and 24VDC power options
- + EU standard

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Specifications

General Data	
Detection Parameters	PM2.5; PM10; CO ₂ ; TVOC; air temperature & RH
Output	RS485(Modbus) OR Wi-Fi
Operating Conditions	Temperature: 0~50°C Humidity:0~99%RH
Storage Conditions	Temperature: -10~50°C Humidity: 0~95%RH (non-condensation)
Power Supply	12~36VDC; or 100~240VAC
Dimensions	130mm(W)×130mm(H)×45mm(T)
Housing Materials and IP level	PC/ABS fire-proof material / IP20
Standard Approval	CE
PM2.5/PM10 Data	
Sensor	Laser particle sensor, Light scattering method
Measuring Range	PM2.5: 0~400 ug/m ³ PM10: 0~500 ug/m ³
Display Resolution	0.1 ug/m ³
Stability at 0	±5 ug/m ³
Accuracy	10% of reading
Temperature and Humidity Data	
Sensor Type	High precision digital integrated temperature and humidity sensor
Measuring Range	Temperature: 0~50°C / Humidity: 0~99%RH
Output Resolution	Temperature: 0.01°C / Humidity: 0.01%RH
Accuracy	Temperature: <±0.5°C @25°C Humidity: <±3.0%RH (20%~80%RH)
CO ₂ Data	
Sensor	Non-Dispersal Infrared Detector (NDIR)
Measuring Range	0~5,000ppm
Output Resolution	1ppm
Accuracy	±40ppm + 3% of reading
TVOC Data	
Sensor	TVOC
Measuring Range	0~2.0 mg/m ³
Output Resolution	0.001 mg/m ³
Accuracy	±0.02mg+10% of reading

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Model Guide

Model.	PM2.5	PM10	Temp/RH	CO ₂	TVOC	12~36VDC Power Supply	100~240VAC Power Supply	Outputs
MAQ1618C	•	•	•	•	•	•		RS485 (Modbus RTU)
MAQ1618D	•	•	•	•	•		•	
MAQ1628C	•	•	•	•	•	•		wi-fi
MAQ1628D	•	•	•	•	•		•	

Dimensions and Mounting

