

INDOOR AIR QUALITY DETECTOR

PM2.5, PM10, CO2, TVOC, AIR TEMPERATURE AND RH

PRODUCT BROCHURE

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 $\mu\text{g}/\text{m}^3$) and PM10 (0-500 $\mu\text{g}/\text{m}^3$)
- 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

SPECIFICATIONS

General Data	
Detection Parameters	PM2.5; PM10; CO2 ; TVOC; air temperature & RH
Output	RS485(Modbus) OR Wi-F
Operating Conditions	Temperature: 0~50°C Humidity:0~99%RH
Storage Conditions	Temperature: -10~50°C Humidity: 0~95%RH (noncondensation)
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	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)
CO2 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

Model	PM2.5	PM10	Temp/RH	CO2	TVOC	12~36VDC Power Supply	100~240VAC Power Supply	Outputs
MAQ1618C ••••• RS485	✓	✓	✓	✓	✓	✓	✗	RS485 (Modbus RTU)
MAQ1618D	✓	✓	✓	✓	✓	✗	✓	
MAQ1628C	✓	✓	✓	✓	✓	✓	✗	wi-fi
MAQ1628D	✓	✓	✓	✓	✓	✗	✓	

DIMENSIONS AND MOUNTING

