# IAQ Monitor Commercial grade IAQ PRODUCTS

### **PRODUCT DATA**

#### Disclaimer

All images used in this document are for illustrative purposes only and may not match the actual product.



## APPLICATION

Rigorous design, professional test and calibration for the commercial grade indoor air quality detector.

High performance for RESET or WELL Certificates, able to replace expensive professional instrument, coordinate well with data collection and analysis system, make multipoint real time monitoring placement easy to achieve.

Suitable for intelligent building, intelligent house system, air quality data collection system, green building evaluation system, ventilation system.

## **FEATURES**

- 24-hour online real-time detecting indoor air quality, upload measurement data.
- The special and core multi-sensor module is inside, which is designed for the commercial grade monitors. The whole sealed cast aluminum structure ensures the stability of detection and improves the anti-jamming capability.
- Unlike other particle sensors, with a built-in large flow bearing blower and the control technology of automatic constant flow, MSD has the much higher and long-term operation stability and life, of course more accuracy.
- Providing multiple sensors such as PM2.5, PM10, CO2, TVOC, Temperature and humidity.
- Using own patent technologies to minimize the influence from ambiance temperature and humidity to the measured values.
- Power supply: 12~28VDC/18~27VAC.
- Communication interface is optional: RS485 Modbus.
- Three-color light ring indicating different level of indoor air quality; the light ring can be turned off.
- Ceiling mounting and wall mounting with the tasteful appearance in different decoration styles.
- Simple structure and installation, make even ceiling mounting easy and convenient.
- RESET certified as the grade B monitor for Green Building Assessment and Certification.

# **TECHNICAL SPECIFICATIONS**

## **General Data**

#### Table 1. General Data

Part Number	C7355A1050
Detection Parameters	PM2.5/PM10, CO2, TVOC, Temperature & RH
Output	RS485/RTU (Modbus)
Operating Environment	Temperature: 0~50°C Humidity:0~90%RH
Storage Conditions	-10°C~50°C/ 0~90%RH (No condensation)
Power Supply	12~28VDC/18~27VAC
Power consumption	Average 1.9w (24V)
Overall Dimension	130mm(L)×130mm(W)×45mm (H)
Net weight	300g
Material of Shell & IP Level	PC/ABS fire-proof material / IP20
Certification Standard	CE/FCC

## **Temperature and Humidity Data**

#### Table 3. Temperature and Humidity Data

Sensor	High precision digital integrated temperature and humidity sensor
Measuring	Temperature:-20°C~60°C /
Range	Humidity:0~99%RH
Output	Temperature:0.01°C /
Resolution	Humidity:0.01%RH
Accuracy	Temperature:<±0.6°C@25°C Humidity:<±4.0%RH (20%~80%RH)

## CO2 Data

#### Table 4. CO2 Data

Sensor	Non-Dispersive Infrared Detector (NDIR)
Measuring Range	0~5,000ppm
Output Resolution	1 p p m
Accuracy	±40ppm +3% of the reading (25°C, 10%~60%RH)

## PM2.5/PM10 Data

#### Table 2.PM2.5/PM10 Data

Sensor	Laser particle sensor, light scattering method
Measuring Range	ΡΜ2.5: 0~500μg/m3 ΡΜ10: 0~800μg/m3
Output Resolution	<b>0.1µg∕</b> m³
Zero Point Stability	±3µg/m <sup>3</sup>
Accuracy (PM2.5)	10% of reading (0~300μg/m3 @25°C, 10%~60%RH)

## **TVOC Data**

#### Table 5. TVOC Data

Sensor	Metal oxide gas sensor
Measuring Range	0~3.5mg/m3
Output Resolution	0.001mg∕m <sup>³</sup>
Accuracy	±0.05mg+10% of reading (0~2mg/m³@25°C, 10%~60%RH)

# DIMENSIONS



# GENERAL SAFETY

- When performing any work (installation, mounting, start-up), all manufacturer instructions and in particular the Installation and Commissioning Instructions are to be observed.
- IAQ monitor may be installed and mounted only by authorized and trained personnel.
- Rules regarding electrostatic discharge should be followed.
- If IAQ monitor is modified in any way, except by the manufacturer, all warranties concerning operation and safety are invalidated.
- Use only accessory equipment which comes from or has been approved by Honeywell.
- It is recommended that devices be kept at room temperature for at least 24 hours before applying power. This is to allow any condensation resulting from low shipping/storage temperatures to evaporate.
- CE declarations according to LVD Directive 2014/35/EU and EMC Directive 2014/30/EU.
- Product standards are EN 50581, EN61010-1 and EN61326-1.
- This monitor has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:
  - Reorient or relocate the receiving antenna.
  - Increase the separation between the equipment and receiver.
  - Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- This monitor complies with Part 15 of the FCC rules. Operation is subject to the following two conditions: (1) this device may not cause harmful

interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

- The monitor is Class B digital apparatus and complies with Canadian ICES-003.
- The monitor complies with Industry Canada licenseexempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

THE FUTURE IS WHAT WE MAKE IT

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