Honeywell Indoor Air Quality Monitor

Honeywell Indoor Air Quality Monitor is advanced with modular architecture design and configured with a comprehensive array of multi-sensors to measure various air quality parameters viz. Particulate Matter (PM2.5 and PM10), Carbon Dioxide (CO₂), Total Volatile Organic Compound (TVOC), Temperature (T), and Relative humidity (Rh) in a single device.

The indoor air quality monitor uses an 'active suction method', draws 'air sample' which enables laminar flow across the array of sensors for better accuracy. The device is BMS Compatible via RS-485 port using MODBUS protocol.

The indoor air quality monitor is pre-configurable with optional sensors viz. Formaldehyde (HCHO), Ozone $(O_3)^*$, NOx*, and SOx* apart from the standard configuration.

It is suitable for intelligent buildings and systems, air quality data collection systems, green building evaluation systems, and ventilation systems.

*Future release FEATURES AND BENEFITS





Wide array of configurable hi-accuracy sensors

Modular Active sampling architecture: '5+2' for optional configuration

with 'Maglev' fan for climate and das sensors





J Large 3.5" TFT touchscreen for clear visual

indication

AQI parameter

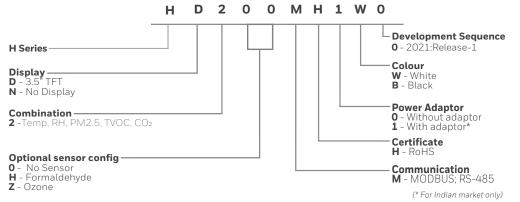
display on

screen



compatible

PART NUMBER DESCRIPTION









PRODUCT SPECIFICATION

DETAIL	SPECIFICATION	
Detection parameter	 5 in one standard sensor: Temperature , Relative humidity (Rh.), Particulate Matter (PM2.5 and PM10), Total Volatile Organic Compound (TVOC), Carbon Dioxide (CO₂) 2 customer selectable optional sensors: Formaldehyde (HCH0), Ozone (O₃)*, NOX*, and SOX* 	
Display	Display Model: 3.5" Colour TFT touchscreen Non-Display Model: LED Indicators	
IAQ monitor power supply	12 VDC	
Operating temperature	0 to 70 °C (32 to 158 °F)	
Humidity	0 to 90% Rh. (Non-condensing)	
Storage condition	-10 to 50 °C (14 to 122 °F)	
Output	RS-485/RTU (MODBUS)	
Dimensions	Without rear mounting plate: 160 mm × 160 mm × 55 mm Mounting plate: 130 mm × 140 mm × 2.5 mm	
Net weight	520 gms. (1.15 lbs.)	
Enclosure and IP level	Polycarbonate (RoHS), IP20	
Air quality index (AQI)	Display Model : Air quality index value and status are displayed on the touchscreen. Non-Display Model : Air quality index status is indicated using a LED {Green (Good), Yellow (Moderate), and Red (Unhealthy)}.	

SENSOR SPECIFICATION - BASE PACKAGE

PARAMETER	DETAIL	SPECIFICATION
Temperature	Sensor output resolution	0.1 °C
	Measuring range	-10 to 70 °C
	Accuracy	± 0.3 °C
	Performance check and re-calibration	Yes / Replacement kit
Relative Humidity	Sensor output resolution	±2 %
	Measuring range	Upto 100 %
	Accuracy	± 3 %
	Performance check and re-calibration	Yes / Replacement kit
	Sensor output resolution	5 μg/m³
TVOC	Measuring range	0-45000 µg/m³
	Accuracy	±1 % full scale
	Performance check and re-calibration	Auto-calibration
CO ₂ (NDIR)	Sensor output resolution	1 ppm
	Measuring range	up to 5000 ppm
	Accuracy	±1% full scale
	Performance check and re-calibration	Auto-calibration
PM2.5 and PM10	Sampling Type	Active airflow
	Sensor output resolution	1 μg/m ³
	Measuring range	0 to 1000 $\mu\text{g/m}^3$
	Accuracy	±5% full scale
	Performance check and re-calibration	Yes / Replacement kit

SENSOR SPECIFICATION - OPTIONAL

PARAMETER	DETAIL	SPECIFICATION
Formaldehyde (HCHO)	Sensor output resolution	100 ppb
	Measuring range	0 - 50,000 ppb
	Accuracy	± 15% full scale
	Performance check and re- calibration	Yes / Replacement kit
O ₃ (MEMS)*	Sensor output resolution	1 ppb
	Measuring range	0 to 1000 ppb
	Accuracy	±1% full scale
	Performance check and re- calibration	Yes / Replacement kit
Notes		

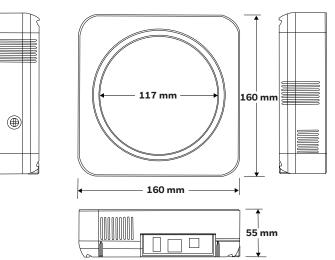
Notes:

Sensors specifications, accuracies are as per standard test procedures in lab conditions. The test conditions for each of the native sensors could vary depending on the type of native sensor.

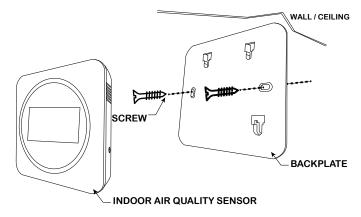
PM Sensors are tested and calibrated with a smoke & dust mix in a proportion.

 For customized applications in specific or varying indoor environments, buyers are required to provide corresponding end conditions for such specific calibrations.

MEASUREMENTS AND DIMENSIONS



MOUNTING



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