BRAMC BR-CON

Ceiling Type Indoor Air Quality monitor

SKU: BRCON
Manufacture Warranty period: 12 months
Country of Origin: China

Product overview

BR-CON series air quality monitor is the professional indoor air quality testing equipment.
It's suitable for all kinds of indoor environment, such as office, classroom, machine room, bedroom, etc., can combine with fresh air device and air purifier.
The data can be transferred to the server via RS485, 433, WIFI communication, to realize project monitoring, fresh air and purification device linkage, smart home, and other project requirements.

Features

- Multiple measurement purposes: PM2.5, PM10, TVOC, HCHO, CO, CO2, temperature, humidity.
- Power source: 110-240V/AC or 8-30V/DC/AC
- Support multiple communication protocols: RS485
- Support MODBUS communication protocol and free-protocol
- BR-Con series products can be integrated with 86 box, support RS485, wireless 433 protocols. Simplified wiring.
- Support mobile app, upper computer and web end remote control. Intelligent control by Internet.

Model	CON-P	CON-P C2	CON-PT C2	CON-PTH C2	CON-PT C1C2	CON-PTH C1C2
PM1.0	•	•	•	•	•	•
PM2.5	•	•	•	•	•	•
PM10	•	•	•	•	•	•
HCHO				•		•
TVOC			•	•	•	•
CO					•	•
CO2		•	•	•	•	•
Temp	•	•	•	•	•	•
RH	•	•	•	•	•	•

Specifications

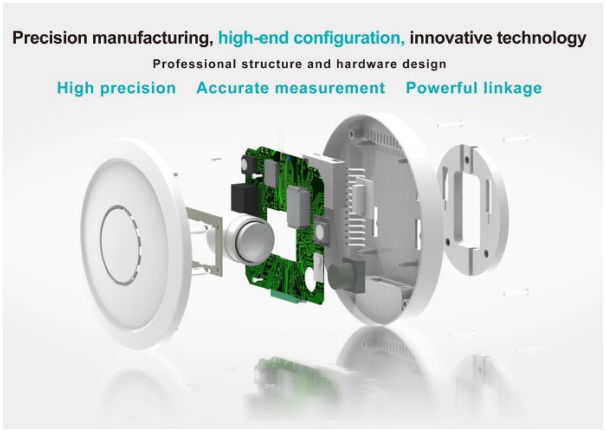
PM2.5 & PM10	
Measurement method	Laser Scattering
Range	0.3 to 10um
Measuring Threshold	0 to 999μg/m³
Counting Effectiveness	50%@0.3um, 98%@≥0.5um
Accuracy	±10%
Measuring Volume	0.1 (L)
Reaction Time	≤10 sec
TVOC	
Measurement Method	Semiconductor Sensor
Range	0 to 2.47 mg/ m³
Accuracy:	±15%
Reaction Time	<5 sec
Warm-up Time	15 mins
Carbon Dioxide (CO2)	
Measurement Method	NDIR
Range	400~5000ppm
Temperature Coefficient	0.2%FS/°C
Temperature Calibration	Auto
Measuring Accuracy	22°C(72°F)±45ppm ±3%
Stability	Within the life cycle (15 yrs), less than 2% of the full measuring threshold
Calibration Cycle	ABC Logic self-calibration (No user input required)
Nonlinear	<1%FS
Pressure Coefficient	0.13%mmHg input
Reaction Time	Less than 2 minutes for 90% of change
Refresh Rate	2 sec
Warm-up Time	< 2min (Operation), 10min (Maximum Accuracy)
Resolution	1ppm

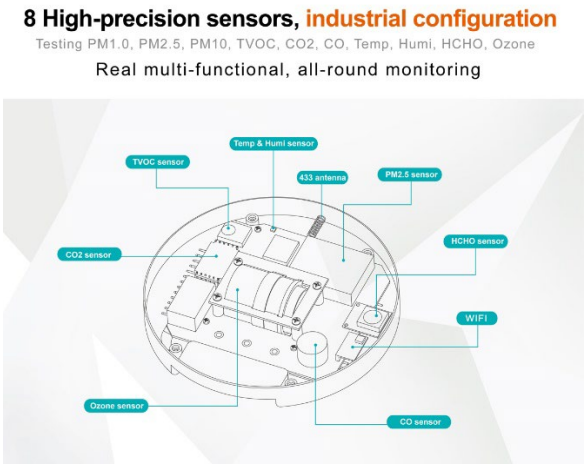
Carbon Monoxide (CO)	
Measurement method	Electrochemical
Range	0~500ppm
Accuracy	0.1ppm
Warm-up Time	≤ 3min
Reaction Time	≤ 60 sec
Recovery Time	≤ 60 sec
Working Humidity	15~65%RH
Formaldehyde (HCHO)	
Measurement Method	Electrochemical
Range	0 to 5mg/ m³
Accuracy	≤0.01mg/m³
Warm-up Time	≤ 3min
Reaction Time	≤ 30 sec
Working Temperature	0~50°C
Working Humidity	15~90%RH
Temperature	
Range	0 to 99°C
Resolution	1°C
Accuracy	±1°C
Repeatability	±1°C
Reaction Time	5 sec
Long Time Drifting	<0.04°C/yr
Relative Humidity	
Range	0 to 100%RH
Resolution	1%RH
Accuracy	±2%RH
Repeatability	±1%RH
Lag	±1%RH
Nonlinear	<0.1%RH
Reaction Time	8 sec
Long Time Drifting	<0.5%RH/yr

Work Status Display	3 indicator light combination display
Power Consumption	3 to 5W (depend on the number of parameters)
Power Supply	8-30VDC / 110-230VAC, 50/60HZ
Overrall Dimensions	DIA 170 x H 50mm
Net Weight	380g

Wiring Standard: Cross cut area <1.5mm2

Comm Port: 8 port connector





Communication Interface:

- 2 way RS485, RS485 used as the main MODBUS station to communicate with the integrated face plate;
- 1 way RS485 used as the MODBUS sub station for long range data transfer
- 433Mhz wireless (only used for integrated face plate with control module) (Optional)

Environment for use

- Temperature range: 0 to 50 ℃
- Humidity range: 0 to 80%RH
- Pressure: 1 standard prescsure
- Storage Temperature: -10 to 50 ℃