EM21 Embedded Indoor Air Quality Monitor

Focus on air quality detection and control for 15 years Continuous innovation and development, accumulation of project application Offering professional and high quality detectors



Various global projects with full life-cycle application experience

EM21- Embedded Installation Indoor Air Quality Monitor

Professional Design in Commercial B-level

Detection Gas:	PM2.5, CO2, TVOC, Temperature, Humidity, HCHO			
Communication interface: RS485,WiFi, Ethernet(RJ45)				
Power supply (optional):	24VAC /VDC ± 10%,100~240VAC			

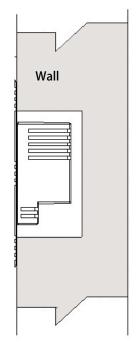


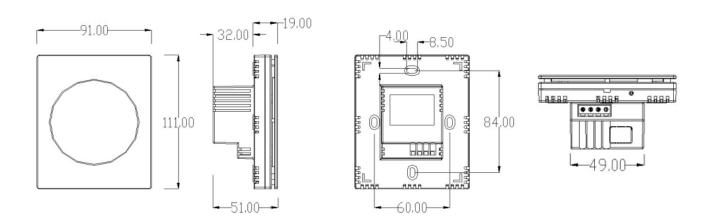
Unique base-line algorithm and data compensation principle ensures measurements reliable and accurate in different environments



Wall-Embedded Installation Applicable to tube box of Europe, American, and China standard



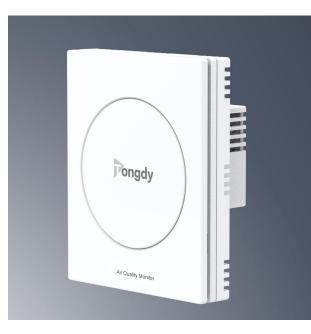






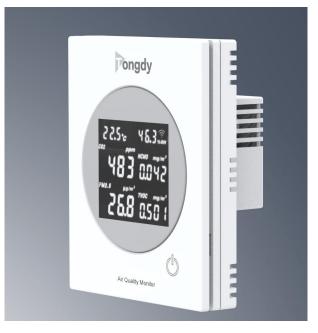
EM21 embedded installation Indoor Air Quality Monitor Simple and elegant type

- LED Tri-colored lights
- Visible air quality level
- Compact and simple design
- Gather real-time data and display history chart via a software platform



EM21 embedded installation Indoor Air Quality Monitor Screen display type

- Show the detailed air quality on the screen
- Display the real time values and 24-hour average of PM2.5, TVOC, CO2
- With on/off touch button to turn off /turn on screen
- The brightness of screen display is automatic adjusted, according with the ambient brightness.
 Both applicable for daytime and night.



Technology Specifications

	CO2	TVOC	PM2.5	Temp&RH	НСНО
Sensor	NDIR	Metal oxide semiconductor	Laser particle sensor Light scattering method	High-precision digital integrated Temperature and humidity sensor	Electrochemical Formaldehyde sensors
Measuring Range	400~5,000ppm	0.001~4.0mg/m ³	0~500µg ∕m ³	Temp: 0°C~60°C Humidity:0~99%RH	0~0.6mg/m3
Output Resolution	Resolution 1ppm 0.001mg/m ³		1µg∕ m ³	Temp:0.01°C Humidity:0.01%RH	0.001mg/m ³
Accuracy	±50ppm + 3% of reading or 75ppm	<15%	<15%	Temp:±0.8°C Humidity:±4.5%RH	±0.005mg/m 3 +5% of reading

General Specifications						
Detection Parameters(max.)	PM2.5 ; CO2 ; TVOC ; Temp&RH ; HCHO	Power Supply	24VAC/VDC±10%,100~240VAC			
Output (Optional)	RS485 (Modbus RTU) WIFI @2.4 GHz 802.11b/g/n RJ45 (Ethernet TCP) PoE power supply Optional	Shell material and IP level	PC fireproof material IP30			
Operating Environment	Temp: 0~60°C Humidity:0~99%RH	Overall Dimension	91.00mm*111.00mm*51.00mm			
Storage Condition	0°C~50°C 0~70%RH	Installation standard	Standard 86/50 pipe box (installation hole distance 60mm) American standard pipe box (installation hole distance 84mm)			



Understand your air quality at all times

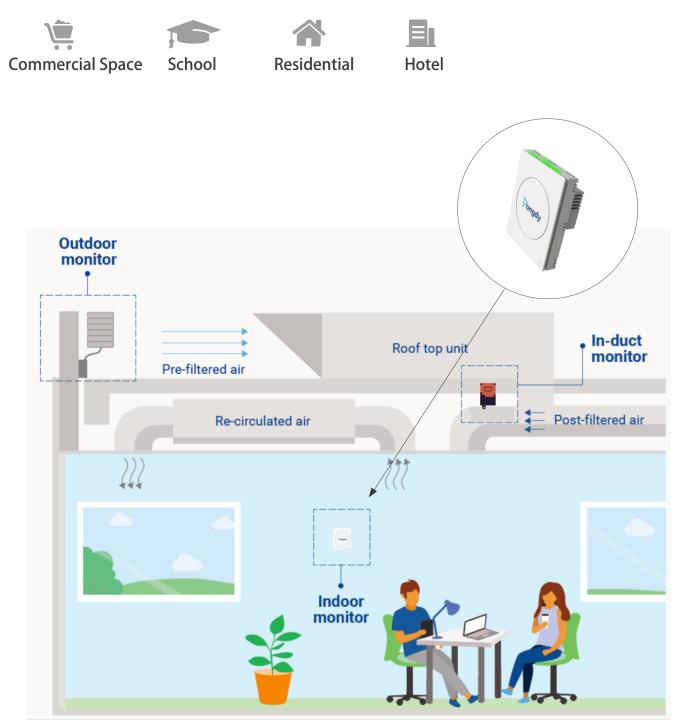
- View real-time and historical data through RS485 or cloud-based platform such as "MyTongdy", in computer or mobile APP
- Check out or download data to analyze your indoor air quality and identify the pollution source as frequently as you need
- Handle your indoor air quality by control the fresh air system or purification equipment automatically





Application scenarios

Widely used in commercial or residential spaces



EM21 Indoor Air Quality Monitor

Models Guide

No.	Model	PM2.5	CO2	Temp&RH	T VOC	нсно	Output	Display	Power Supply
1	EM21-B/S13C/D	•	•	•				B No display S with display	C: 24VAC/VDC D: 100~240VAC
2	EM21-B/S15C/D	•		•	•		RS485		
3	EM21-B/S17C/D	•	•	•		•			
4	EM21-B/S18C/D	•	•	•	•				
5	EM21-B/S23C/D	•	•	•			WiFi		
6	EM21-B/S25C/D	•		•	•				
7	EM21-B/S27C/D	•	•	•		•			
8	EM21-B/S28C/D	•	•	•	•				
9	EM21-B/S33C	•	•	•			RJ45 Ethernet (please contact our sales department		
10	EM21-B/S35C	•		•	•				
11	EM21-B/S37C	•	•	•		•	for POE Power Supply)		
12	EM21-B/S38C	•	•	•	•				

We provide commercial air quality monitors Including- indoor, in-duct, outdoor monitors Help you build healthy indoor air quality



Tongdy Sensing Technology Corporation

Address : Building 8, No.9, Dijing Rd., Haidian Dist., Beijing 100 95, China Website : www.tongdy.com Email : info@tongdy.com Phone : 86 10 59738930