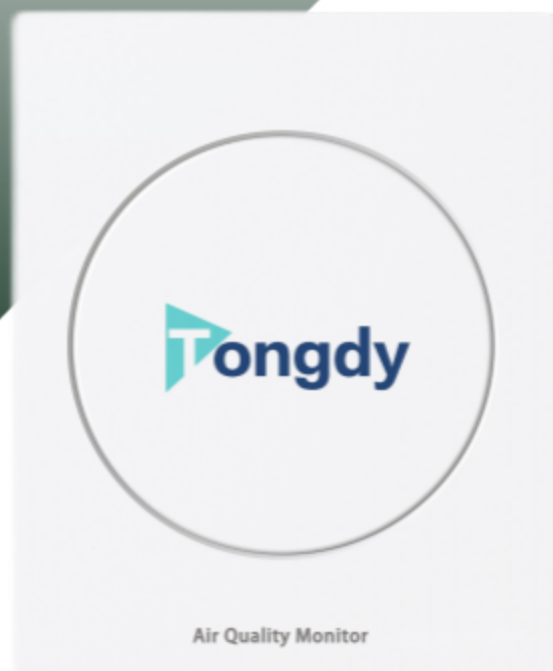


# EM21

## Indoor Air Quality Monitor

Tongdy focus on air quality monitoring and solution for 15 years  
Provides more project experience and reliable data  
Hundreds of products meet more requirements of air quality



Various global projects with full life-cycle application experience

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# EM21- Indoor Air Quality Monitor

## Wall embedded Installation

## Wall surface installation

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### 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 $\pm 10\%$ , 100~240VAC

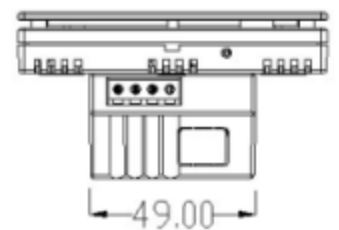
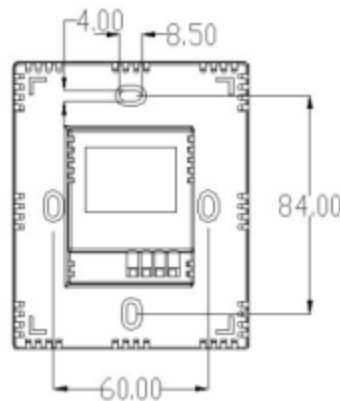
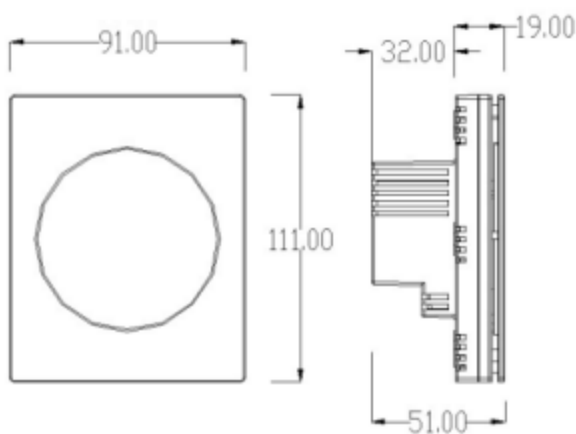
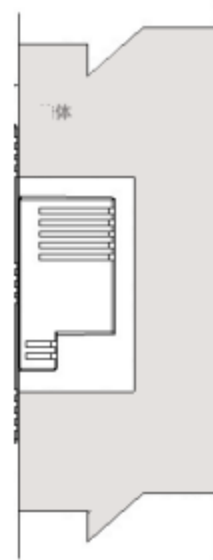
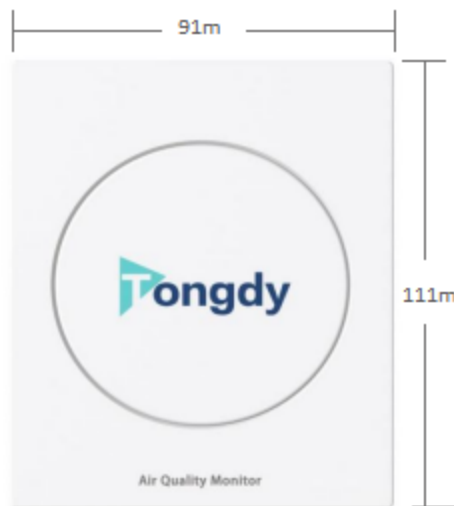


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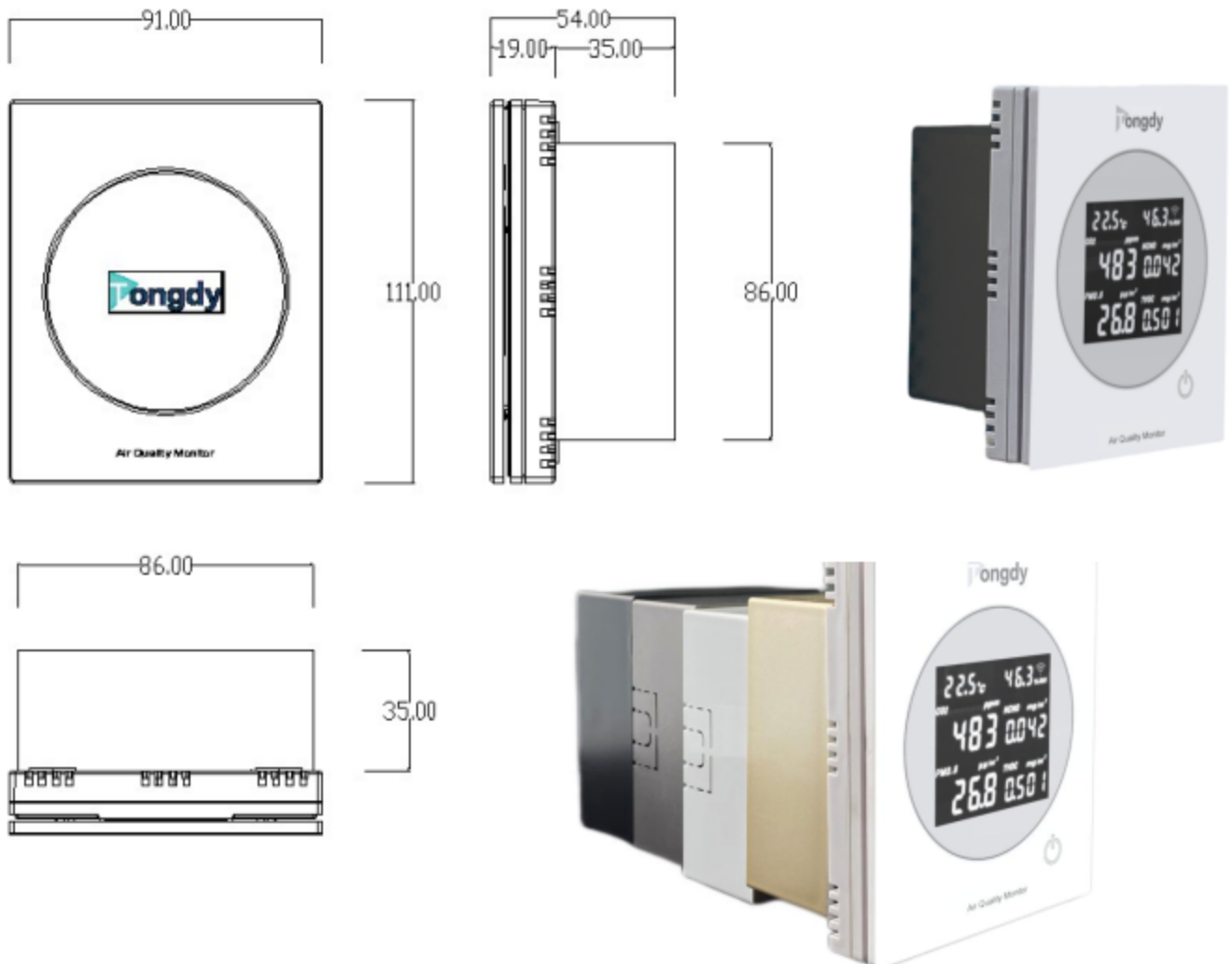
Unique base-line algorithm and data compensation principle ensures measurements reliable and accurate in different environments

## Wall-Embedded Installation

Applicable to tube box of Europe, American, and China standard



## Wall Surface Installation or desktop placement with a surface mounted pipe box



4 color surface mounted tube boxes  
are optional

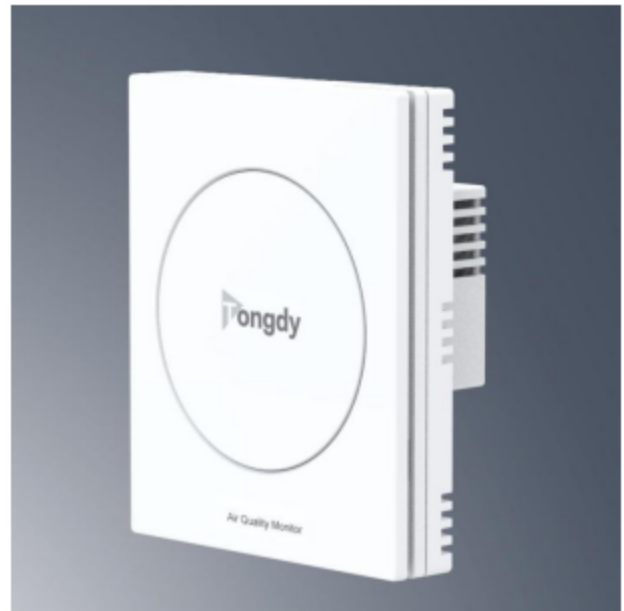


Place on the desk

## EM21 Indoor Air Quality Monitor

### -Simple and Elegant

- 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 Indoor Air Quality Monitor

### -Unique Display Design

- 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 is automatic adjusted , according with the the day and night.



# Technology Specifications

	CO2	TVOC	PM2.5	Temp&RH	HCHO
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 <sup>3</sup>	0~500 µg/m <sup>3</sup>	Temp: 0°C~60°C Humidity:0~99%RH	0~0.6mg/m <sup>3</sup>
Output Resolution	1ppm	0.001mg/m <sup>3</sup>	1µg/m <sup>3</sup>	Temp:0.01°C Humidity:0.01%RH	0.001mg/m <sup>3</sup>
Accuracy	±50ppm + 3% of reading or 75ppm	<15%	<15%	Temp:±0.8°C Humidity:±4.5%RH	±0.003mg/m <sup>3</sup> +10% 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)

## Keep an eye on your air quality at all times

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- 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



Commercial Space



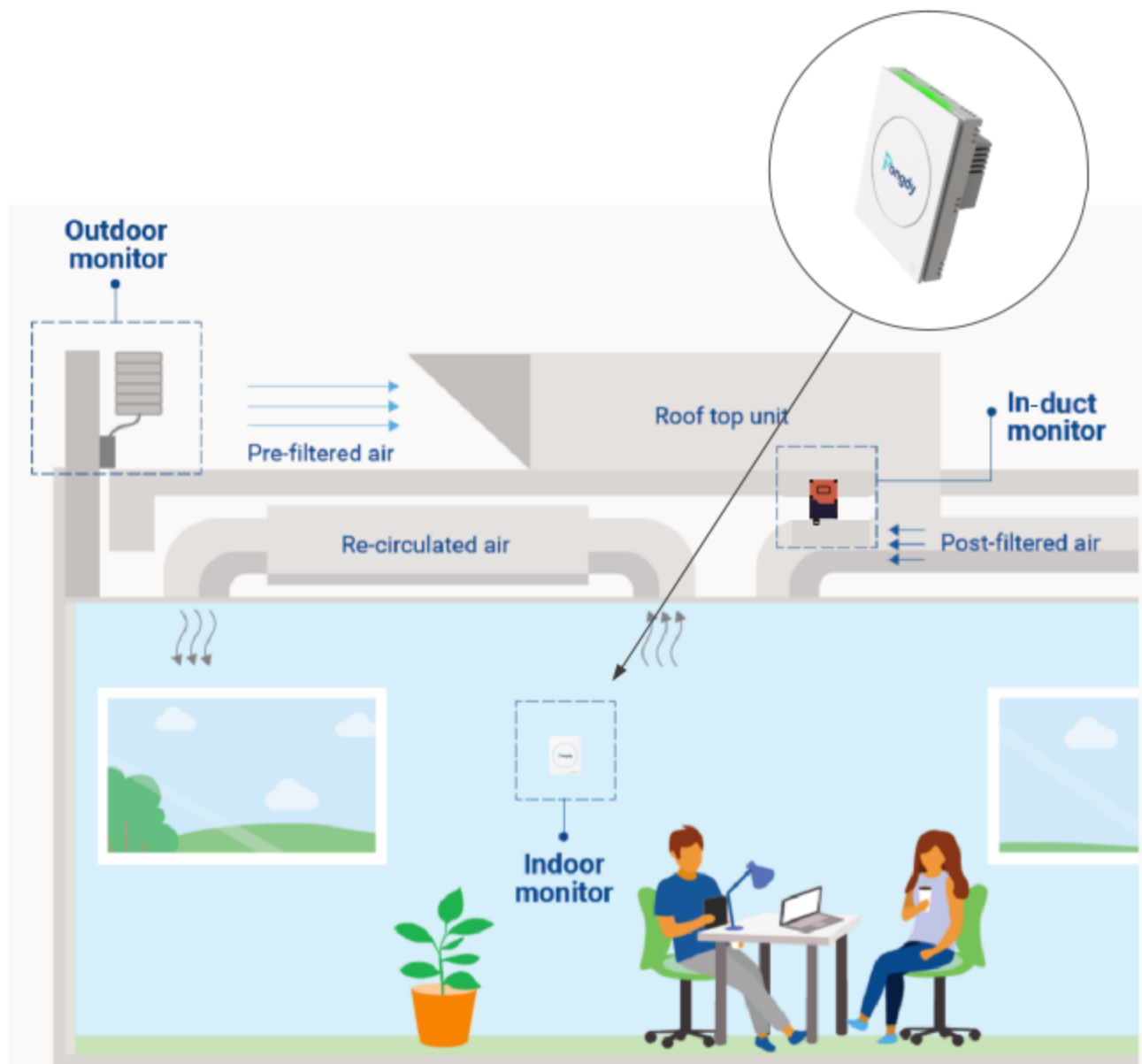
School



Residential



Hotel





## Models Guide

No.	Model	PM2.5	CO2	Temp&RH	T VOC	HCHO	Output	Display	Power Supply		
1	EM21-B/S13C/D	●	●	●			RS485 (Modbus RTU or BACnet MS/TP)	B No display S with display	C: 24VAC/VDC D: 100~240VAC		
2	EM21-B/S15C/D	●		●	●						
3	EM21-B/S17C/D	●	●	●		●					
4	EM21-B/S18C/D	●	●	●	●						
5	EM21-B/S23C/D	●	●	●			WiFi (MQTT)				
6	EM21-B/S25C/D	●		●	●						
7	EM21-B/S26C/D		●	●							
8	EM21-B/S27C/D	●	●	●		●					
9	EM21-B/S28C/D	●	●	●	●						
10	EM21-B/S33C	●	●	●			Ethernet RJ45 (MQTT)				
11	EM21-B/S35C	●		●	●						
12	EM21-B/S37C	●	●	●		●					
13	EM21-B/S38C	●	●	●	●						

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



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