



NEO WAVE®

## Overview

TxAQ37 All-In-One Air Quality Sensor detects temperature, humidity, CO<sub>2</sub>, PM<sub>2.5</sub>, PM<sub>10</sub>, VOC, and formaldehyde—up to 7 parameters. It offers RS485 output with a built-in Modbus protocol for real-time, multi-point data detection. The indoor model can include a display screen and a three-color LED indicator to show air quality status. Both indoor and top suction types support RS485 communication configuration. With wide power supply options and protection features.

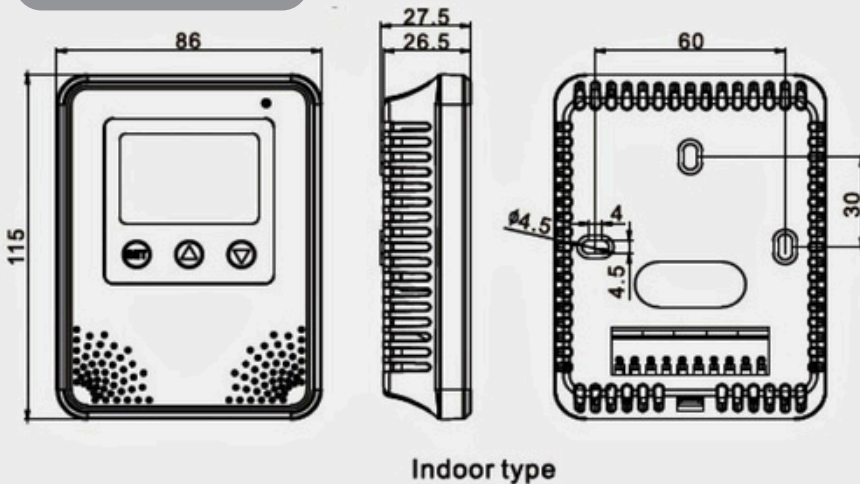
## Feature

- High-precision sensor for stable air quality measurement.
- Detects temperature, humidity, CO<sub>2</sub>, PM<sub>2.5</sub>, PM<sub>10</sub>, VOC, and formaldehyde.
- 3-color LED indicator with an optional off function for air quality display.
- Overvoltage and reverse connection protection for reliability.
- Optional RS485 output (isolated/non-isolated).
- Suitable for indoor or top suction installation across various settings.

## Application

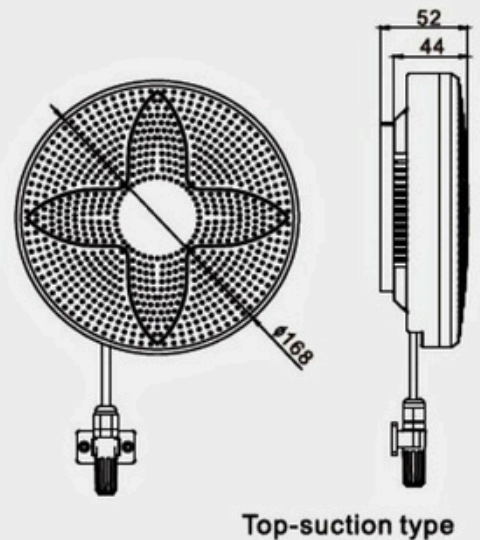
air quality monitoring in commercial complexes, offices, hotels, airports, and schools.2. HVAC

## Dimensions



## TxAQ37

### All-In-One Air Quality Sensor



## Specifications

### All-In-One Air Quality TxAQ37

#### Temperature

Sensor	Digital temperature sensor
Range	0~50°C
Accuracy	±0.5°C@20°C; ≤±1°C@0~50°C
Response time	≤10s (20°C, slow flow air)

#### Relative Humidity

Sensor	Digital Humidity sensor
Range	0~100%RH
Accuracy	Typical ±3% RH@20°C & 20 to 80% RH
Response time	≤10s (20°C, slow flow air)

#### PM2.5/PM10

Sensor	Laser dust sensor, detection particle size 0.3~10µm
Range	PM2.5: 0~500 ug/m³, with a particle size of 0.3~2.5µm PM10: 0~600 ug/m³, particle size 0.3~10µm
Precision/consistency	PM2.5: ±10 µg/m³@0~100 ug/m³, ±10%FS@100~500/600 µg /m³, @25°C
Resolution ratio	1 µg /m³
Response time	Continuous measurement mode with single response time <1s, integrated response time <10s

#### CO2

Sensor	The NDIR sensor, with the ABC self-check function
Range	0~5000 ppm
Accuracy	(±40 ppm±3%MV)ppm
Response time	2 mins

#### VOC

Range	Metal oxide semiconductor gas sensor
Range	0~2 ppm
Resolution ratio	1ppb
Response time	First power-up for 1 hour; pre-heat for 3mins

#### Formaldehyde

Sensor	Electrochemical-type gas sensor
Range	0~1 ppm
Accuracy	+10%FS@25°C
Response time (T90)	<120s

#### General Parameters

Power Supply Voltage	12~36VDC/24VAC+20%
Output Signal	Isolation/non-isolated RS485
Work Environment	0~50°C & 0~95%RH(no condensation)
Storage Temperature	-20~60°C & 0~95%RH (no condensation)

Display and Buttons	Indoor type can be optional
LED pilot lamp	Indoor type can be optional Light indicate: Green: good air quality; Yellow: air quality is generally; Red: poor air quality
Levels of Protection	IP30
Way to Install	Indoortype, Top-suction type
Case Material	Indoor type: PC    Top-suction type: ABS
Weight	Indoor type: 148g    Top-suction type: 235g

## Selection Code

Code and description		Remark
TxAQ37	ALL-IN-ONE AIR QUALITY Sensor	Model
1	Indoor type	Installation method
2	Top suction type	
1	N/A	Temp&RH
2	Temp&RH	
1	N/A	CO2
2	CO2	
1	N/A	PM
2	PM2.5&PM10	
1	N/A	VOC
2	VOC	
1	N/A	Formaldehyde
2	HCHO	
RSN	Non-isolated RS485	Output
RS	Isolation type of RS485	
1	Without display	Display
2	With display	
1	None	Indication light
2	With 3-color LED	