

Overview

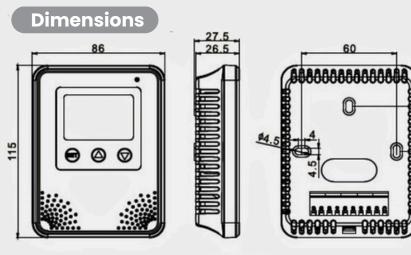
TxAQ37 All-In-One Air Quality Sensor detects temperature, humidity, CO2, PM2.5, PM10, VOC, and formaldehyde—up to 7 parameters. It offers RS485 output with a built-in Modbus protocol for real-time, multi-point data detection. The indoor model can include a display screen and a three-color LED indicator 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, CO2, PM2.5, PM10, 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



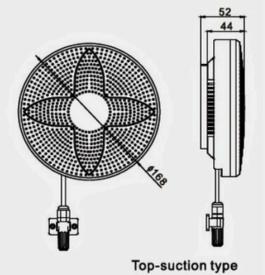
Indoor type

TxAQ37

All-In-One Air Quality Sensor









Response time≤10s (20°C, slow flow air)Response time≤10s (20°C, slow flow air)SensorLaser dust sensor, detection particle size 0.3~10µmRangePM2.5: 0~500 ug/m³, with a particle size of 0.3~2.5µm PM10: 0~600 ug/m³, particle size 0.3~10µmPrecision/consistencyPM2.5: ±10 µg/m³@0~100 ug/m³, ±10%FS@100~500/600 µg /m³, @25°C 1 µg /m³	Specific	ations	All-	In-One Air Quality	TXAQ37					
Range 0-50°C Range 0-100%RH Accuracy ±0.5°C@20°C; ±1°C@0-50°C Accuracy Typical +3%, RH@20°C & 20 to 80%, RH Response ±10s (20°C, slow flow air) Response (10s (20°C, slow flow air)) Sensor Laser dust sensor, detection particle size 0.3-10µm Range PM2.5; 0-500 ug/m², with a particle size 0.3-10µm Precision/consistency PM2.5; 0-500 ug/m², with a particle size 0.3-10µm Resolution ratio PM2.5; ±10 µg/m²@0-100 ug/m², ±10%FS@100-500 /600 µg /m³, @25°C Resolution ratio PM2.5; ±10 µg/m²@0-100 ug/m², ±10%FS@100-500 /600 µg /m³, @25°C Resolution ratio Continuous measurement mode with single response time <1s, integrated response time <10s Sensor The NDIR sensor, with the ABC self-check function Range 0-5000 ppm Range 0-2 ppm Range Sensor Range 0-2 ppm Resolution ratio Ippb Response time 0-2 ppm Response time First power-up for 1 Response time Ippb Accuracy First power-up for 1 Nour; pre-heat for 3mins		Temperatu	re		Relative Humidity					
Accuracy mesponse time ±0.5°C@20°C; ±±°C@0~50°C Accuracy Accuracy Typical ±3% RH@20°C & 20 to 80% RH Response time ±10s (20°C, slow flow air) Response time ±10s (20°C, slow flow air) Sensor Laser dust sensor, detection particle size 0.3-10µm PM2.5: 0~500 ug/m², with a particle size 0.3-2.5µm Range PM2.5: 0~500 ug/m², particle size 0.3-10µm PM2.5: 0~500 ug/m², particle size 0.3-10µm Precision/consistency PM2.5: ±10 µg/m²@0-100 ug/m², particle size 0.3-10µm PM2.5: 0.500 ug/m², particle size 0.3-00µm Response time Continuous measurement mode with single response time <1s, integrated response time <10s Electrochemical-type Sensor The NDIR sensor, with the ABC self-check function Electrochemical-type Range Metal oxide sensor Sensor Electrochemical-type gas sensor Response time 0~2 ppm Range 0~1 ppm Accuracy Electrochemical-type gas sensor esponse time 10%FS@25°C Range First power-up for 1 hour; pre-heat for 3mins Response time (190) <120s Response time First power-up for 1 hour; pre-heat for 3mins Response time (190) <120s Power Supply Voltage Output Si	Sensor	Digital temp	perature sensor	Sensor	Digital Humidity sensor					
Response time s10s (20°C, slow flow air) Response time s10s (20°C, slow flow air) Response time s10s (20°C, slow flow air) Response time s10s (20°C, slow flow air) Sensor Laser dust sensor, detection particle size 0.3-10µm Range PM2.5: 0-500 ug/m³, with a particle size 0.3-10µm Precision/consistency PM2.5: ±10 µg/m³ (20°C, slow flow air) Response time Continuous measurement mode with single response time <1s, integrated response time <10	Range	0~	~50°C	Range	0~100%RH					
situs situs <th< td=""><td>Accuracy</td><td>±0.5°C@20°C</td><td>; ≤±1°C@0~50°C</td><td>Accuracy</td><td>Typical ±3% RH@20°C & 20 to 80% RH</td></th<>	Accuracy	±0.5°C@20°C	; ≤±1°C@0~50°C	Accuracy	Typical ±3% RH@20°C & 20 to 80% RH					
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Resolution ratio 1 µg /m³ Response time Continuous measurement mode with single response time <1s, integrated response time <10s Response time 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 Formald=hyde Range Metal oxide semiconductor gas sensor Sensor Electrochemical-type gas sensor Range 0~2 ppm Range 0~1 ppm 4 Resolution ratio 1 ppb Accuracy +10%FS@25°C Response time First power-up for 1 hour; pre-heat for 3mins Response time (T90) <120s Power Supply Voltage 12~36VDC/24VAC+20% Countput Signal Isolation/non-isolated RS485 Kender Stender Sten	RU	inge	PM10: 0~600 ug/m³, particle size 0.3~10µm							
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Resolution ratioIppbResolutionResponse timeFirst power-up for 1 hour; pre-heat for 3minsResponse time (T90)<120s	Ro	inge	0~2 ppm	Range	0~1 ppm					
Response timehour; pre-heat for 3minsResponse time (T90)<120sGeneral ParametersPower Supply Voltage12~36VDC/24VAC+20%Output SignalIsolation/non-isolated RS485Work Environment0~50°C & 0~95%RH(no condensation)	Resolut	tion ratio	lppb	Accuracy	+10%FS@25°C					
Power Supply Voltage12~36VDC/24VAC+20%Output SignalIsolation/non-isolated RS485Work Environment0~50°C & 0~95%RH(no condensation)	Respor	nse time	hour; pre-heat for	Response time (1	(120s					
Output SignalIsolation/non-isolated RS485Work Environment0~50°C & 0~95%RH(no condensation)			General F	Parameters						
Work Environment 0~50°C & 0~95%RH(no condensation)	Power Sup	oply Voltage	:+20%							
	Outpu	ıt Signal	Isolation/non-isolated RS485							
Storage Temperature -20~60°C & 0~95%RH (no condensation)	Work En	vironment	0~50°C & 0~95%RH(no condensation)							
	Storage T	emperature	-20~60°C & 0~95%RH (no condensation)							



Display and Buttons	Indoor type can be optional			
	Indoor type can be optional			
LED pilot lamp	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

03

	Code and description							Remark			
TxAQ37			ALL-IN-ONE AIR QUALITY Sensor							Model	
	1			Indoor type							Installation
	2			Top suction type							method
		1		N/A							Temp&RH
		2		Temp&RH							
			1 N/A						202		
			2							CO2	
				1							
				2						РМ	
										1/00	
					2	2 VOC				VOC	
						1	1 N/A			Formeridabyda	
						2				НСНО	Formaldehyde
						RSNNon-isolated RS485RSIsolation type of RS4851Without display			Output		
									Diaplay		
							2 With display			Display	
									1	None	Indication light
									2	With 3-color LED	indication light