

Product Specification



Product	Smart AQI Sensor
Device Model	SA-7591
Document Version	1.0.1
Power Supply	DC 5V/1A(Type-C) or DC 12V~24V(max 600mA) (Gauge Cable port)
Connectivity	RS485
Core	Real-M300 @ 200MHz Real-M200 @ 20MHz
Display	PMVA LCD 50X31.4mm
CO2 Sensor	SCD40
CO2 Output Range	400~40,000ppm
Temperature	-10°C~50°C
RH	10~90%RH

Environmental Sensor	SEN54
PM2.5	0~1000µg/m3
VOC(VOC Index)	1~500
RS-485	Half duplex RS-485
Installation position	Wall mount/On the Table
Size(H*W*D)	90 x 90 x 43mm
Weight	23.2g
Operating Temp.	-5°C~45°C
Operating Humidity	10%~90% (No condensation)
Storage Temp.	-10°C~65°C
Button	Reset Hole*1
Regulatory	NCC

Technical Specification

Data Acquisition	RS485
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LCD display Icons information

Parameter Measurement Range Corresponding to LCD Display Icons

Category	Range	Screen Icon	Screen Display Value	APP Display
TVOC	Index 0~50		1	Level 1
	Index 51~100		2	Level 2
	Index 101~150		3	Level 3
	Index 151~200		4	Level 4
	Index 201~300		5	Level 5
	Index 301~500		6	Level 6
CO2	<= 1000ppm	😊	Actual Value (ppm)	Actual Value (ppm)
	1001~1600ppm	😊		
	1600~2000 ppm	😐		
	> 2000 ppm	😞		
PM2.5	0~35 µg/m3	😊	Actual Value (µg/m3)	Actual Value (µg/m3)
	36~53µg/m3	😊		
	54 ~ 70µg/m3	😐		
	> 70 µg/m3	😞		

When the values of PM2.5, TVOC, or CO2 change, the screen panel will update within 15 seconds, while the app will update within approximately 35 seconds.

However, the app's update speed may vary depending on the actual network conditions.

Wiring Diagram

For RS485 wiring, please use RS485-specific cables (UL2426 2C dual-isolated twisted pair).

