

Product Manual



Air Quality Monitor

Type: AM7000

Catalogue

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1、Preface

Thank you for purchasing the AM7000 air quality monitor. This product can detect six indicators of indoor-temperature, humidity, PM2.5, CO2, formaldehyde and VOC. Please read the instructions carefully before use and pay attention to all precautions. After reading, please keep it in a safe place for reference at any time.

User Notice

- ✓ Please use 5V/1A power adapter, otherwise it may cause overheating, explosion and other accidents due to excessive current;
- ✓ Do not insert sharp metal tools into the ventilation holes of the housing, otherwise it will cause damage to the sensor or electric shock;
- ✓ Keep the water away from entering the interior. Water in electrical parts may cause product failure and electric shock;
- ✓ Please keep the monitor in the power-off state when users install or remove the formaldehyde/VOC module;
- ✓ This product is only suitable for general indoor environment, please do not place it in an environment with too high(above 50°C)or too low temperature (below -20°C), do not place the product in a hot environment exposed to direct sunlight for a long time. When the monitor with the formaldehyde module, please ensure that the temperature condition is between 0°C to 40°C;
- ✓ Please stay away from indoor environments with large amounts of humidity,

		 Good: 1  Bad: 2、3
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Note: In the display interface, the background color block of CO2 and formaldehyde, the surrounding color circle of PM2.5, and the grade color block of VOC all have three states: green, yellow, and red, representing the excellent, good, and bad of each indicator. And the VOC grade color block is divided into 4 segments, corresponding to 0~3 grades respectively. When the formaldehyde/VOC module is not installed, the color block is gray.

3.3 Product Information

Product Type	AM7000
Working condition	Within 0~40°C,15~95%RH (non-condensing)
Storage Condition	Within -20~50°C,15~95%RH (non-condensing)
Rated voltage	DC5V
Size	90x80x53 mm
Weight	365.6g(with package)
Display	2.8 inch TFT LCD screen
Wireless module*	WiFi 802.11b/g/n, Bluetooth BLE4.2

*The wireless module is an optional component and needs to be customized according to customer requirements.

4、 Instructions

4.1 Install the formaldehyde/VOC module :

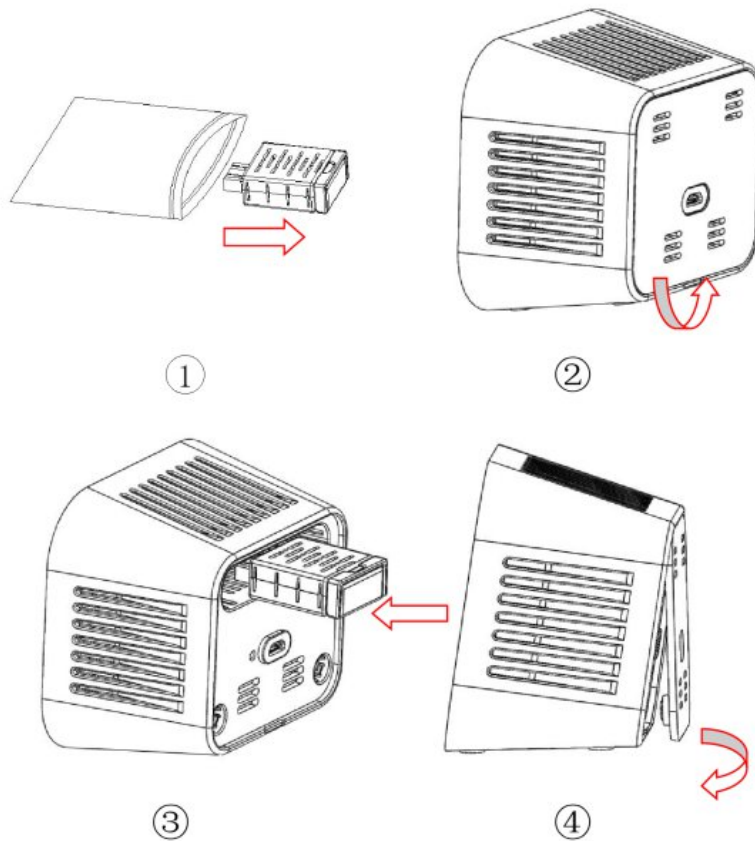
- ① Take out the individually wrapped aluminum foil bag from the packing box,

open and take out the formaldehyde/VOC;

② Turn over and uncover the rear cover from the gap at the bottom of the product;

③ Insert the formaldehyde/VOC module into the corresponding USB socket on the product;

④ Insert the top buckle of the rear cover into the corresponding hole on the top of the product, and fix it with the magnet at the bottom.



4.2 Supply power to the product through the power cord, and display the air quality test after warming up data.

4.3 Disassemble the formaldehyde/VOC module: Because the

oil fume, corrosive indoor environments, etc. If the monitor exposed to high-concentration gas for a short time, it may cause the formaldehyde sensor to fail temporarily. Then the product must be placed in a clean and ventilated environment to recover. The recovery time may be as long as 1 to 2 days;

- ✓ Please do not block the vent slot when the product is in use, so as not to affect the measurement accuracy;
- ✓ The formaldehyde sensor used in this product has the characteristics of high sensitivity, so it requires a stable detection environment and eliminates major interferences: including but not limited to ethanol (alcohol), methanol, toluene, xylene, carbon monoxide, hydrogen sulfide, etc. In order to ensure the accuracy of formaldehyde measurement, avoid using it in an environments with high alcohol content such as perfume and cooking wine; if the product is placed in high-concentration organic gas for a long time, it may cause irreversible damage to the formaldehyde sensor.
- ✓ This product uses an electrochemical sensor to detect the indoor formaldehyde concentration. The measurement value is mainly used for users' reference. It cannot be a substitute for professional instruments, and the measurement results must not be used in any other way.

2、 Packing List

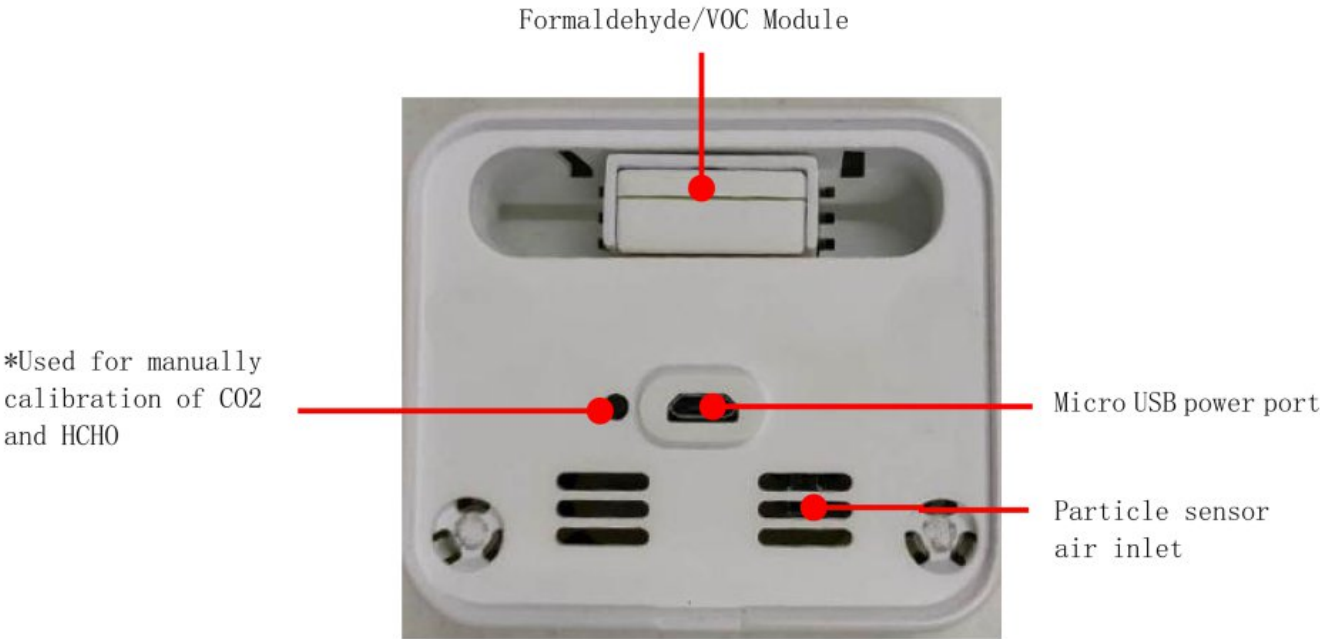
- ① AM7000 Air Quality Monitor x1
- ② Micro USB cable x1
- ③ Operating Manual x1

④ Formaldehyde/VOC module(Optional) x1

3、Product Introduce











3.1 Appearance



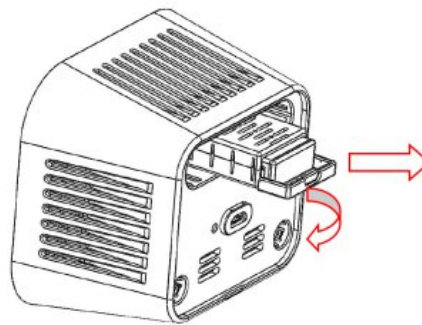


3.2 Technical parameter of sensor

Indictor	Item	Explanations
Temperature	Measurement Range	0~40℃
	Accuracy	±1℃ (Measured after 30 minutes under stable environment for 25±2℃, 50±10%RH)
Humidity	Measurement Range	0~95%RH
	Accuracy	±8%RH
PM2.5	Measurement Range	0~1000μg/m ³

	Accuracy	$\leq 100\mu\text{g}/\text{m}^3$: $\pm 10\mu\text{g}/\text{m}^3$ $> 100\mu\text{g}/\text{m}^3$: $\pm 10\%$ readings (Refer to TSI 8530, $25\pm 2^\circ\text{C}$, $50\pm 10\%\text{RH}$)
	Upgrade Range	 Excellent: $0\sim 35\mu\text{g}/\text{m}^3$  Good: $36\sim 75\mu\text{g}/\text{m}^3$  Bad: $76\sim 1000\mu\text{g}/\text{m}^3$
CO ₂	Measurement Range	400~5000ppm
	Accuracy	$\pm (50\text{ppm}+5\% \text{ readings})$
	Grade range	 Excellent: 400~600ppm  Good: 601~1000ppm  Bad: 1001~5000ppm
Formaldehyde	Measurement Range	$0\sim 1.000\text{mg}/\text{m}^3$
	Accuracy	$\leq 0.100\text{mg}/\text{m}^3$: $\pm 0.03\text{mg}/\text{m}^3$ $> 0.100\text{mg}/\text{m}^3$: $\pm 30\%$ of readings (Refer to Gasera one, measured after 2 minutes under stable environment, $25\pm 2^\circ\text{C}$, $50\pm 10\%\text{RH}$)
	Upgrade Range	 Excellent: $0\sim 0.03\text{mg}/\text{m}^3$  Good: $0.031\sim 0.100\text{mg}/\text{m}^3$  Bad: $0.101\sim 1.000\text{mg}/\text{m}^3$
VOC	Measurement Range	Level 0、1、2、3
	Upgrade Range	 Excellent: 0

formaldehyde/VOC module is a consumable material, if the product is not used for long time, the formaldehyde/VOC module should be disassembled and installed in primary aluminum foil bag, to extend the life span of the formaldehyde/VOC module. When disassemble the formaldehyde/VOC modules, use the fingers on the built-in handle to turn the handle over, and then use the handle to take out the module.



5、 Common problem guidelines

Problem description	Solve Method
Black Screen, no display	①Confirm whether the product is correctly connected to the power supply, and power adapter whether meets the requirements; ②Confirm whether the power plug of the adapter is in good contact.
Formaldehyde value is high	①Please keep the monitor ventilating for 15 minutes before use; ②Eliminate possible sources of interference: oil fume, cigarettes, perfume, fruits (which emit

	aromatic gases, containing alcohol, fermented products, etc.), alcohol and alcohol-containing items, frequent walking, etc.
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6、 After-sales service and consultation

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