A 25 M Portable PM2.5 Air Quality Monitor User Manual

I. Overview

PM2.5 refers to the atmosphere particle of which the diameter is less than or equal to 2.5 microns . It that is less than the hair diameter 1/20 can be directly absorbed into the lungs. It is also called as the particles into lungs.

Although PM2.5 is only a small component of the earth's atmosphere, it has an important impact on air quality and visibility . PM2.5 small size, large area, high activity, easy with toxic and hazardous substances (such as heavy metals, microbial, etc.), and long residence time in the atmosphere, long conveying distance ,etc. Thus , it greatly impacts the health of human and the quality of atmospheric environment .

A25M is a portable PM2.5 detector which can effectively monitor the PM2.5 concentration in the environment . and it is widely used in home, shopping malls, offices, stations and other public places.

This manual includes the interrelated information about safety and warning. Please read carefully and follow all warnings and precautions.

Warning: before you use the product, please read the guidelines for safe operation.

2. Open Box for the inspection

Open the box and take out the instrument, please check if the item is missing or damaged:

USB cable 1P	CS
Vehicle bracket 1P	CS
Wall bracket 1P	CS
Notch bracket 1F	CS
Instruction manual 1P	CS
Warranty card1F	PCS

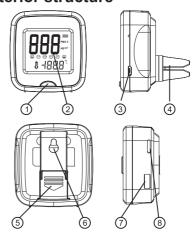
3. Safety operation rules

To be aware of any damage or abnormal phenomenon, the instrument and accessories should be checked before using this instrument .

Do not use this instrument if it is found that the instrument housing has been damaged and the LCD display is not displayed, or if you do not think it is working properly

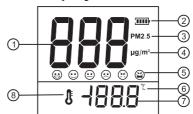
- 2. When implementing the measurement, please follow the operating instructions.
- 3. Please do not randomly open the instrument and change the internal circuit so as not to damage the instrument .
- 4. When the LCD screen appears "___" symbol, please plug in the adapter to charge .
- Do not store or use this instrument in high temperature, high humidity, flammable, explosive and strong electromagnetic environment.

4. Exterior structure



1	Function key	5	Notch bracket	
2	LCD display	6	Wall bracket	
3	USB interface	7	Air inlet	
4	Vehicle bracket	8	Air outlet	

5. Symbol display



1	PM2.5 measurements	5	PM2.5 concentration expression level
2	Battery Icon	6	Temperature unit
3	PM2.5 Icon	7	Temperature measurement
4	PM2.5 unit	8	Temperature Icon

6. Operating instructions

1. ON/OFF

ON/OFF: Long press (b) key to ON/OFF the unit

2. Backlight

Backlight : short press **()** key to turn on /off Backlight . The default state is Backlight with being turned on .

There are two instances as blow when the backlight is turned off

- a. When the particle concentration exceeds the standard (PM2.5>115ug/m3), the red backlight will light up; when the particle concentration returns to normal (PM2.5 ≤ 115ug/m3), the red backlight will automatically be turned off.
- b. When the particle concentration exceeds PM2.5>115ug/m3, the red backlight will light up, the red backlight will always be bright (if PM2.5>115ug/m3 keeps still) this moment, you can turn backlight off by manual via short press 🖰 key

3. Charg

To connect charging port and power source with Micro USB wire to charge the meter .

Note: the input power source is rated 5V/1A

7. performance parameter

1. Technical specification

Function	Range	Resolution	Accuracy (a% reading+b digital)	Remark
			$\pm (10 \mu g/m^3 + 10 dgts)@0 \sim 100 \mu g/m^3$	
PM2. 5	$0\!\sim\!500\mu\mathrm{g/m^3}$	1µg/m³	± (10%+30dgts)@101~400µg/m³	Ambient temperature :18 ~ 28 °C
			± (10%+50dgts) @401~500μg/m³	Ambient humidity :40%~75%RH
Temperature	−10~50°C	0.1℃	Temperature Only As Reference	

2. PM2.5 concentration expression level

Concentration (µg/m³)	Expression	Backlight		
0-35	(Excellent)	White		
36-75	⊕(Good)	White		
76-115	(Slight Pollution)	White		
116-150	(Middle Level Pollution)	Red		
151-250	(Heavy pollution)	Red		
251-500	(Serious Pollution)	Red		

3. General specification

- a. Liquid crystal display: LCD display, reading is clear and intuitive
- b. Measure method: laser scattering principle
- c. Alarm prompt: color alarm (red)
- d. Low power prompt: "___" symbol (should be charged in time)
- e, backlight: dual color LED backlight function

4. Environmental limit

- a. For Indoor or vehicle use
- b. Altitude is not more than 2000 meters
- c. Operating temperature and humidity Temperature: -10~50°C Humidity:0-99%RH
- d. Storage temperature: -20~60°C

5. Maintenance

Warning: please do not open the instrument housing so as not to affect the accuracy of the meter or damage the instrument as well as to avoid collision, fall, hit, soak, etc.

- a. The maintenance and service of the instrument must be implemented by qualified professional personnel or the designated department.
- b. Regularly use dry cloth to clean the shell, but must not use the detergent containing solvent composition
- c. If do not use this instrument for a long time, please shut down to prevent the battery power consumption. otherwise it will affect the battery life.

6. Attentions

a $\mbox{\ensuremath{^{\backprime}}}$ In measuring , please keep the test time more than 10 minutes to read the stable PM2.5 value.

- b. Due that PM2.5 particles in the air are not normally distributed . Even testing in the same place, the measurement of numerical deviation with several or even dozens of words is also recognized as normal, but the overall values can reflect the level of PM2.5 concentration there.
- c. When using the product, please do not use fan, hair dryer, fan heater ,etc. to blow it directly .
- d. Please do not directly blow the product or block it's air inlet and outlet

7. Maintenance

- a. Please refer to the warranty regulations in the offered warranty card
- b. Below situations are not within the scope of the warranty.
- 1. The user disassembles the products privately or implement improper use to cause damage.
- 2. The user alters the warranty card privately or has no shopping vouchers

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