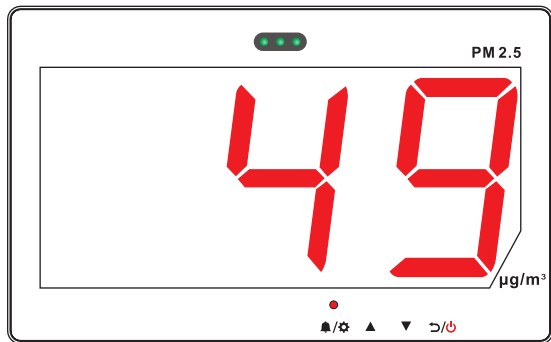


Wall-mounted PM2.5 Monitor

User's Manual



User Instructions

- ◆ Please read this operation guide and safety regulations before your operation. Improper operations which don't comply with this manual maybe cause damage to the device or influence on the results.
- ◆ Please do not use the device in inflammable and explosive environment.
- ◆ Junked device should not processed as household garbages. Please deal with it according to the local laws regulations.
- ◆ Any quality issues or any questions on the device, please contact your local distributors of manufacturer at once.

professional casts quality and good quality gets reputation

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1、 Before Using

Instrument Check List

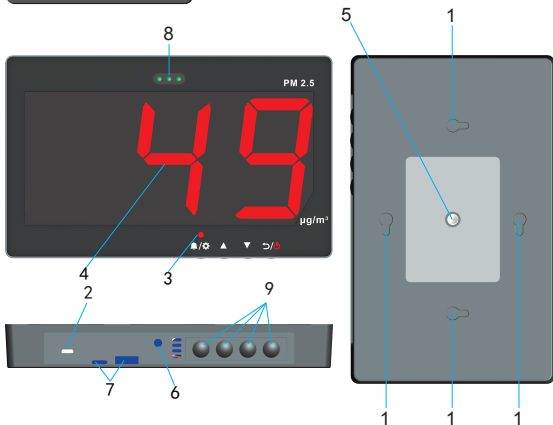
This Meter is supplied with the following accessories. If lack of accessories, please contact the local dealers or manufacture.

No.	Description	Unit	Qty.	Remarks
1	Wall-mounted PM2.5 Monitor	set	1	
2	USB cable	pc	1	
3	CD	pc	1	
4	Instructions	pc	1	

Introduction

The PM2.5 monitor is a monitor for detecting the quality of particles in the atmosphere that are less than or equal to 2.5 μm of fine particulate matter. Compared with the coarser atmospheric particles, PM2.5 particles have small diameter, large area and strong activity, which are easily associated with toxic and harmful substances (e.g., heavy metals and microorganisms), and long residence time in the atmosphere, conveying distance, and thus the impact on human health and environmental quality of the atmosphere more. This instrument uses the principle of laser scattering. Let the scattering laser irradiation suspended particles in the air. At the same time, to collect scattered light at a particular point of view, get the scattering intensity versus time curve. Then the equivalent particle size of particles and the number of particles of different sizes in unit volume are obtained.

Meter Description



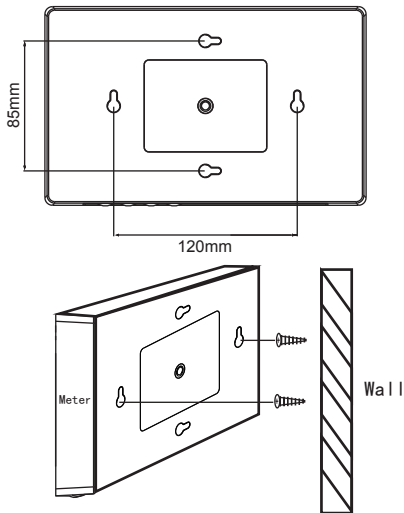
1. Hooks.
2. USB outlet.
3. Alarm light.
4. Display: Three 3 inch digital tube display to display PM2.5 level.
5. Tripod mounting screw: 1/4", the meter can be mounted on a tripod with this hole.
6. Audio Outlet: It can drive the loudspeaker to alarm. User need to connect a loudspeaker to the device for the alarm. 3.5mm earphone plug, 6-12V loudspeaker as below is recommended.



7. PM2.5 sensor air inlet and air outlet.
8. Two color LED indicator light, indicating the current degree of air pollution. Green is good, yellow is worse, red is bad.
9. Buttons

Buttons	Description	Specification
	Power	Short press to turn on; Long press to turn off.
	Down	Short press for reducing value while setting, hold for continuous reducing
	Up	Short press for increasing value while setting, hold for continuous increasing
	Alarm	Short press for ON/OFF alarm, long press enter settings.

Installation diagram



Notes & Warning

- ◆ Do not use Meter in high temperature and high humidity environment.
- ◆ Do not use Meter near corrosive material.


- ◆ Do not use Meter in the conditions that should be splashed by water.
- ◆ Do not use Meter in an environment with chemical gas.

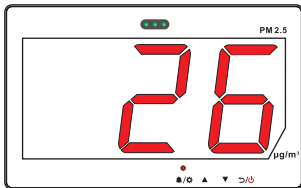
Technical Parameters

Description	625A	625B
Measuring range	0~500 $\mu\text{g}/\text{m}^3$	
Consistency	$\pm 10\%$ @100~500 $\mu\text{g}/\text{m}^3$; $\pm 10\mu\text{g}/\text{m}^3$ @0~100 $\mu\text{g}/\text{m}^3$	
Response time of once	<1s	
General response time	$\leq 10\text{s}$	
Resolution ratio	1 $\mu\text{g}/\text{m}^3$	
Particle count efficiency	50%@0.3 μm 98%@ $\geq 0.5\mu\text{m}$	
Sensor	Plantower Laser Particulate Matter Sensor	
Working life	$\geq 3\text{years}$	
Record	X	4s/time, can be kept for 1 year
Communication	X	Connecting PC with USB cable
Power supply	DC5V 1A Micro USB	
Alarm reminder	Sound & Display	
Alarm output	√	
Two color LED	√	
Operating conditions	-10 ~ +60°C, 20% ~ 80%RH	
Storage conditions	-40 ~ +80°C, 20% ~ 70%RH	
Weight	453g	
Size	210x130x28mm	

2、 Using Instructions

PM2.5 Measurement



Press  turn on power. Wait for 8 seconds to enter measuring interface. The screen displays the PM2.5 reading value, and the two color LED indicator on the screen shows the current level of air pollution. Green is good, yellow is worse, red is bad.





Alarm

1. Alarm switch

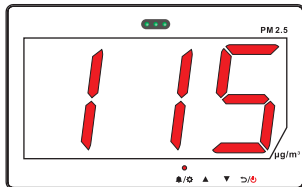
Turn on alarm function by default when the meter leaves the factory.

Press / turn off alarm, then the red light goes out;

Press / again, the alarm function is turned on, then the red light lights.

The alarm switch can be set, it will take the setting as the default when start the meter next time.

2. Set alarm value



The alarm value is set at $115\mu\text{g}/\text{m}^3$, you can set it by yourself. (Range: $0\sim 500\mu\text{g}/\text{m}^3$)

- 1) In normal measurement, long press to enter the alarm setting, then the screen displays the current alarm value and the red light flashes;
- 2) Press the buttons to adjust the alarm value and press buttons for a while to set up continuously.
- 3) Press to save the alarm value, or press to return the measurement state.

Attention: press enter alarm time setting, press back to measurement state.

3. Alarm function (Sound & Display)

When the measuring value of the instrument exceeds the set alarm value, the instrument sends out the alarm sound of Di Di Di Di..., and locks the measuring data and flashes the measuring value. Instrument alarm duration of 2 minutes, After 2 minutes, or press any button, the instrument stops the alarm sound, the screen does not blink, but still lock data. Normal measurements are resumed after 5 seconds.

* User can set the alarm time through computer for 625B.

NOTES: The device will start alarm again, if the first result is still beyond the alarm value when it return to normal measurement.

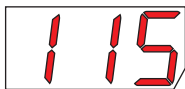
4.Alarm Time & Volume

The default time of alarm is 2 minutes, volume is 3. User can adjust the time between 6s to 120s, and volume 1 to 3, 3 is the Maximum. Please check system setting for operation details.

Data Records (Only 625B)

The instrument automatically every 4 seconds a data storage, The stored value is the maximum PM2.5 value in 4s. The instrument can be stored continuously for a year, a year after the instrument automatically cleared six months before the data, the user can through the computer software export record.

System Setting



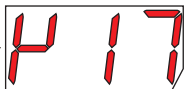
Alarm Value Setting



Alarm Time Setting



Alarm Volume Setting



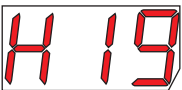
Year Setting



Month Setting



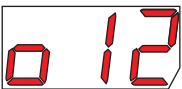
Day Setting



Hour Setting





Minute Setting









Second Setting

NOTES: Settings of Year/Month/Day/Hour/Minute/Second are just available for 625B.

System setting parameter including: Alarm value, Alarm time, Alarm volume, Year, Month, Day, Hour, Minute, Second. Long press button / for alarm value setting (Refer to <Instrument alarm>).

System Settings operation as follows:

- 1) Press   button to adjust the parameters; Hold it for continuous adjustment.
- 2) Short press / button to save data and set the next batch of parameters(Alarm value->Alarm time->Alarm volume->Year->Month->Day->Hour->Minute->Second).
- 3) If you don't want to save data, please press / button to return back to normal measuring.

Connecting (Only 625B)

The instrument provides computer applications that can communicate with the computer via USB, download records, sample in real-time, print charts and data, and so on.

PM25 Meter.rar is software files package. Please extract it to install the software or start the software directly. Please read the <Installation and Operation Instruction> carefully before use.

3、 Additional Instructions

Common Breakdown & Processing

1.No display

- (1) Press the power ON/OFF switch again.
- (2) Try the other USB cable to connect computer.
- (3) Try the other power adapter.

2.No signal when connecting computer

- (1) Try the other USB cable.
- (2) Replace the computer USB outlet.
- (3) Be applicable to the systems of Windows Xp,Win7, Win8,Win10 only.
- (4) Send the Meter back to factory to check its USB outlet.

Instrument Maintenance

1. Surface Cleaning

Clean the Meter with wrung-out wet cloth.Do not use the alcohol, alcohol diluent or corrosive chemical liquid to clean the Meter.

Attached A: PM2.5 air quality standards

Air quality grade	Standard value of PM2.5 average of 24 hours
Excellent	0~35 $\mu\text{g}/\text{m}^3$
Good	35~75 $\mu\text{g}/\text{m}^3$
Slight pollution	75~115 $\mu\text{g}/\text{m}^3$
Medium pollution	115~150 $\mu\text{g}/\text{m}^3$
Heavy pollution	150~250 $\mu\text{g}/\text{m}^3$
Severe pollution	$\geq 250\text{ug}/\text{m}^3$

