

# Dust Particle Counter Manual



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## Overview:

This product adopts the principle of laser scattering, can detect the quantity of 0.3um, 2.5um particle size dust and PM2.5, PM10 quality detection, temperature, humidity and AQI level detectors.

It has 999 sets of data records, can view the data curve, has a 3.2-inch TFT full-color display, automatic measurement, real-time date and time, rechargeable lithium battery or a separate external USB power supply, stable data, etc.

### Applied to:

Industrial dust particle detection instrument.

Industrial production of electronics, optics, chemicals, food, medicine and health, biological products, aerospace, etc.

### Filter seal check

### Particle pollution source detection

## Safety and maintenance

1. Do not use the instrument in a dusty or corrosive gas environment, so as not to reduce the life of the instrument or damage it
2. When the battery icon on the display is empty or red, please charge it in time, and remove the battery if it is not used for a long time.
3. Do not store or use the meter in a high temperature, high humidity, flammable, explosive and strong electromagnetic field environment.
4. For maintenance, use a soft cloth and neutral detergent to clean the case. Do not use abrasives and solutions to prevent the case from corroding and damaging the instrument.

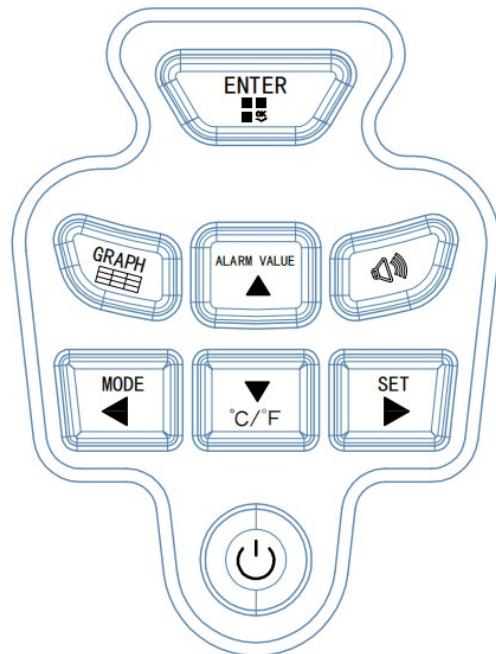
## Structure appearance



### Function:

1. Display screen
2. Operation buttons
3. USB interface
4. Air outlet
5. Battery compartment
6. Air intake
7. Temperature and humidity sensor
8. Support frame nut
9. Note: 1. Do not block the air inlet with objects during the test

## Button function



**1. Power on/off button:** short press to power on or off



**2. OK button:**

- 1) Historical trend interface press this button to exit to the main interface
- 2) The history record interface can enter the page number view
- 3) The function parameter interface can enter the parameter modification
- 4) The alarm value setting can be exited to the main interface



**3. Mode button:**

- 1) Short press to turn on the weighing mode or counting mode
- 2) Shift page position of history record interface
- 3) Parameters can be modified in the function parameter interface
- 4) Displacement value of alarm value setting interface



**4.Setting button:**

- 1) Short press the history record → function parameter → main interface
- 2) Shift page position of history record interface
- 3) Parameters can be modified in the function parameter interface
- 4) Displacement value of alarm value setting interface



**5.Alarm value setting button: 1) Short**

- press to enter the alarm value setting, press this button again to increase the alarm value
- 2) The number of pages that can be turned up in the historical trend interface
  - 3) The number of pages that can be turned up in the history record interface
  - 4) The function parameter interface can go up to select parameter items



**6.Temperature unit conversion button:**

- 1) Short press to turn on the °C or °F unit
- 2) The number of pages that can be turned down in the historical trend interface
- 2) The number of pages that can be turned up in the history record interface
- 3) Function parameter interface can select parameter items down



**7.Historical trend button:**

- 1) Short press to enter the historical trend interface



**8.Sound alarm button:**

- 1) Short press to turn on or off the alarm sound

## Operation description:

### 1. Power on or off:

Short press button  to turn on or off

### 2. Counting and weighing mode conversion:

Short press button  to switch between ug/m3 or Piece/L mode

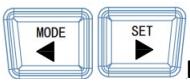
Temperature unit conversion  Short press Button switch °C/°F

### 3. Record data interval time setting

 Press during automatic measurement, press the button twice to enter the function parameter interface.

 Press button to confirm to enter the modification

 Press at this button to select [recording interval] item.

 Press mode or set Button to enter time selection.

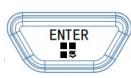
 Press Button to select the required interval time, After the selection is

complete, press  Button twice, Press again  Button to return to the main interface.

## 4. History query



Press Button once,

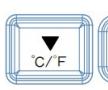


Press enter Go to <History>,



Button

shift pages,



Button to scroll through the record page,

## 5. Parameter setting

Press the button



twice and press



Enter to <function parameter>, Press the

button



can move to select the corresponding parameter item, and the

background color of the selected item will turn white,



The parameters can be

modified. Exit press



Button, Press again



Button to return to the main

interface.

**Backlight:** Press the button



to switch brightness 25%-50%-75%-100%

**Data Clear:** Button to enter the data clearing menu, press again



Button to confirm

clear,



Button exit clear.



**Time Rev:** Button to enter the time setting menu, press again



be shifted, The button can modify the time,



press enter Button to



confirm the modification, press again

Button to exit modification, once



again Button and return to the main interface.



**Auto shutdown:** Button to select OFF (no automatic shutdown) / 15 minutes / 30 minutes / 45 minutes / 1 hour / 2 hours / 4 hours / 8 hours.



**Record interval:** Button to enter the recording interval setting,



press Button to select the time recording interval, press when



finished Button to exit the interval interface, press again

Button, then



press Button to return to the main interface



**Language settings:** Button to switch Chinese/English



**Factory settings:** Button to enter to restore the original factory



parameter settings. Press again Button to confirm reset,



Button to exit reset.

After reset, all will be restored to factory parameters.

## 6. Technical specifications

Particle detection range	0.3~10μm
Six-channel particle size	0.3, 2.5, 10um
PM2.5 Range	0 ~ 1000μg/m <sup>3</sup>
PM2.5 Precision	±12μg/m <sup>3</sup>
Concentration resolution	1μg/m <sup>3</sup>
Flow	1liter/min (2.83L=1L*2.83)
Response time	1s
Boot stabilization time	10s
Temperature measurement range	-10 ~ 60°C
Temperature accuracy	±2°C
Temperature resolution	0.01°C
Humidity measurement range	0 ~ 100%
Humidity accuracy	±3%
Humidity resolution	0.01%
Power supply	3.7V Removable 18650 lithium battery
Charging voltage	5V/USB
Length of work	2000mAhCan work continuously≥9 hours
Data record	999 groups
Weight	320g
Size	222*80*46mm

## 7. Common problem analysis

1. There is no data to show the number and concentration of particulate matter in the air

Analysis 1: The battery power is too low to start the sensor work

2. Doesn't boot

Analysis 1: If the battery is dead or damaged, use the USB port to supply power. If it can be turned on and there is a change in the power grid in the upper right corner, the battery is dead.

If there is no change, only the OK icon will be displayed.