

PM2.5 Monitor



CT-EDZW4001-MH

PM2.5 Monitor

Introduction

PM2.5 Monitor is an air quality controller which compatible with Z-Wave technology, it is mainly used to monitor PM2.5 concentration in industrial, agricultural, and residence environment, while monitoring the indoor temperature and humidity. Device can be included into any Z-Wave network, and is compatible with any other Z-Wave certified devices.

Technical Information

- Compatible with any Z-Wave network controller
- Monitor PM2.5, temperature and humidity
- High accuracy , good real-time performance and low cost

Specifications

- Radio protocol: Z-Wave
- Radio Frequency: 868.42MHz EU
- Power supply: AC220V, 50Hz
- Self-dissipation: <3W
- PM2.5 detection range: 0-999.9 $\mu\text{g}/\text{m}^3$
- Temperature range : -9.0 ~ 50 °C
- Humidity range: 0% ~ 99% RH
- Hole Pitch : 60mm or 82mm
- Installation: wall-mounted (Vertical)
- Housing: Tempered glass+ PC Alloy
- Dimension : 85mm x 135mm x 33mm

Installation Instructions

Device is suggested to be installed indoor, a place with around 1.5m height above the floor where represents the average PM2.5 concentration. It should be away from direct sunlight, any cover, or any heat source, to avoid false signal for detection.

Notice!

- 1. Device must be wall-mounted vertically. Do not lay it flat or upside down while working.**
- 2. Do not mounted it in a wind gap, or cover its bottom, which may affect the detected data.**

PM2.5 MOTION INSTALLATION

- 1) Follow the wiring diagram to insert all wires into right terminals and tighten screws.

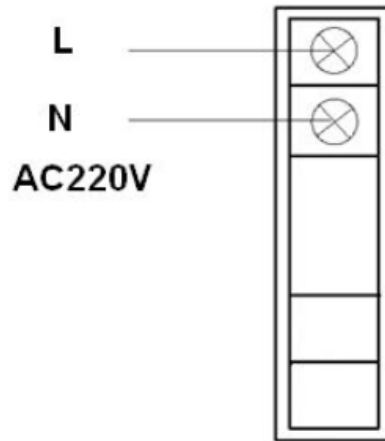


Fig.1

- 2) Separate panel and bottom case by removing the screw at the bottom of device, and mount the bottom case onto wall with two screws (M4*25mm). The hole pitch 60mm is for 86/60mm box, and 82mm is for American120mm box.
- 3) Mount the panel back by aligning its tabs and card slot onto the bottom case.
- 4) Tighten the fastening screw and the device is ready for normal work.

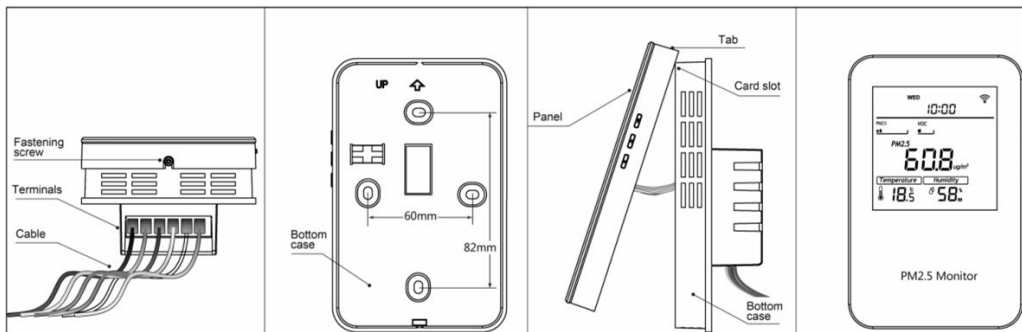


Fig.2

Operation

Button & Display is below:

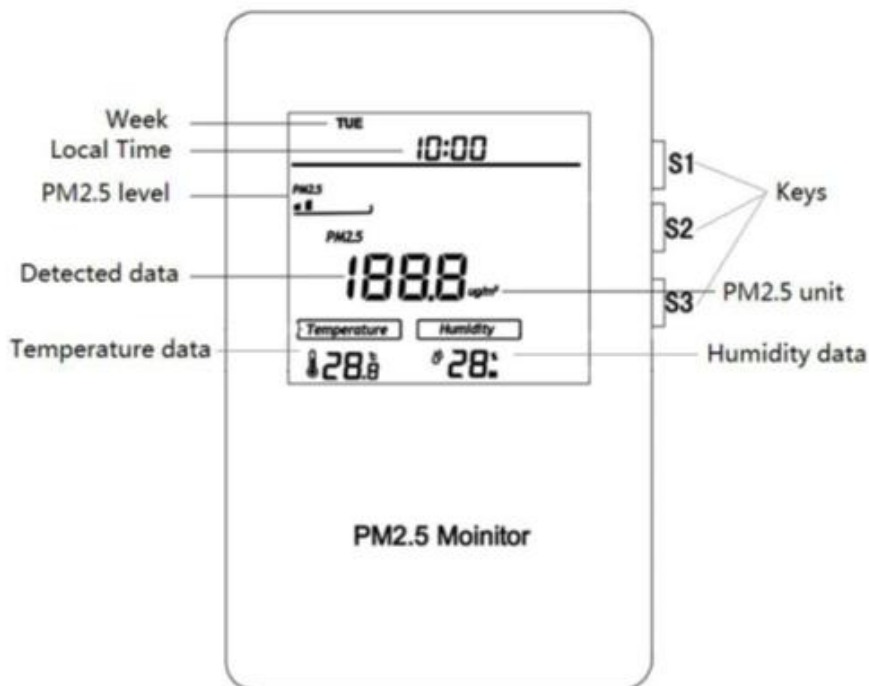


Fig.3

Local time setting:


In normal display interface, long press S3 will enter the local time modification interface. Press S2 can switch among "Week, Hour & Minute", press S1 or S3 can change their values. After all parameters set, press S2 can save settings and return to normal display.

Backlight:

The backlight will be full bright when any keys pressed, and turn to half bright if no operation in 10 Sec.

Including of Z-Wave network:

If device has not been included into any Z-Wave network before, " - - - " will display on the screen.

- 1) Connect the power supply, and make sure that device in a state of "No node ID".
- 2) Long press S1 & S3 until " - - - " displays on the screen.
- 3) Then press S1 once, " - - - " flashing and device enters into learning mode.
- 4) Choose "Z-Wave" to enter the Network Inclusion mode on the APP, then click "  ".



- 5) If inclusion is success, a node ID will display on the screen, please go to the device list interface, and refresh the device list, the device will be displayed.
- 6) If not, “- - -” will stop flashing in 20 sec, please repeat the above steps.

Excluding of Z-Wave network:

- 1) Make sure the device is connected to the power supply.
- 2) Remove the device on the APP, then click "finish".
- 3) Long press S1 & S3 until a node ID displays on the screen.
- 4) Then press S1 once, “ID” flashing.
- 5) If exclusion is success, “- - -” will display on the screen, please go to the device list interface, and refresh the device list, the device will not be displayed.
- 6) If the device can still be displayed (network exclusion failed), repeat steps 2-5.

If the device is online, directly perform steps 1-6, if the device is offline, need interruption of the device power supply first, and then perform step 1-6.

Note

If display flashing, long press S1+S3 can quite the operation and back to normal work. If display stops flashing, press S2 once can return to normal work.

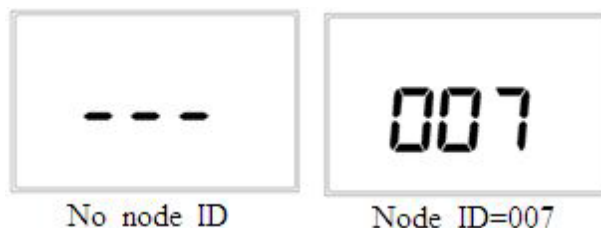


Fig.4

Association Group

Device supports 1 association group. A gateway is suggested to associate with this group. The device will report to this associated device (gateway) when detected data changes:

PM2.5: report every 10Sec

Temperature: report when any change $\geq 0.5^{\circ}\text{C}$

Humidity: report when any change $\geq 2\%$

Safety Notice

- A qualified electrician with the understanding of wiring diagrams and knowledge of electrical safety should complete installation following the instructions.
- Before installation, please confirm the real voltage complying with the device's specification. Cut off any power supply to secure the safety of people and device.
- During installation, protect the device from any physical damage by dropping or bumping. If happened, please contact the supplier for maintenance.
- Keep the device away from acid-base and other corrosive solids, liquids, gases, to avoid damage.
- Avoid overexertion during operation, to protect device from mechanical damage.
- Read all instructions and documentation and save for future reference.