

User Mannual

**Weather Station (6 sensors)
WP-2S**

1. Installation instructions

1.1 Device list



Bakelite



Lightning rod -lead wire



Lightning rod



Mounting rod



Sensor mounting kit



Expansion screws



Irradiance sensor



Other sensors integrated type



Junction box

Before installation, please check the packing list carefully. If any equipment or any parts are found damaged, lost or model inconsistent, please contact the manufacturer immediately.



Tips

In order to avoid equipment damage, please pay attention to avoid collision when opening the package. Do not disassemble the wiring which is connected already.

Warnings



Lightning rod is optional. If the user does not install lightning rod, resulting in equipment damage, our company will not be responsible.

Lightning rod is dangerous goods, please store it in a concealed place before installation to avoid accidental injury.

3.2 Installation tools

Please prepare the following installation tools in advance for installation on site.



Cross screwdriver



Adjustable wrench



pincer pliers



pincer pliers



Wire stripper



Percussion drill

4. Installation

4.1 Installation diagram



Tips



1. Before the goods delivered, the sensor logger and meteorological data collector have been set up. Please do not disassemble the device. Please protect the connected wires during installation.
2. The weather station is connected with the required power supply and RS485 extension lines shall be provided by the user.

4.1 Installation of mounting rod



1. Installation site requirements: during installation, there should be no vegetation and buildings that block the light within 5 meters of the bracket and sensor; there should be no landform, vegetation and buildings that affect the wind direction and wind speed within 10 meters; the ground should be flat and open; if it is a soil ground, cement foundation (cement foundation with a diameter of 1.5 meters and a thickness of at least 25 cm) should be made, and the tripod needs to be fixed with expansion screws.

2. In some coastal areas, it is also necessary to pull up the windbreak cable to ensure its wind resistance. The weather station installed on the roof of the building also needs to take lightning protection measures and install lightning rods.

3. Wire connection should be according to customer requirements and site specific conditions, the periphery of the wire should be covered with PVC pipe. In order to ensure safety, the electric wire should go through the wall and high altitude as far as possible. If it is necessary to go underground, PVC pipes must be covered to prevent water leakage, and air switch should be installed to prevent personal safety accidents.

4.2 Installation of lightning rod

Assembling

Assemble the metal needle, bakelite and lightning lead wire according to the following figure (remove the four bolts on the top of the pole house, install the bakelite, and then tighten the screws)



Assembly of lightning rod and lead wire



Assembly of lightning rod and lead wire

4.5 Installation of Irradiance sensor

Steps:

1. Connect the irradiance sensor with the ambient temperature and humidity sensor (as shown in the picture below)



2. Wiring connection



3. Remove the radiation sensor cover.



4.6 Installation of ambient temp. and humidity sensor

Steps:

1. Fix the integrated sensor fixing kit to the bracket.



2. Fix the atmospheric temperature + humidity sensor on the bracket through the integrated sensor firmware package.



Fixed with the integrated sensor kit through the snap of the sensor



Finished as shown in picture

3. Make sure the North Point points to the north correctly



4.7 Installation of Junction box (power supply and communication)

Steps:

1. Take out the junction box and the fixing kit



2. Installation of junction box and fixing kit



3. Fix the junction box on the mounting rod (shown as below)



5. Wiring

5.1 Wiring of Integrated sensors (ambient temp.& humidity, wind speed & wind direction)

Steps:

- 1.Connecting integrated sensors



Connects the cable from junction box with the integrated sensor

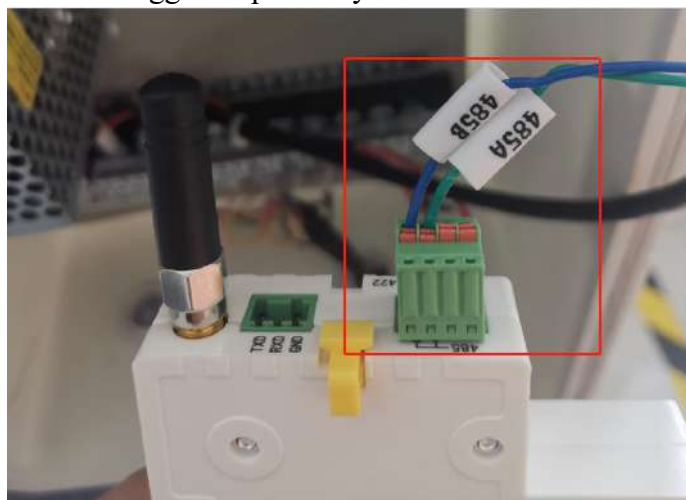


Warnings

1. It is extremely forbidden to connect the power supply during the wiring process

5.2 Wiring between weather station and data logger

1. RS485 wiring: Connect the lines marked 485a and 485b in the junction box with ports A and B of the data logger respectively



2. Wiring of power supply for data logger: Connect the red wire marked "DC12V" in the junction box to the data logger's "+", and the black wire marked with "GNG" to the data logger's "-"

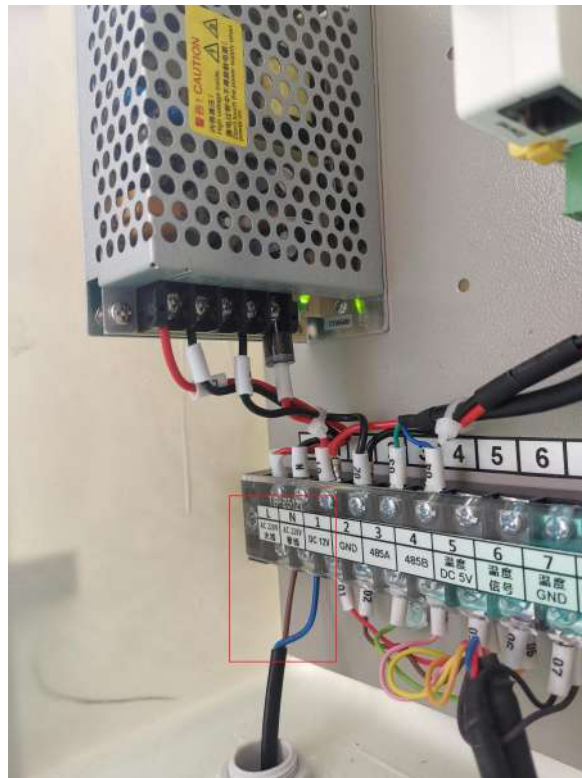


3. Checking if the wiring is correct or not



Wiring Finished display

4. Making sure that the wiring is correct and then power on, the indicator light should be always on.

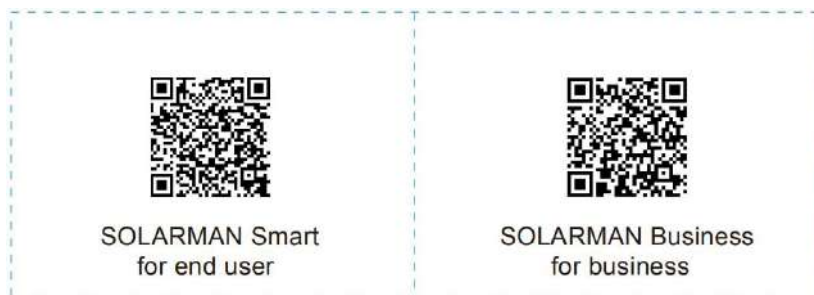


Warning

Making sure that the DC connection is correct, otherwise the data logger will be damaged

5. Tighten the waterproof cap

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