

## Contact

IGEN Tech Co., Ltd.

• Add: Block F4, China IoT International Innovation Park, No. 200, Linghu Avenue, Wuxi, Jiangsu, P. R. China

Sales Inquiries: info@solarmanpv.com

After-sales Inquiries: customerservice@solarmanpv.com

**Website:** www.solarmanpv.com





# **Installation Preparation**

1.1 Checklist







**Expansion Screw** 

Irradiance Sensor x2



immediately.

Tip:

Please do not disassemble the connected wiring.

Please confirm the checklist before installation. If any damage, loss or

inconformity are found in the devices or parts, please contact the manufacturer









Integrated Sensor

Fixing Set for Junction Box x2

1.2 Tools





Cross Screwdriver

Pincer Pliers

Adjustable Spanner



Lightning Line Sensor Holde







Connection Box+ Chip Temperature Sensor

Fixing Set for Integrated Sensor



Wire Stripper

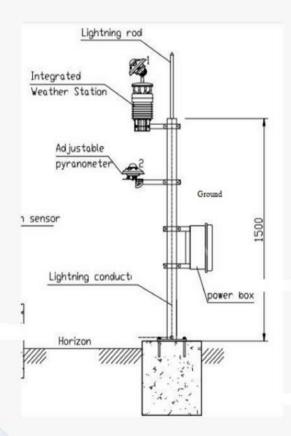


Percussion Drill



## Installation

#### 2.1 Bracket Installation



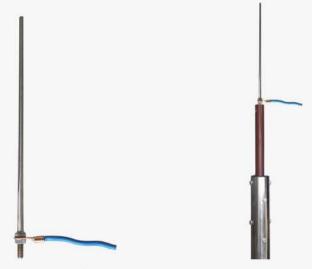
1. Please confirm that there is no shelter 5 meters around bracket and sensors installation site.

- 2. For safety reasons, please cover the wire with PVC pipe. If the wire must go underground, please take waterproof measures and install an air switch.
- 3. Please use the concrete of grade C25 or above to make cement platform. (Diameter>80cm, Thickness>25cm)

### 2.2 Lightning Arrester Installation

Please assemble lightning arrester, bakelite, lead wire as follows.

( Remove 4 screws on the top, insert a bakelite and tighten the screws.)



Lightning Arrester & Lead Wire

Lightning Arrester & Bakelite





#### Warning:

The lightning rod is required, if the installation site is in the wild. The lightning rod is quite dangerous, please mind your own safety. IGEN is not responsible for the damage caused by no lightning rod.

#### 2.3 Irradiance Sensor Installation

1. Connect irradiance sensor with integrated sensor as follows.







2. Unscrew the protective cover of irradiance Sensor.



3. In the same way, the horizontal radiation meter is fixed on the bracket by fixing the horizontal arm with the horizontal radiation sensor.



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## 2.4 Integrated Sensor Installation

1. Please confirm that N sign should point to the north.



2. If you do not want to install a lightning rod, please install the integrated sensor on the bracket.

If you want to install a lightning rod, please install the integrated sensor on the cross arm.







Installation with lighting rod

## 2.5 Junction Box Installation

Please fix the junction box on the bracket and tighten the screws.





# Connection

3.1 Integrated Sensor



Connect a temperature sensor with an integrated sensor via this wiring.

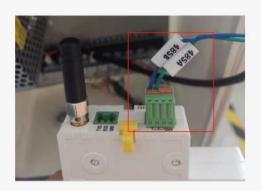


Warning:

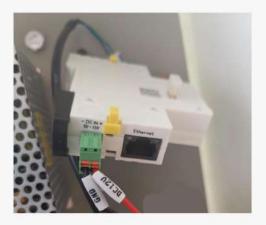
Please power off the device during the connection.

## 3.2 Connection between Logger and Weather Station

Connect 485A (Green) to logger interface A.
 Connect 485B (Blue) to logger interface B.



Connect "DC 12V" (Red) to logger "+" interface.
 Connect "GNG" (Black) to logger power input interface.





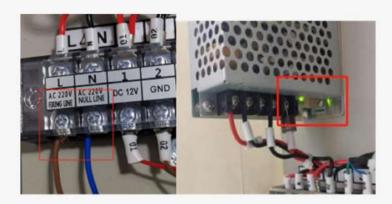
## 3. Check if the wiring is correct



Connection Diagram

4. Connect L-line and N-line according to L/N sign.

Power on the device and all indicator lights keep on.





## Warning:

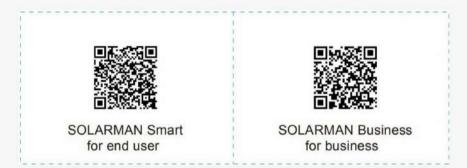
- 1.Please double check the connection and power on.
- 2. Please make sure the DC connection is correct.

5. Tighten waterproof cap.



## **USER MANUAL for SOLARMAN APP**

## 1. Download app



iPhone: Search "SOLARMAN Smart"/ "SOLARMAN Business" in Apple Store.

Android: Search "SOLARMAN Smart"/ "SOLARMAN Business" in Google Play.

You can also login via WEB as below:

pro.solarmanpv.com

info@solarmanpv.com

home.solarmanpv.com

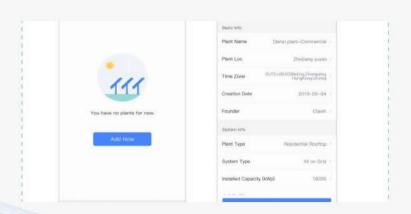
#### 2. Registration on SOLARMAN SMART

Go to SOLARMAN Smart and register. Click "Register" and create your account here.



#### 3. Create a Plant

Click "Add Now" to create your plant. Please fill in plant basic info and other info here.



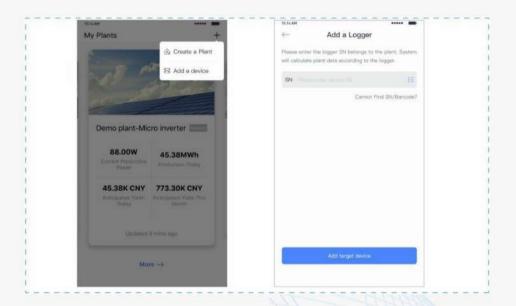
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#### 4. Add a Device

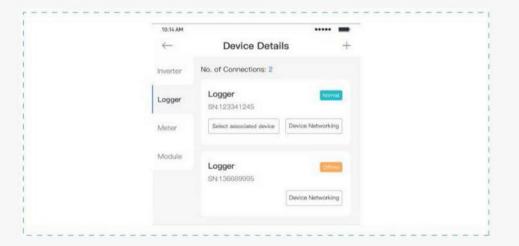
Method 1: Enter logger SN manually.

Method 2: Click the icon in the right and scan to enter logger SN. You can find logger SN in the external packaging or on the logger body.



5. Network Configuration [This step is required for logger (WiFi). For logger (GPRS)/logger (4G), users can skip this step.]After the logger is added, please configure the network to ensure normal operation.

Go to "Plant Details"-"Device List", find the target SN and click "Networking".





Step 1: Confirm WiFi Info

Please make sure your phone has connected to the right WiFi network.

And click "Start".

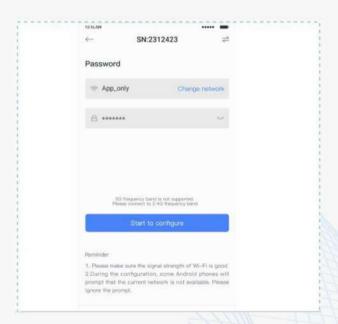


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Notice:

5G WiFi is not supported.

Avoid the use of special characters in WiFi networks (, ; = ""')



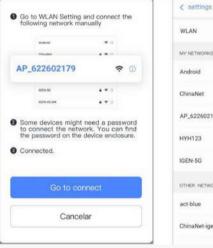
#### Step 2: Connect to AP network

Click "Go to connect" and find the right "AP\_XXXXX" network.

(XXXXX refers to logger SN).

If the password is required, you can find the password on the logger body.

Go back to SOLARMAN Smart APP, after connecting to AP network.





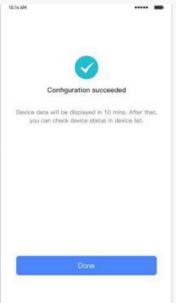
Step 3: Auto Configuration

Please wait for a while to complete the configuration. Then system will switch to the following page.

Click "Done" to check plant data. (Usually, the data will be updated in 10 mins)







If configuration failure occurs, please check the following reason and try it again.

- (1) Make sure WLAN is ON.
- (2) Make sure WiFi is normal.
- (3) Make sure wireless router does not implement the white-black list.
- (4) Remove the special characters in Wi-Fi network.
- (5) Shorten the distance between the phone and device.
- (6) Try to connect to other WiFi.