EONLAND
FUTURE

Eonland User Manual

Microinverter Sub1G version V2.0

V2.0

Contents

1. Important Notes

1.1 Radio Interference Statement

Eonland Microinverters comply with the requirements of EU EMC, and they immune to electromagnetic interference. However, electromagnetic interference might be differ due to different application or installation. If there is interference with radio or television reception, please try the following methods to eliminate the interference:

- Re-select the installation location of the antenna, or move the microinverter faraway from the antenna;
- Separate the microinverter and antenna with metal, concrete, or other shielding;
- Contact your local dealer, installer, or experienced radio technician for help.

1.2 Important Safety Instructions

For safety, installation and replacement of Microinverters need to be performed by personnel with relevant qualifications, professional training and skills. To reduce the risk of electric shock and ensure safe installation and operation of the Microinverters, please read and follow the following safety instructions:

- All electrical installations must comply with local electrical codes;
- Before installation, confirm that the product is not damaged in any way in case of compromising the product's insulation performance, safety clearances, etc.;
- During operation, wear protective gloves, goggles and other personal protective equipment;
- To disconnect the PV panels from the microinverter, disconnect the AC connector of the microinverter first;
- Note that the surface of a normally operating microinverter may be hot, so do not touch it directly.

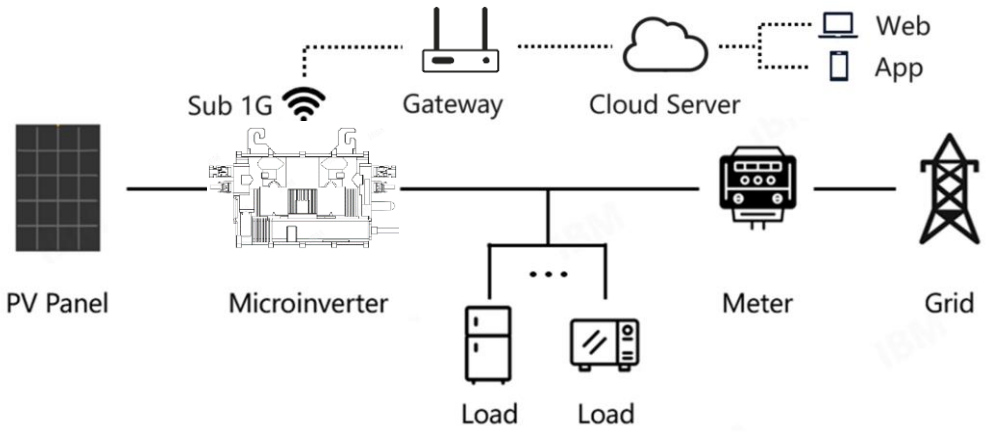
1.3 Explanation of Symbols

EONLAND	Eonland Logo
	Danger of electric shock
	Beware of hot surface
	Symbol for the marking of electrical and electronics devices according to Directive 2002/96/EC. Indicates that the device, accessories and the packaging must not be disposed as unsorted municipal waste and must be collected separately at the end of the usage.
	CE Mark
	Read manual first

2. About Product

2.1 About PV Microinverter System

Microinverters convert the DC power generated by PV panels into AC power, which meets the requirements of the power grid. The AC power is then fed into the grid via meter.



2.2 About Microinverter

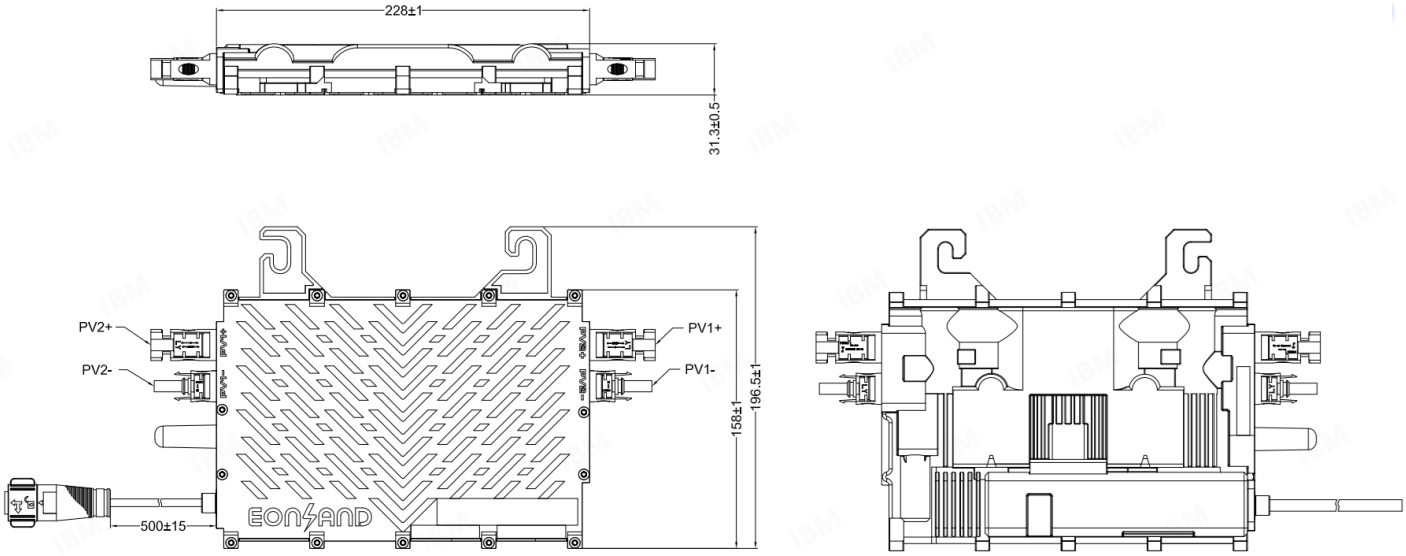
EON-MI800S-2B offers 2 MPPTs and each one could connect to a PV panel. Each DC input is monitored by independent MPPT to maximize the power generation.

Module-level microinverter help the PV system to avoid the "Cask Theory" caused by shadows, individual component failure or attenuation, and improve the overall power generation of the system.

The PV input of the microinverter is low-voltage with the maximum input voltage up to 60V, which greatly reduces risks such as electric shock and fire.

Through the EON SOLAR cloud platform, users can remotely monitor the operating voltage, current and power of each PV panels in real time.

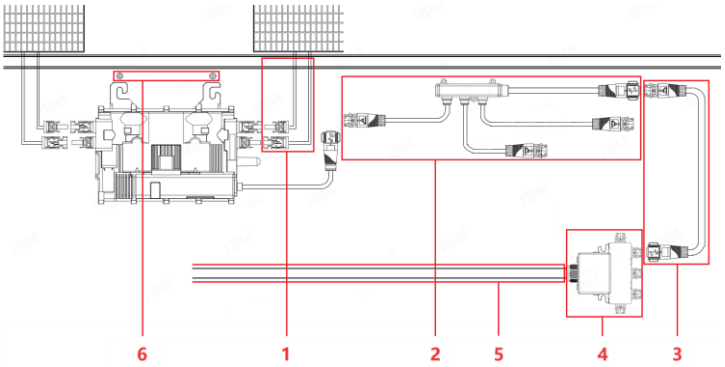
2.3 Dimensions (mm)



3. Microinverter Installation

3.1 Accessories

Line	Accessories
1	DC Extension Cable
2	3 in 1 Connector
3	AC Prefabricated Extension Cable
4	Combiner Box
5	5 Core AC Bus
6	M8 Screws



Note: All of the above attachments are not included in the product package and should be purchased separately.

3.2 Precautions

A) Read all the technical documents and notes of the microinverter and solar array before installing or using the Microinverters;

B) Disconnect the grid before installation, and cover or isolate the PV panels;

C) When taking the microinverters, do not pull the AC output cable of the Microinverters;

D) Choose the appropriate location for Microinverters installation:

- Good ventilation, conducive to the Microinverter heat dissipation;
- Avoid direct sunlight and install the Microinverters under the PV panels;
- Avoid the electromagnetic interference;
- Keep from gas or flammable and explosive substances.

3.3 Installation Steps

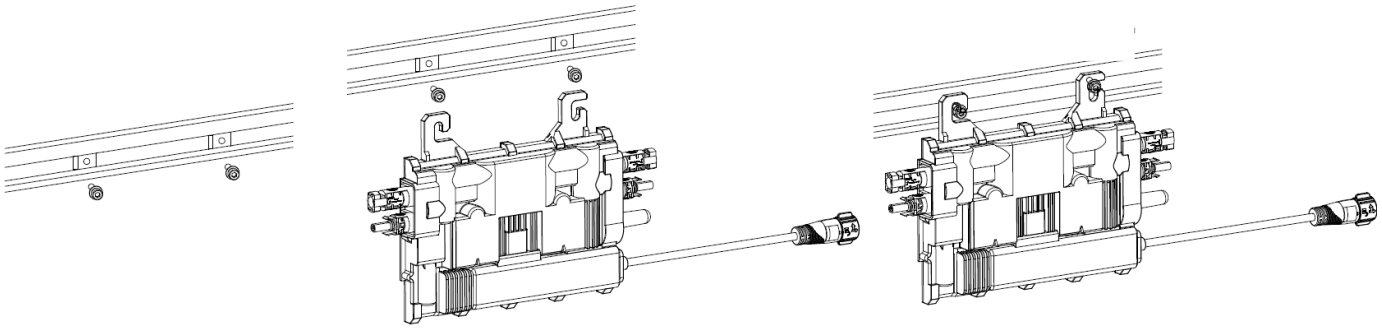
Step 1: Plan and install the microinverter

A. Plan the positions of the microinverters on the bracket according to the layout and size of PV panels;

B. Insert the screws and spacers in each position of the bracket;

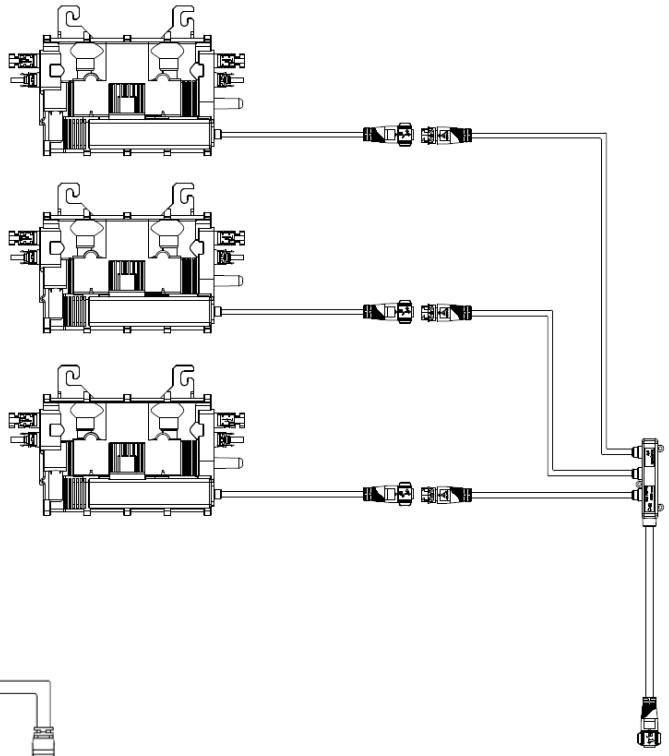
C. Hang the microinverters on the screws, and tighten the screws. The flat side of the microinverters should be facing the panels;

D. Tear off the label paper on the microinverters and stick them to the corresponding positions in the installation map (see the attachment for the installation map).

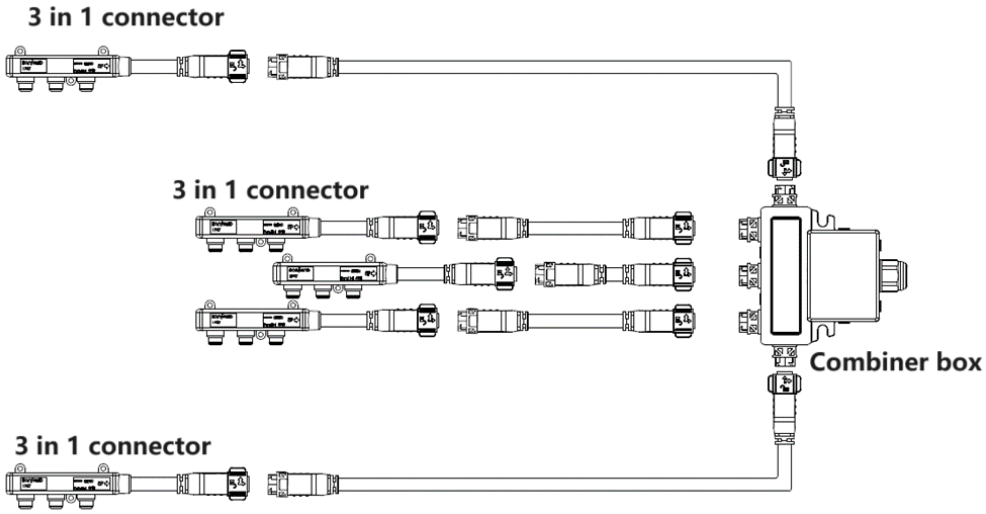


Step 2: AC Side Wiring and Connection

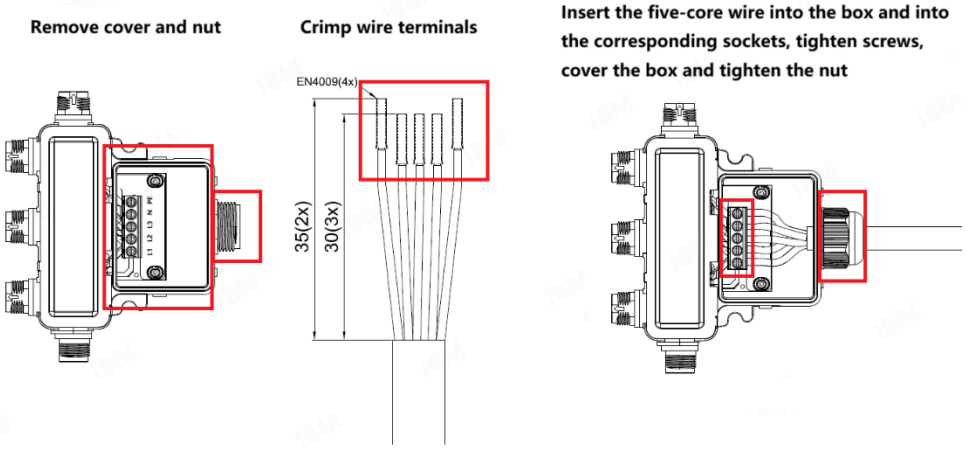
A. Install 3 in 1 connectors. According to the positions of the Microinverters, plan the positions and install 3 in 1 connectors. The length of the three input wires are 0.5m, 1.5m and 2.8m, which could connect the adjacent 3 Microinverters. When plugging the AC connectors of the Microinverter, the blue ring rebound indicates that the connection is completed;



B. Install the combiner boxes. According to the positions of the 3 in 1 connectors, plan the locations and install the combiner boxes. The combiner boxes can connect up to five 3-in-1 connectors with five input interfaces; 3-in-1 connectors can be directly connected with the combiner boxes interface with 0.5m prefabricated output cable, or through the required prefabricated AC extension cable. When plugging the connectors, the blue ring rebound indicates that the connection is completed;



C. Combiner boxes and 5 core AC bus connection, wiring steps are as follows:



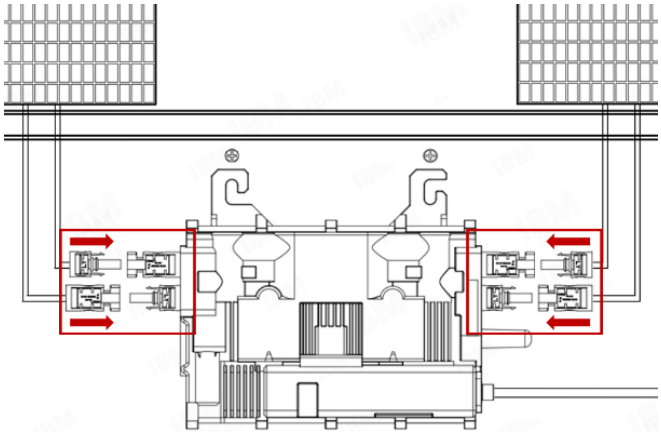
D. Connect each AC buses to the junction box.

Step 3: PV Panels Installation

A. Prepare the DC extension cable that may be required according to the length of the own cable of the PV panels;

B. Place the PV panels above the Microinverters and fix it on the bracket;

C. Plug the DC output terminals of PV panels with the input interface of microinverters. With the sun light, the LED indicator of the microinverters flash red after connecting the PV panels.



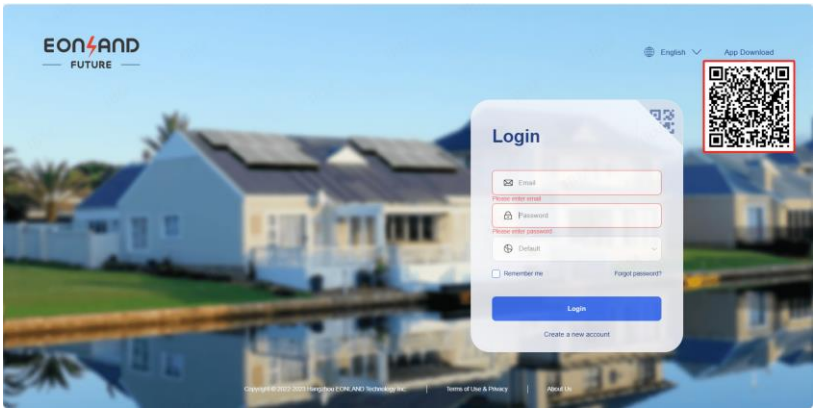
Step 4: Connect to The Grid

Close the AC circuit breaker, connect to the power grid. After the Microinverter is connected to the PV panels and the power grid, the LED indicator light flashes red and green alternately.

Step 5: Set up The Gateway and The Cloud Platform

A. APP download

Visit the web page at https://solar.eonlandfuture.com, scan the QR Code on the page.



B. Register

- Web

Click **Create A New Account** in the website login interface, fill in the correct email address and other content, and register.

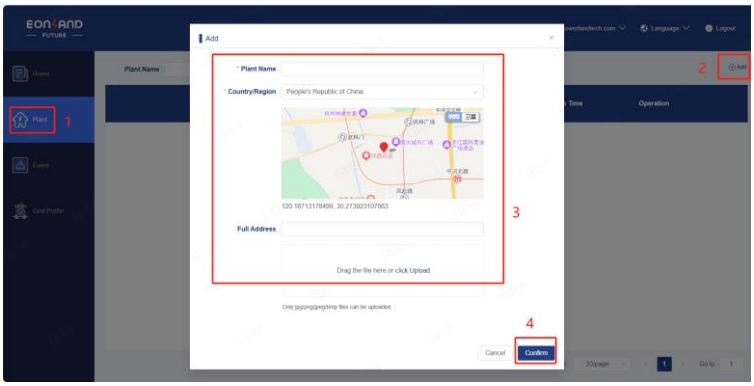
- APP

In the APP login interface, click on the word **Register**, fill in the correct email address and other content, and register.

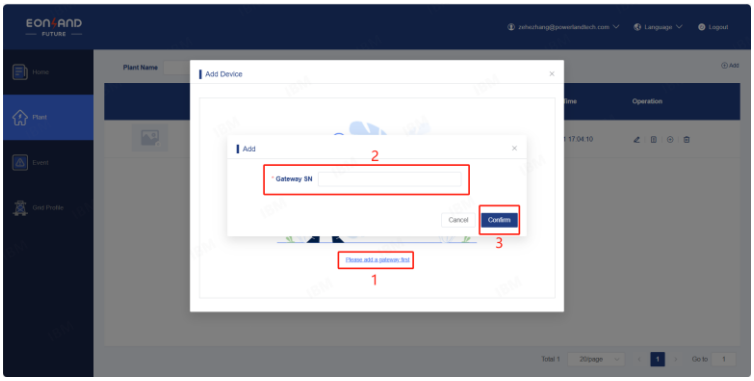
C. Plant creation, device creation and addition

- Web

Plant creation: After logging in, click **Add** on the upper right side , and fill in the Plant Name, Country/Region, full address and picture, so as to create the plant.



Device creation and addition: after creating the plant, pop up to add the gateway / device, click **Please Add A Gateway First**, enter the Gateway SN code to add the gateway, click **Add Device**, and input the SN code of the device to add the device.



- **APP**

Plant creation: in the APP Home interface, click  , click **+** in the upper right corner of the **Plant** page, fill in the relevant content, can create or add the Plant.

Device creation and addition: after adding the Plant, click **Add Device**, and then click **Add Gateway** to manually or scan the code to enter the SN code of the gateway. After adding the gateway, enter the SN code of the device manually or scan the code to add the device.

Gateway Configuration: on the **Menu** page of the home directory, click **Gateway Configuration**, press the button on the gateway, wait for the gateway light to flash, find the Bluetooth device starting with **ZC**, and make the gateway configuration, including **Configure wireless network** and **Configuring wired network**.

After successful configuration, the microinverters LED indicator flashe green light.

Please refer to ***Eon Solar User Manual APP Cloud Monitoring V2.0*** and ***Eon Solar User Manual Website Cloud Monitoring V2.0*** for details.

4. Maintenance and Decommission

4.1 Routine Maintenance

A) Before routine maintenance, please ensure that the microinverters is disconnected from the grid, and shade or isolate the PV panels;

B) Routine maintenance needs to be performed by authorized personnel with personal protective equipment;

C) Regularly check the operating environment of the microinverters to ensure that the microinverters is not exposed to the harsh environment;

D) The surface of each PV panels is cleaned and dusted regularly with a vacuum cleaner or brush;

E) No matter the microinverter is normal or abnormal, do not try to disassemble and repair the equipment by yourself. Once disassembled, the warranty will be invalid.

4.2 Decommission and Replacement

To remove the microinverter, follow these steps:

A) Disconnect the microinverter from the power grid;

B) Disconnect the DC cable between the PV panels and the microinverter;

C) Remove the microinverter;

D) Delete the microinverter on the Eon Solar cloud platform. Add the new microinverter information if there is replacement.

5. Disposal

The modules and components contained in the microinverters may cause pollution to the environment, please follow the relevant local regulations.

Annex - Installation Map

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Eonland Microinverter Installation Map

No.____

Solar panel information:

Customer information:

Gateway inforamtion:

N W E S

Row \ Column	1	2	3	4	5	6	7	8	9	10	11	12
A												
B												
C												
D												
E												
F												
H												
I												
J												
K												
L												
M												