

ENVERTECH EVT800 Advanced Micro Inverters Installation Guide

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ENVERTECH EVT800 Advanced Micro Inverters



Product Information

• Product Name: Envertech EVT800 PV Microinverter

• Manufacturer: Envertech Corporation Ltd.

Contact Information:

• Tel: +86 21 6858 0086

Web: <u>www.envertec.com</u>Email: <u>info@envertec.com</u>

• Address: No.138, Xinjunhuan road, Minhang District, Shanghai, China.

Specifications

• Operating Range (Vdc): 16V~60V

• MPPT Voltage Range (Vdc): 22V~50V

• Max. DC Input(Vdc): 60V

• Max. Input Continuous Current (A): 14Ax2

• Max. Input Short-Circuit Current (A): 25A

• Ingress Protection (IP): IP67

• Power (Max. Continuous) (W): 800W

• Temperature Range: -40 to +65°C

• Standard Voltage (Vac): 220/230V

• Current (Max. Continuous) (A): 3.63A

• Frequency (Hz): 50Hz/60Hz

• Power Factor Range: +/-0.90

• Maximum Units Per Branch: 6

• Protective Class: Class I

• Overvoltage Category: OVC III (AC Main), OVC II (PV)

Product Usage Instructions

1. Ensure the system is disconnected from the grid and the solar panel is covered or disconnected before

installation.

- 2. Verify that the grid voltage and PV panel voltage match with the microinverter rating.
- 3. Mount the microinverters onto the rack, positioning them at the estimated center of each PV module. Install the microinverters under the modules to protect them from rain and sun, with the trademark facing downward.
- 4. Ground the system by connecting the microinverters and modules to the grounding conductor according to national standards. Fix the screws to the microinverter installation hole, ensuring that the grounding screw thread is pierced into the bracket for optimal grounding effect.

Note:

The accessories mentioned in the manual are not included in the package and should be purchased separately.

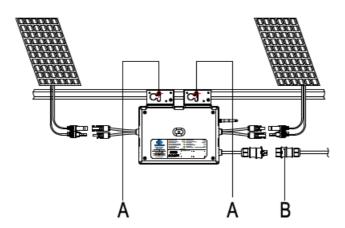
Envertech EVT800 Quick Installation Guide

Please read and follow the safety and installation instructions below. You can find and download the instructions or other technical documents on our website: www.envertec.com.



Accessories

Α	M8 x 25 screws (Prepared by the installer)
В	5m AC extension cable



Note:

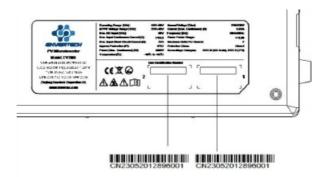
All accessories above are not included in the package and should be purchased separately.

Create an Installation Map

• Create a paper installation map to record microinverter serial numbers and positions in the array. Download the sheet with this QR code.



• Peel the removable serial number label from each microinverter and affix it to the respective location on the paper installation map.

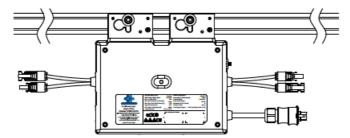


Always keep a copy of the installation map for your records.

Installation Steps

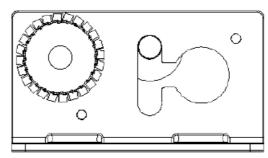
Installation could only be implemented when the system is disconnected from the grid, and the solar panel has been covered or disconnected.

- Step 1. Verify that grid voltage and PV panel voltage are matching with microinverter rating
- Step 2. Mount microinverters onto the rack Mark out the estimated center of each PV module on the rack to facilitate locating microinverters. Mount all microinverters under modules to avoid rain and sun, with the trademark facing downward.



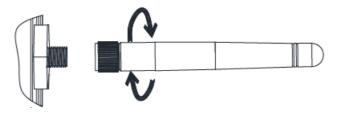
Step 3. Ground the system

Microinverters and modules must be connected to the grounding conductor in accordance with national standards. Fix the screws to the microinverter installation hole. Make sure that the grounding screw thread is pierced into the bracket to get the best grounding effect.



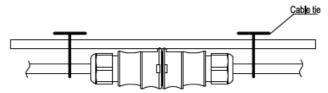
· Step 4. Install a WLAN antenna

For better WiFi signal, rotate the antenna clockwise until it is firmly secured to the EVT800.



• Step 5. Fasten AC cables

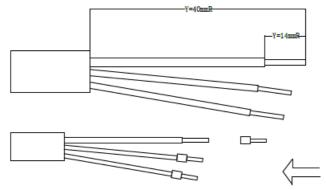
Fasten AC cables and grounding cables to the rack with cable ties.



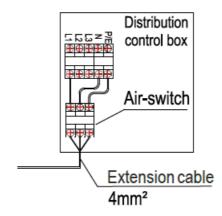
· Step 6. Connect to the grid

Option a. Connect to air switch

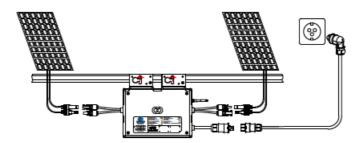
1. Remove the skin of the two ends of the extension cable by y=40mm and remove the skin of internal wires by x=14mm. Set the metal terminals onto the open parts and clamp them to tighten the connection;



2. Connect the other side of the extension cable to the air switch.

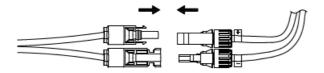


Option b. Put the open parts of the extension cable into the plug and use the plug to connect to the socket



Step 7. Connect PV modules to microinverters

Mount the PV modules on top of the microinverters; Connect each PV module with the DC input cables of the microinverter.



Step 8. Switch on the PV system

- Ensure all connection is completed and then turn on the air switch.
- For the monitoring system (EnverBridge) installation please scan this QR code .



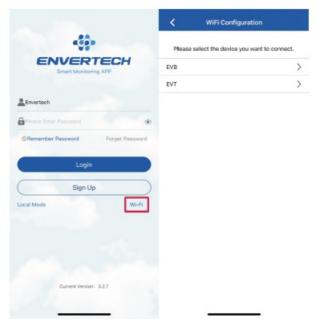
Warranty Policy & Safety Info

Please register your product with the QR code below to obtain full warranty benefits, or you can only get a 2-year warranty.

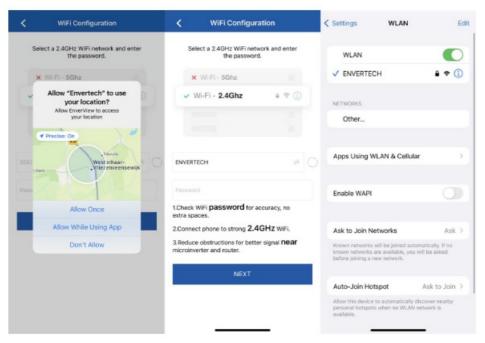


Wi-Fi Configuration

• Open Envertech app and click WiFi. Select "EVT" to connect.

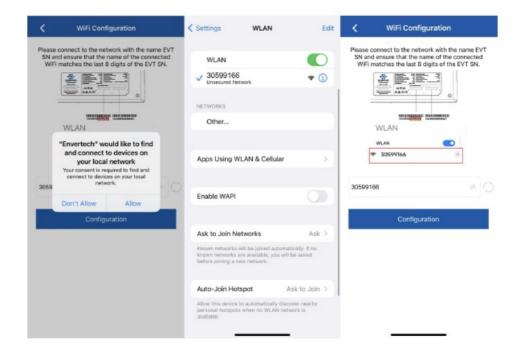


• Select a 2.4GHz WiFi network, and return to the app. Then enter the password of 2.4GHz WiFi network. Please allow Envertech app to use your location. Or you will fail to configure WiFi.



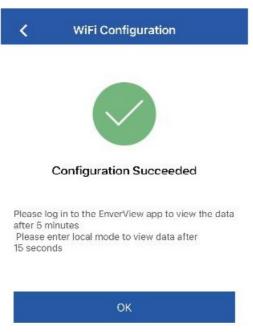
Note:

- 1. Please carefully check the WiFi password, such as extra spaces.
- 2. Ensure that the WiFi name and password do not contain, ; = or other special characters.
- 3. Please ensure that the current network your phone connect to is 2.4GHz WiFi, and the connection between your router and the Internet is in good condition.
- 4. Please shorten the distance between the microinverter and the router, and between the microinverter and the phone. Try to keep the devices clear of obstructions to obtain better signal strength.
- Connect the network whose name is as same as your EVT's SN, and return to the app. Please allow Envertech app to find and connect to devices on your local network. If not, it also causes configuration failure.



Note: When configuring WiFi, make sure you keep staying on the current connection.

· Click Configuration and wait for success.



Microinverter Safety

- DANGER: Risk of electric shock. Risk of fire. Do not attempt to repair the Envertech Microinverter; it contains
 no user-serviceable parts. If it fails, contact Envertech customer service to obtain an RMA (return merchandise
 authorization) number and start the replacement process. Tampering with or opening the Envertech
 Microinverter will void the warranty.
- **DANGER:** Risk of fire. The DC conductors of the PV module must be labeled "PV Wire" or "PV Cable" when paired with the Envertech Microinverter.
- **WARNING:** You must match the DC operating voltage range of the PV module with the allowable input voltage range of the Envertech Microinverter.
- WARNING: The maximum open circuit voltage of the PV module must not exceed the specified maximum input DC voltage of the Envertech Microinverter. Using electrically incompatible PV module voids Envertech's

warranty

• WARNING: Risk of equipment damage. Install the microinverter under the PV module to avoid direct exposure to rain, UV, and other harmful weather events. Always install the microinverter bracket side up. Do not mount the microinverter upside down. Do not expose the AC or DC connectors to rain or condensation before mating

the connectors.

WARNING: Risk of equipment damage. The Envertech Microinverter is not protected from damage due to
moisture trapped in the cabling systems. Never mate microinverters to cables that have been left disconnected

and exposed to wet conditions. This will void the Envertech warranty.

• WARNING: Risk of equipment damage. The Envertech Microinverter functions only with a standard,

compatible PV module with appropriate fill-factor, voltage, and current ratings. Unsupported devices include

smart PV modules, fuel cells, wind or water turbines, DC generators, and non-Envertech batteries, etc. These

devices do not behave like standard PV modules, so operation and compliance is not guaranteed. These devices may also damage the Envertech Microinverter by exceeding its electrical rating, making the system

potentially unsafe.

• WARNING: Risk of skin burn. The chassis of the Envertech Microinverter is the heat sink. Under normal

operating conditions, the temperature could be 20°C above ambient, but under extreme conditions, the

microinverter can reach a temperature of 90°C. To reduce the risk of burns, use caution when working with

microinverters.

• Note: Please do not violate the following content, otherwise the warranty will be invalid.

1. Ensure that the EVT800 is properly grounded during installation.

2. It is prohibited to connect more than one photovoltaic panel to a DC connector.

3. It is prohibited to use batteries and energy storage products that have not been certified by Envertech.

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Documents / Resources



<u>ENVERTECH EVT800 Advanced Micro Inverters</u> [pdf] Installation Guide EVT800, EVT800 Advanced Micro Inverters, Advanced Micro Inverters, Micro Inverters, Inverte

References

Envertech - Advanced Microinverters for a green future

Manuals+,