



# **ENVERTECH EVT400 Advanced Micro Inverters Installation** Guide

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**ENVERTECH EVT400 Advanced Micro Inverters** 



# **Product Specifications:**

• Manufacturer: Envertech Corporation Ltd.

• Model: EVT400 -Type B

• Quick Installation Guide Version: QIG-B-2023-V04

• AC Extension Cable Length: 5m

# **Product Usage Instructions**

### **Accessories:**

- A. M8 x 25 screws (Prepared by the installer)
- B. 5m AC extension cable

### **Create an Installation Map:**

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

# **Installation Steps:**

1. Verify that grid voltage and PV panel voltage match with microinverter rating.

### 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.
- For better WiFi signal, rotate the antenna clockwise until it is firmly secured to the EVT400.

### 3. **Ground** the system:

- Microinverters and modules must be connected to the grounding conductor in accordance with national standards.
- Fix the grounding wire with screws to the microinverter's grounding hole for proper grounding.
- 4. Fasten AC cables and grounding cables to the rack with cable ties.

### 5. Connect to the grid:

- Connect to air switch by following specific instructions provided
- 6. Connect PV modules to microinverters and mount them on top of the microinverters.
- 7. Switch on the PV system after ensuring all connections are completed.

### Warranty Policy & Safety Info:

Please register your product with the provided QR code to obtain full warranty benefits. Without registration, you will only get a 2-year warranty.

### Frequently Asked Questions (FAQ):

### 1. Q: Are all accessories required for installation included in the package?

A: No, all accessories mentioned in the manual, such as M8 x 25 screws and AC extension cable, are not included in the package and should be purchased separately.

# 2. Q: How can I ensure proper grounding of the system?

A: Microinverters and modules must be connected to the grounding conductor following national standards.

Make sure to fix the grounding wire with screws to the microinverter's grounding hole for effective grounding.

• Envertech Corporation Ltd.

• **Tel**: +86 21 6858 0086

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

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

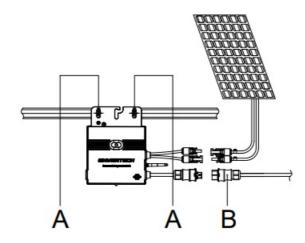
### **Envertech EVT400 Quick Installation Guide**

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**

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



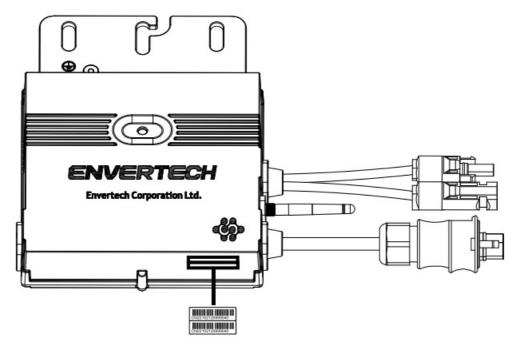
Note: All accessories above are not included in the package and should be purchased separately.

# **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.

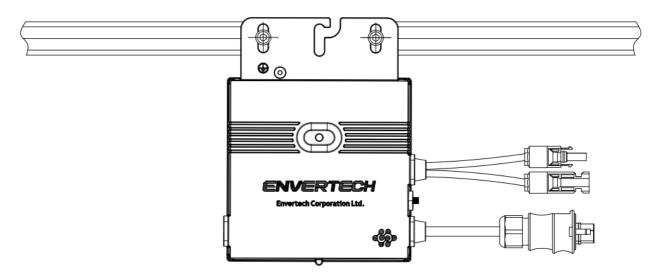


Always keep a copy of the installation map for your records.

# **Installation Steps**

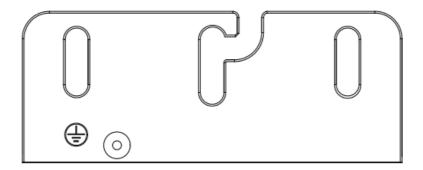
Installation could only be implemented when the system is disconnected from the grid, and the solar panel has been covered or disconnected.

- 1. Step 1. Verify that grid voltage and PV panel voltage are matching with microinverter rating
- 2. 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.



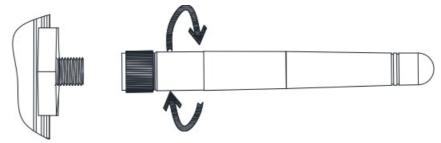
# 3. Step 3. Ground the system

Microinverters and modules must be connected to the grounding conductor in accordance with national standards. Fix the grounding wire with screws to the microinverter's grounding hole, so that the grounding of microinverters can be realized.



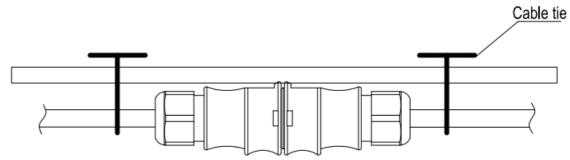
# 4. Step 4. Install a WLAN antenna

For better WiFi signal, rotate the antenna clockwise until it is firmly secured to the EVT400.



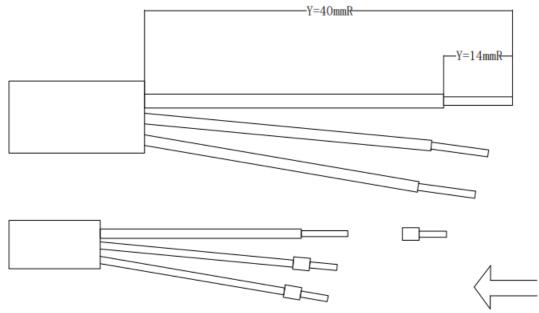
### 5. Step 5. Fasten AC cables

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

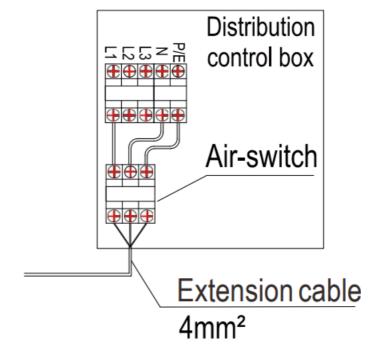


# 6. Step 6. Connect to the grid Option a. Connect to air switch

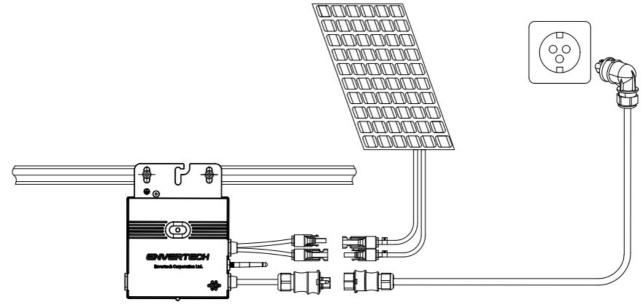
1. Remove the skin of the two ends of the extension cable by y=40mm and remove the skin of internal wires by x=14mm. Set the metal terminals onto the open parts and clamp them to tighten the connection;



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

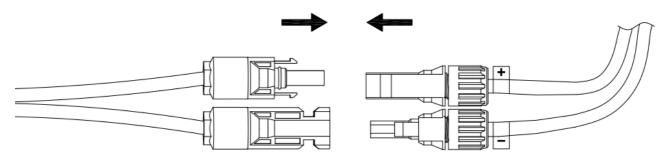


Option b. Put the open parts of the extension cable into the plug and use the plug to connect to the socket



# 7. 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.



# 8. Step 8. Switch on the PV system

Ensure all connection is completed and then turn on the air switch.

For the monitoring system (Enver Bridge) installation please scan this QR code .

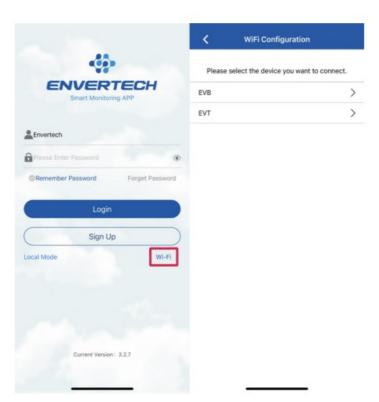


Please register your product with the QR code below to obtain full warranty benefits, or you can only get a 2-year warranty.

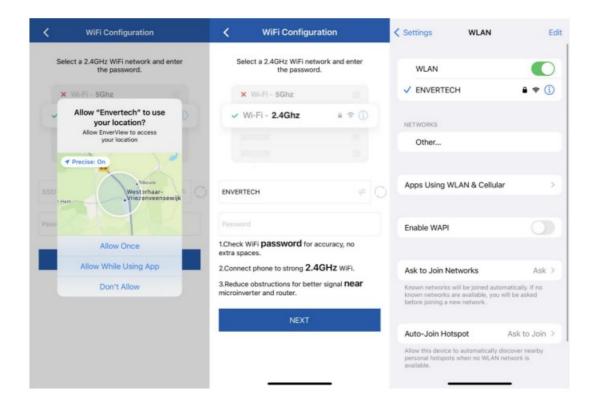


# Wi-Fi Configuration

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



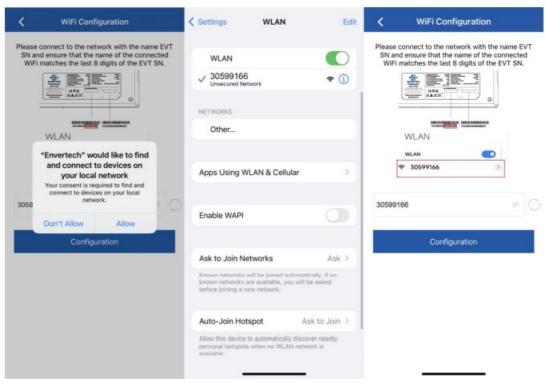
Select a 2.4GHz WiFi network, and return to the app. Then enter the password of 2.4GHz WiFi network. Please allow Envertech app to use your location. Or you will fail to configure WiFi.



### Note:

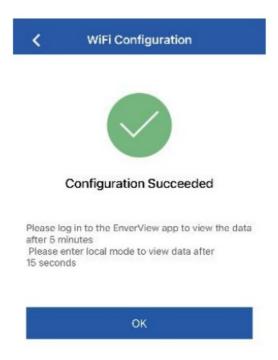
- 1. Please carefully check the WiFi password, such as extra spaces.
- 2. Ensure that the WiFi name and password do not contain, ; = or other special characters.
- 3. Please ensure that the current network your phone connect to is 2.4GHz WiFi, and the connection between your router and the Internet is 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 EVT400 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.

## **Documents / Resources**



**ENVERTECH EVT400 Advanced Micro Inverters** [pdf] Installation Guide EVT400 Advanced Micro Inverters, EVT400, Advanced Micro Inverters, Micro Inverters

### References

- User Manual

Manuals+, Privacy Policy

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