

Fox PowerQ Energy Storage System

Quick Installation Guide

Issue: V1.1b
Date: 2025-04-22

FOXESS CO., LTD.



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2. Only certified electricians are allowed to operate the device. Operation personnel must wear proper personal protective equipment (PPE).

3. Before installing the device, check that the package contents are intact and complete against the packing list. If any damage is found or any component is missing, contact your dealer.

4. The device damage caused by the violation of instructions in this document is not covered under warranty.

5. The cable colors involved in this document are for reference only. Select cables in accordance with local cable specifications.

6. Fox PowerQ Energy Storage System has passed UL9540A unit level testing, suitable for residential indoor flooring installation

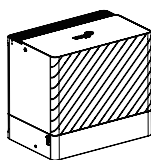
Testing Laboratory Name: CSA GROUP

Project Number: 80182817

Date of issue: April 2024

1 Packing List

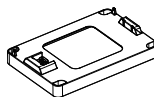
1.1 Cube Inverter Package Box



A



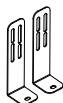
B



C



D



E



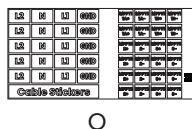
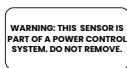
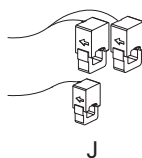
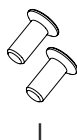
F



G

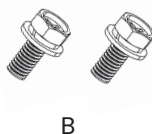
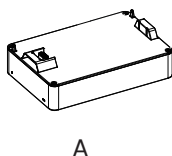


H



OBJ	QTY	DESC	OBJ	QTY	DESC
A	1	Cube Inverter	I	2	Flat-head Screw
B	1	Side Cover	J	3	Current Transformer (1*100A, 2*250A)
C	1	Base	K	1	Smart WiLAN/Smart 4GWiLAN (Optional)
D	4	Set Screw	L	1	E-STOP
E	2	Fixing Bracket	M	2	Screw Hole Cap
F	4	Sleeve Expansion Bolt M8*60	N	1	Label (stuck near the CTs)
G	4	Expansion Tube & Expansion Screw	O	1	Cable Sticker
H	2	Handle	P	1	Quick Installation Guide

1.2 Battery Package Box



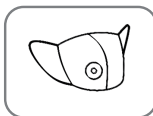
OBJ	QTY	DESC	OBJ	QTY	DESC
A	2-7	EQ4000	B	2	Set Screw



Safety
Goggles



Steel Toe
Boots



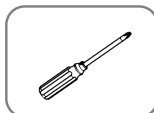
Dust Mask



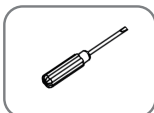
Helmet



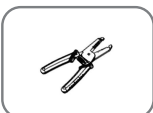
Insulating
Gloves



Phillips-Head
Screwdriver



Flat-Head
Screwdriver



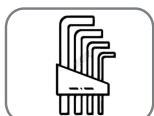
Wire Stripper



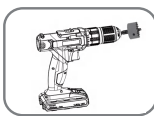
Electric Drill



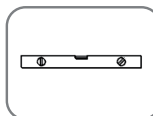
Adjustable
Wrench



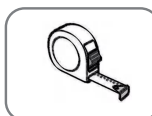
Hex Wrench
Set



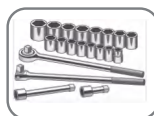
Hole Punch



Level



Tape



Sleeve



Multimeter



Phone

**DANGER:**

Special care must be taken to protect personal safety.

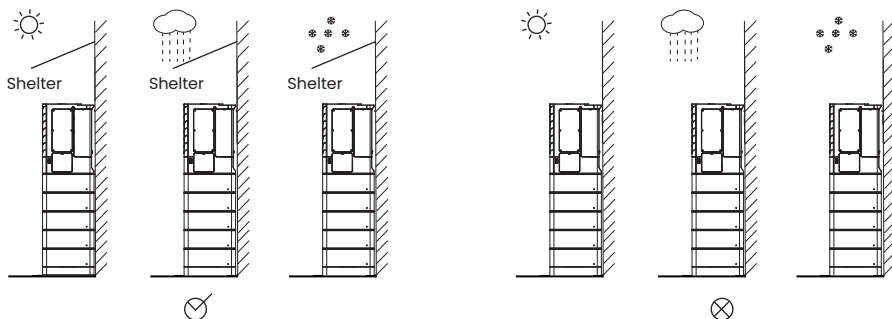
PPE must be worn during transfer and installation.

**WARNING:**

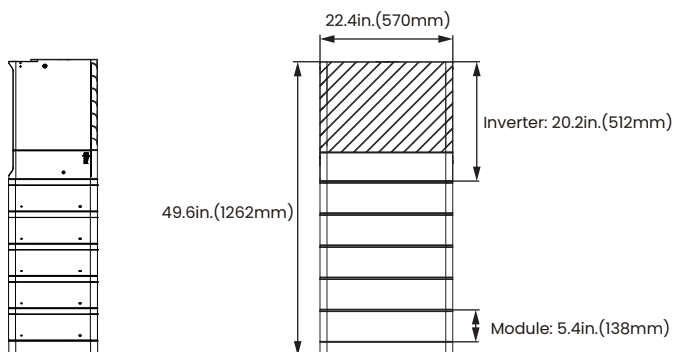
Please use proper protective measures, such as foam or protective cloth, keep the equipment well protected from hard objects that may damage their exterior appearance or body during handling and installation.

3 Installation Steps

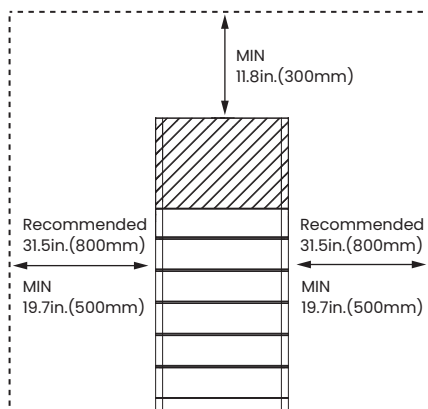
3.1 Installation Environment



3.2 Size



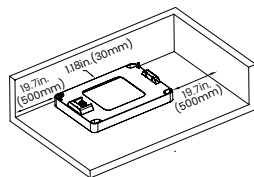
3.3 Installation Space



3.4 Installation Steps

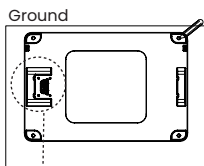
- Installation on a Solid Ground

①



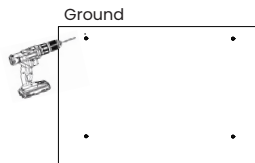
The base needs to be more than 1.18in. (30mm) against the wall.

②

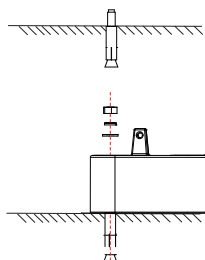


Make sure the connector is on the left side when installing the base.

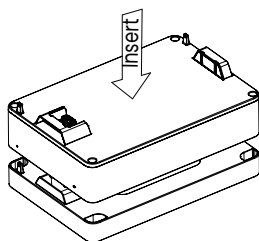
③



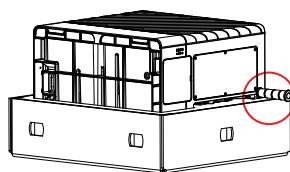
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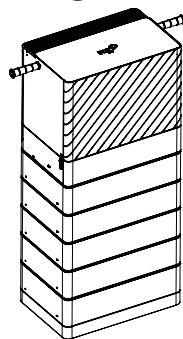
⑤



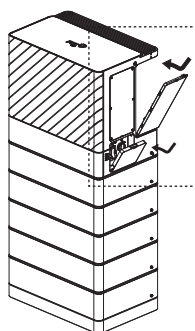
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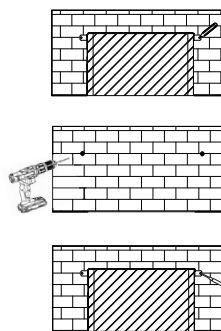
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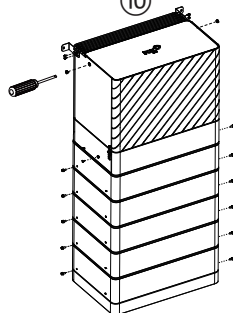
⑧



⑨

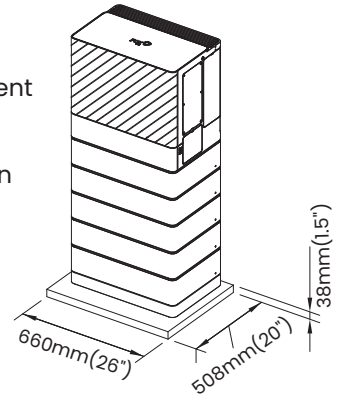


⑩



• Installation on a Soft Ground

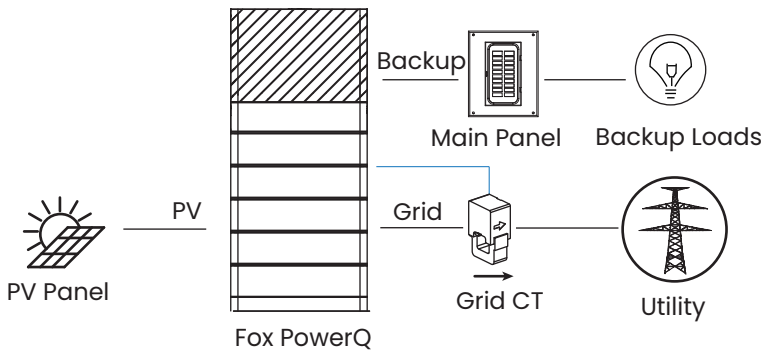
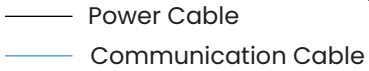
- ① Prepare a cement slab with a dimension as shown in the figure on the right.
- ② Install Fox PowerQ in the middle of the cement slab to prevent cracking.
- ③ The following steps are the same as those in "Installation on a Solid Ground".



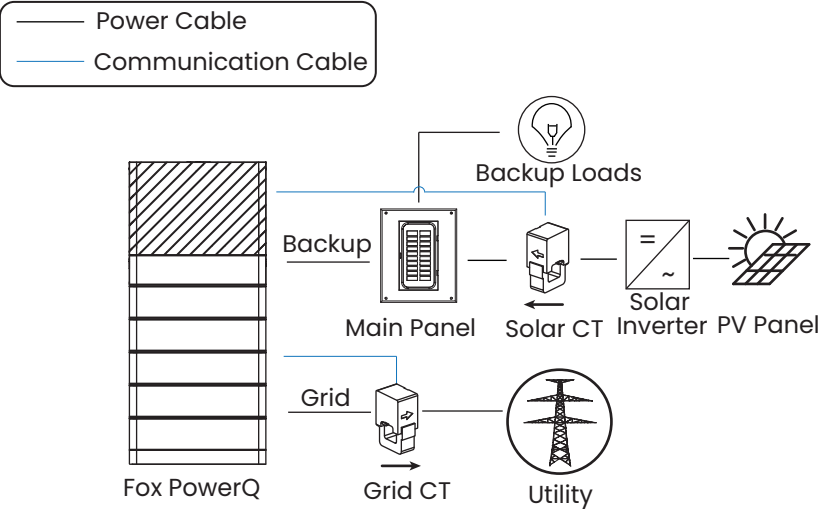
4 System Wiring Diagram

4.1 Whole-home Backup

Whole-home Backup (DC Couple)

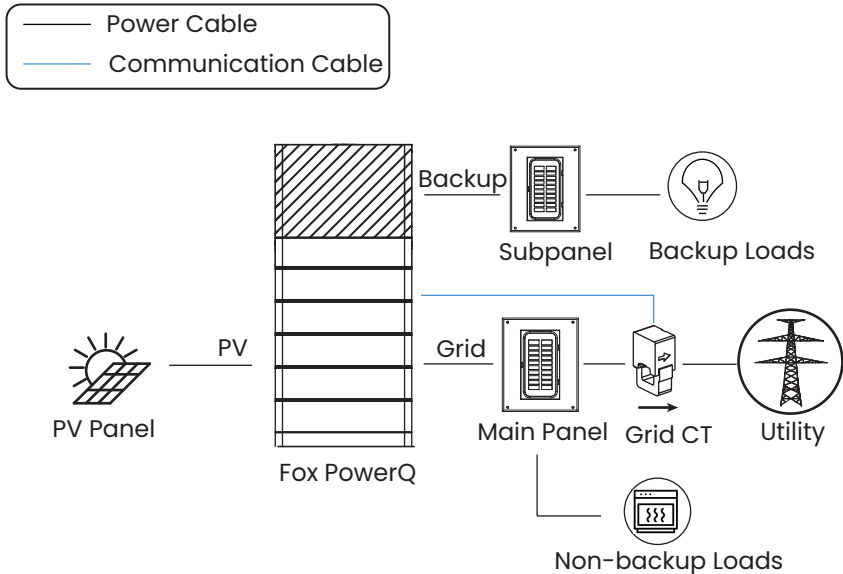


Whole-home Backup (AC Couple)

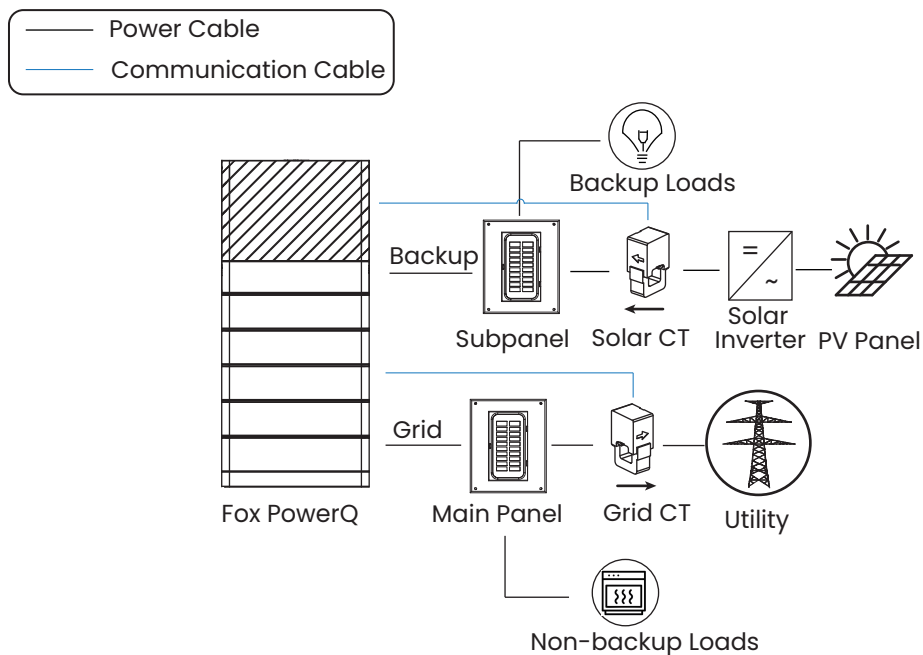


4.2 Partial-home Backup

Partial-home Backup (DC Couple)



Partial-home Backup (AC Couple)



5 System Wiring Steps

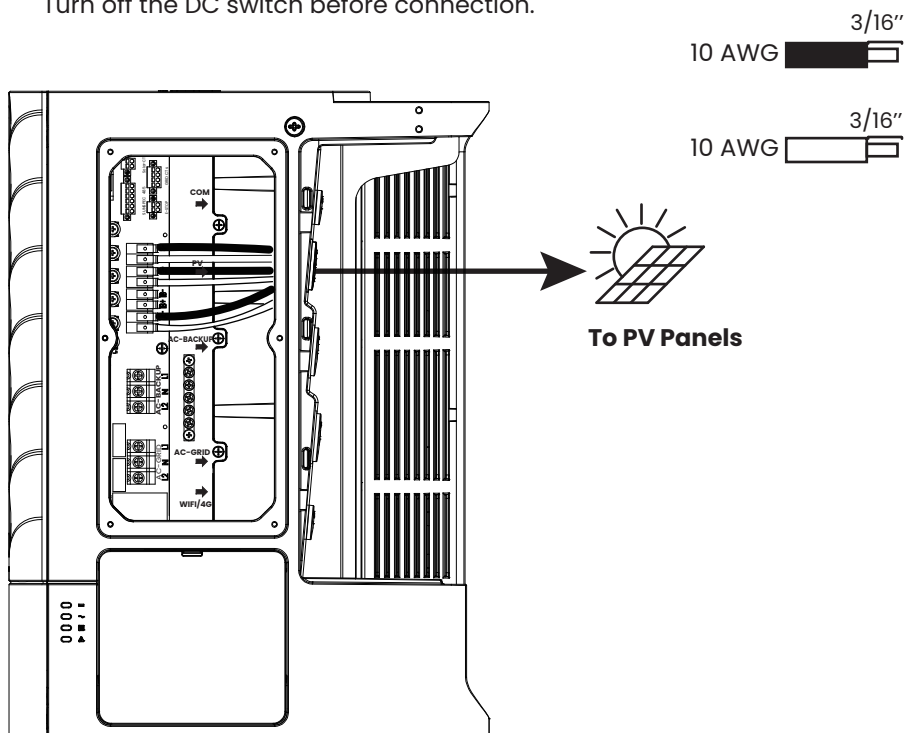
5.1 Power Cable Wiring

- Size of Conduit and Cable Gland

Fox PowerQ			
Cable Marker	Max. Cable Diameter	Conduit	Gland
L1	6 AWG	EMT 2"	M75 or adapts to 2" EMT conduit
L2	6 AWG		
N	6 AWG		
PE	6 AWG		

- The PV Panels Connections to the Fox PowerQ

Turn off the DC switch before connection.



If there are ≤ 3 PV strings, 3 PV strings are preferentially connected to terminals 1A+, 1A-, 2+, 2-, 3+, 3-.

If there are 4 PV strings, the number of PV panels connected to terminals 1A+, 1A- needs to be the same as that connected to terminals 1B+, 1B-.

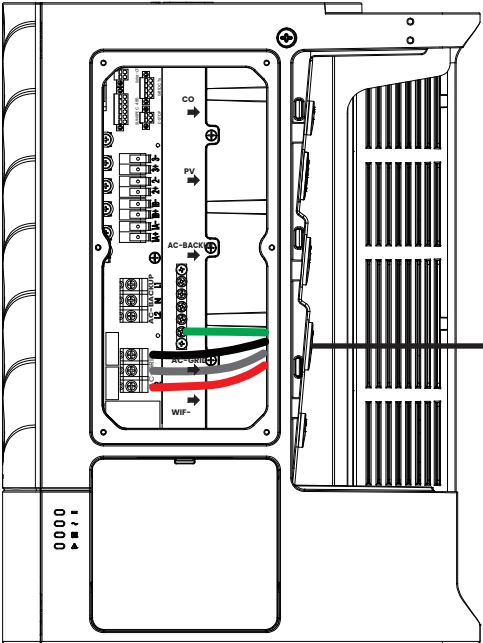
• The Utility Connections to the Fox PowerQ

L1:
6 AWG 


N:
6 AWG 

L2:
6 AWG 

PE:
6 AWG 



Fox PowerQ

- ① **Whole-home Backup**

To Utility
- ② **Partial-home Backup**



To Main Panel

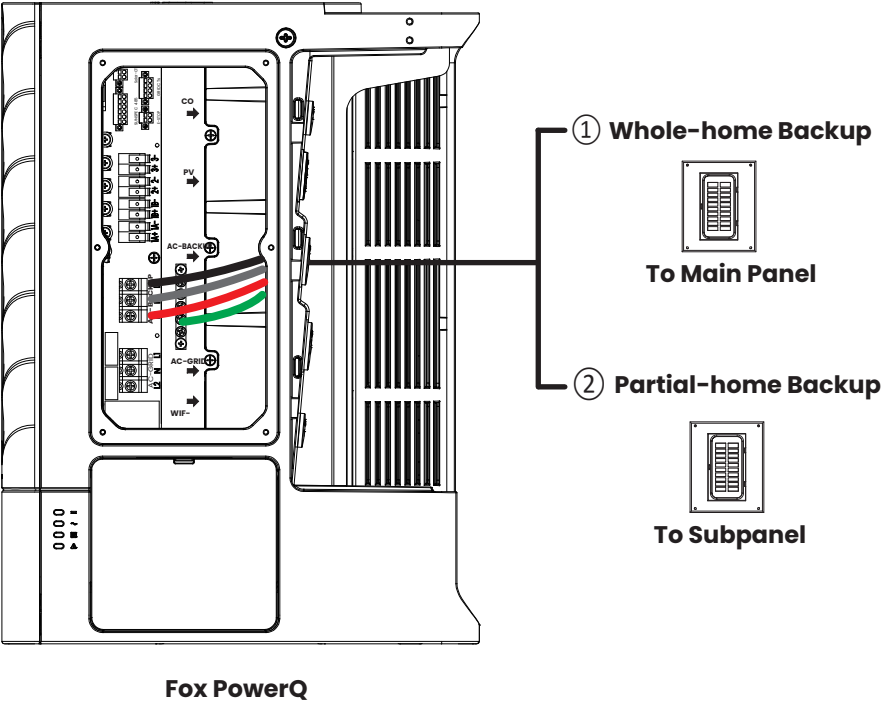
• The Backup Loads Connections to the Fox PowerQ

L1:
6 AWG 3/4"

N:
6 AWG 3/4"

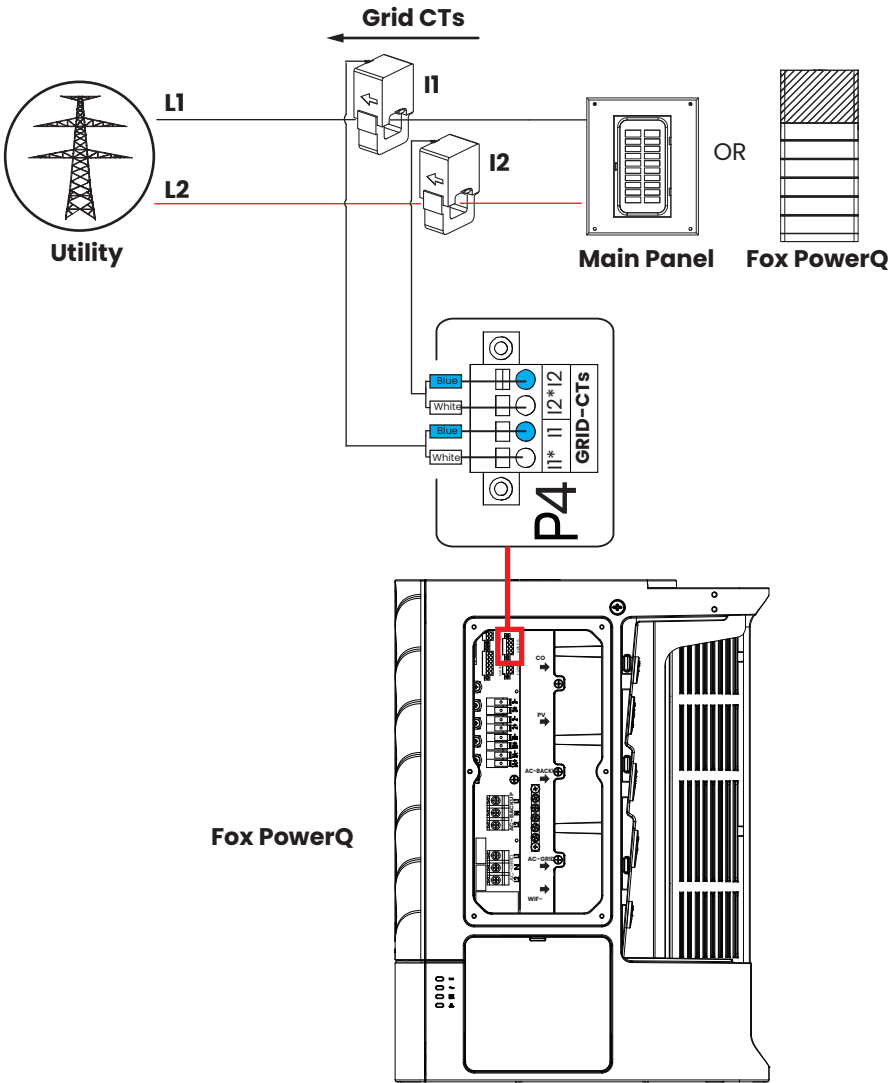
L2:
6 AWG 3/4"

PE:
6 AWG 3/4"

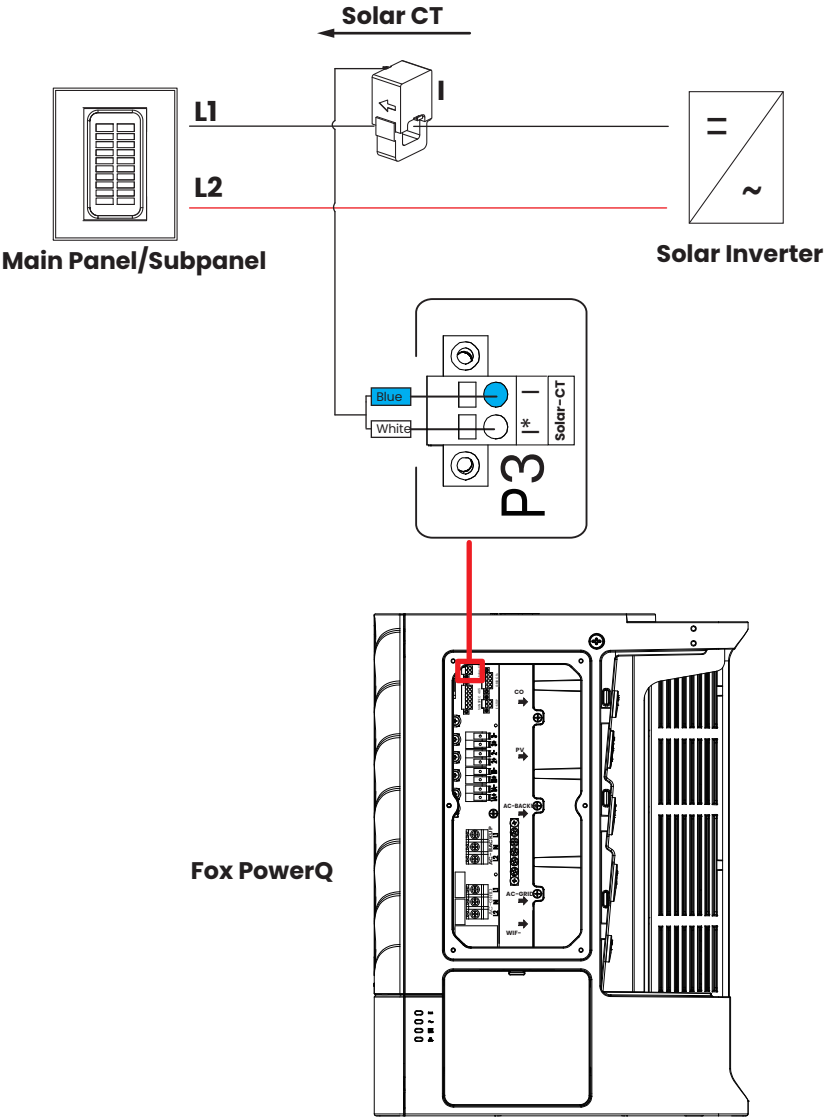


5.2 CT Wiring

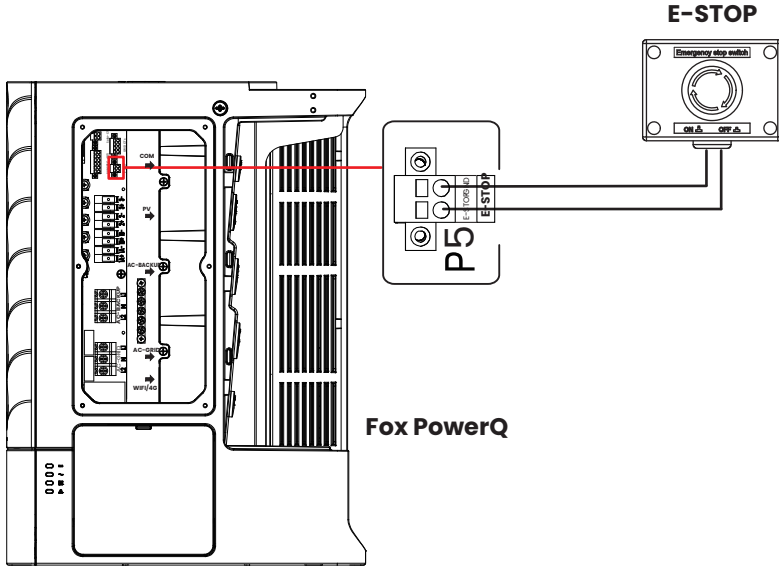
- Grid CT Wiring



• Solar CT Wiring (Optional)



5.3 E-STOP Wiring



Step 1: remove the jumper on the P5 socket.

Step 2: connect the P5 socket to the E-STOP.

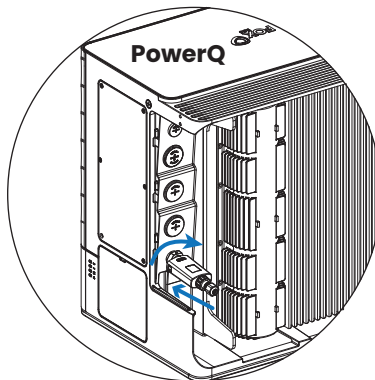


NOTE:

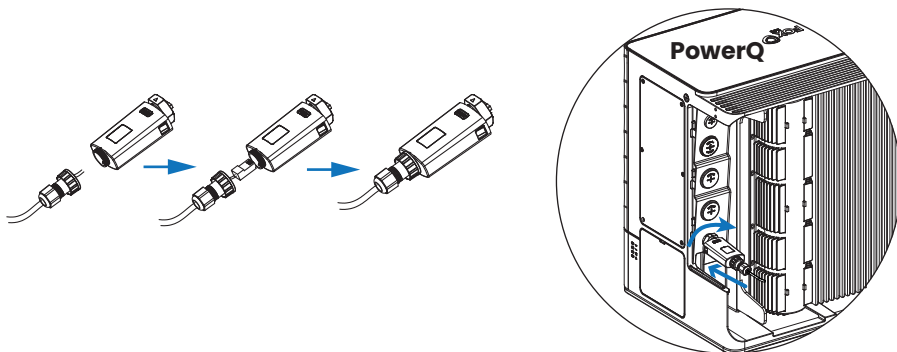
Do not remove the jumper at the P5 socket if E-STOP is not used.

5.4 Smart WiLAN or Smart 4GWiLAN Connection

- **WiFi & 4G Installation:** connect the Smart WiLAN or Smart 4GWiLAN to the Fox PowerQ.



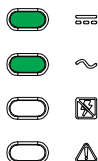
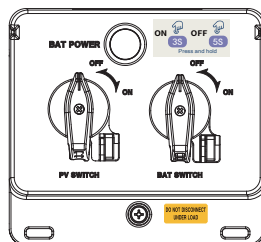
- **LAN Installation:** insert the network cable into the Smart WiLAN or Smart 4GWiLAN, and connect it to the Fox PowerQ.



6 System Turn on

Please refer to the following steps to switch on the system.

1. Ensure all cables are connected properly.
2. Turn on the PV SWITCH on the Fox PowerQ (Only for New System), and AC breakers (in main panel or service panel).
3. Turn on "BAT SWITCH" first, then press and hold "BAT POWER" button for 3s, and then release it.
4. Check if green lights on the Fox PowerQ are solid on.



In case you need to turn off the system, please refer to the following steps:

1. Turn off the PV SWITCH, press and hold "BAT POWER" for 5s, and turn off "BAT SWITCH" and AC breakers.
2. Wait 5 minutes before you open the side cover of the Fox PowerQ (in case of repair).

Step 1: scan the QR code to download FoxCloud2.0 app and download the app.



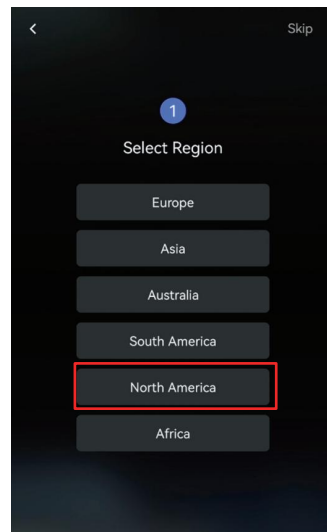
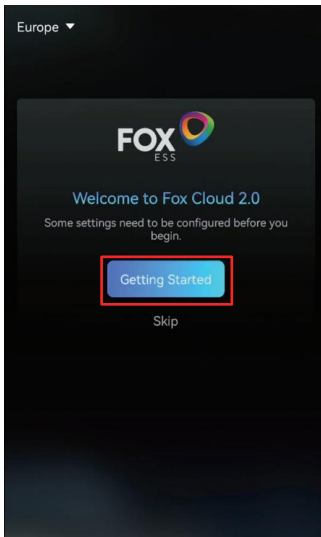
After the app is installed, the FoxCloud2.0 icon is displayed on the home screen.



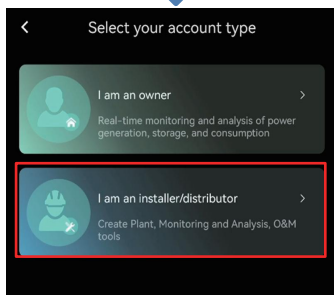
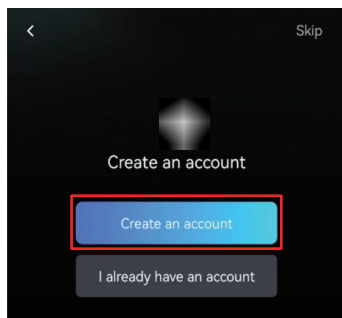
FoxCloud2.0

Step 2: Initial App Configuration (**First Download Only**)

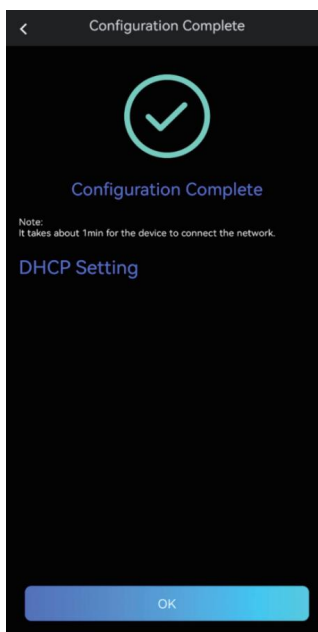
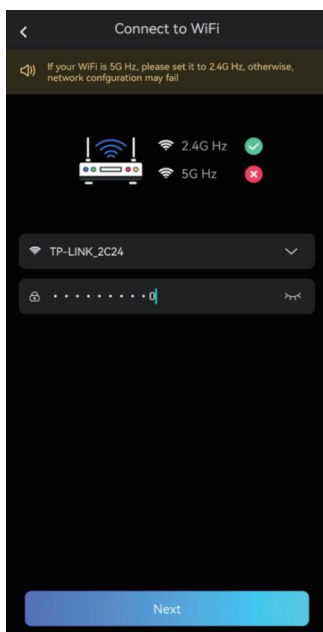
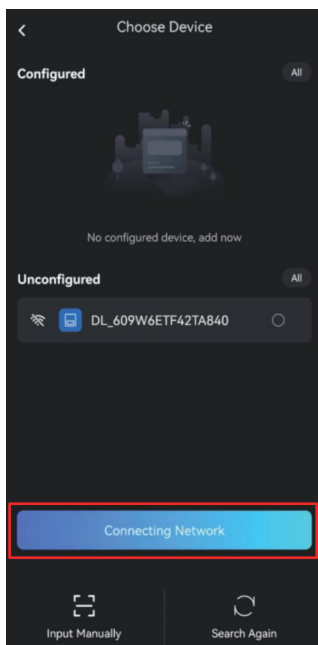
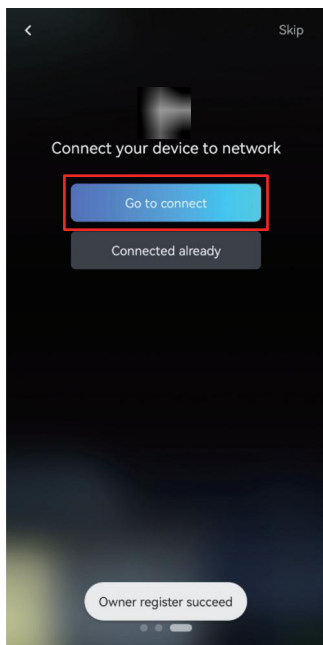
- Tap "**Getting Started**", select "**North America**".



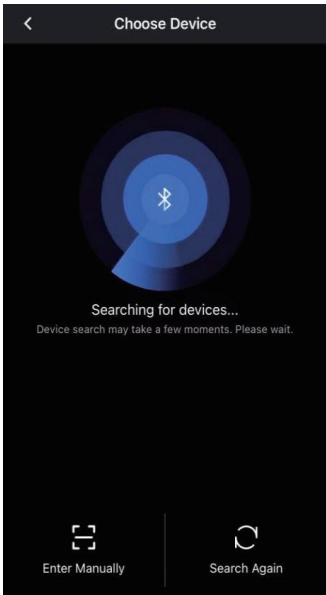
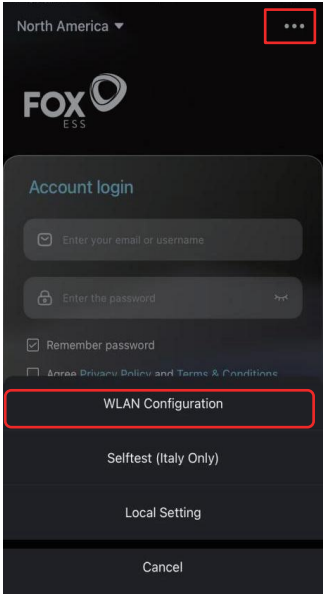
- Create an account.
For installers/distributors



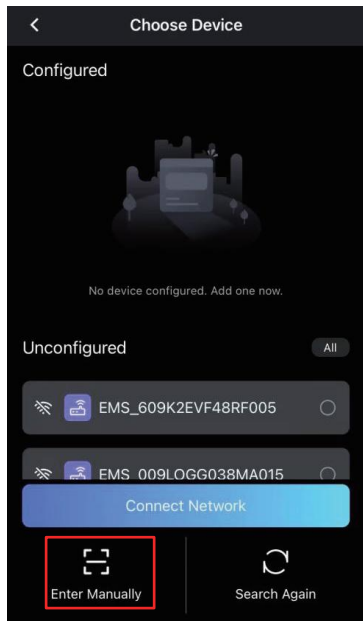
- Connect to the network. Turn on the Bluetooth of your phone in advance.



Step 3: Tap “...” at the right corner, select “WLAN Configuration”.



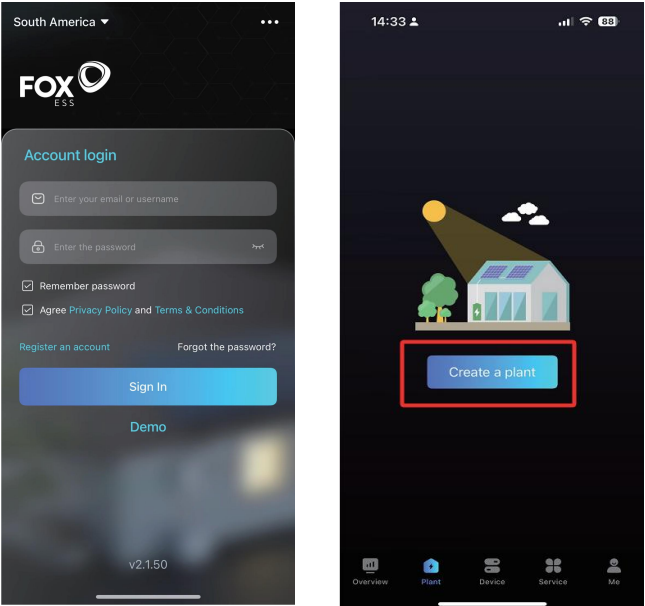
Or, manually enter the SN code on the Smart WiLAN.



Light indication on the Smart WiLAN

Indicator	Status	Instructions
Red light	Blinking	Not connected to the server
	Solid on	Connected to the server
Green light	Blinking	Data transmission

Step 4: Sign in the installer’s account. Tap **“Create a plant”**.



Scan the QR code on the Smart WiLAN or enter the SN code, and fill the information.

New Plant

Add Device

+

Plant Information

Plant Profile Image

Plant Name

Country / Region

City

Address

Post Code

Time zone

Agent

Save

Add Device

General Device

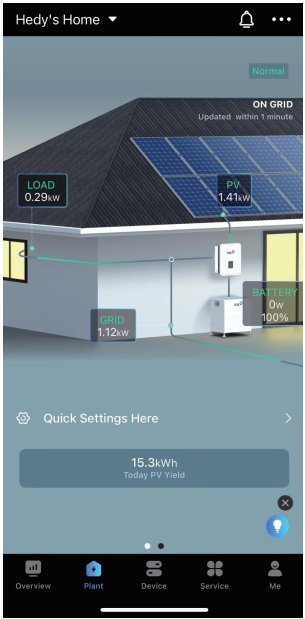
Micro Inverter

Please enter the SN code

Save



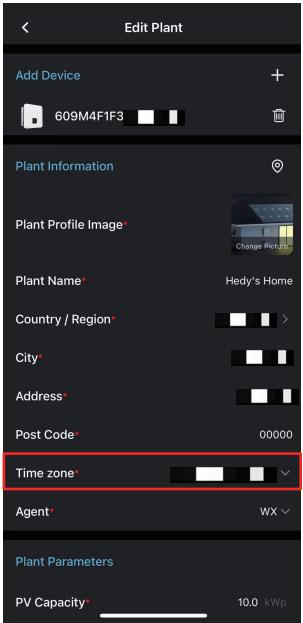
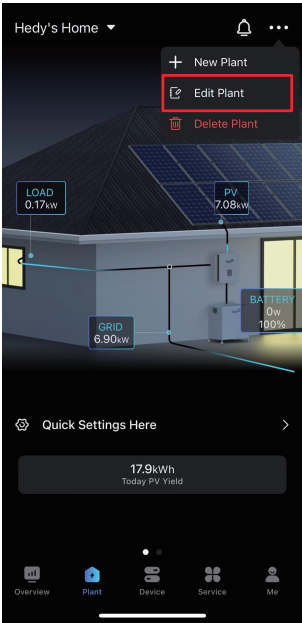
Step 5: Check system performance on “Plant” dashboard.



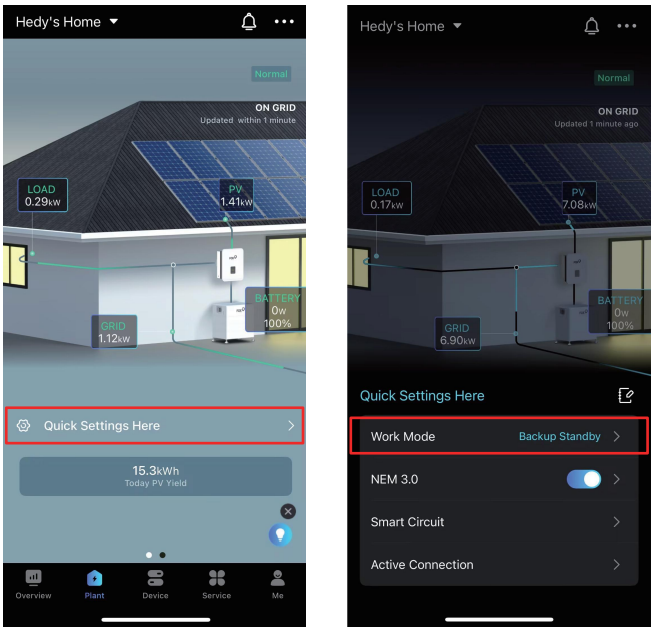
Step 6: Use the checklist below to make sure the necessary items are completed.

Item	Necessary or Optional	Status (✓ if completed)
1. Time Zone	Necessary	
2. Energy Mode	Necessary	
3. Service Panel Parameter	Necessary	
4. Zero Back-feed	Optional	
5. Grid Code	Optional (Only needed when selling to countries except US; Change "USA" into your own country)	
6. Existing Solar Inverter Power	Optional (Only needed in Existing System)	
7. Charge from Grid	Optional (Only needed when main breaker cannot support inverter output during full load)	

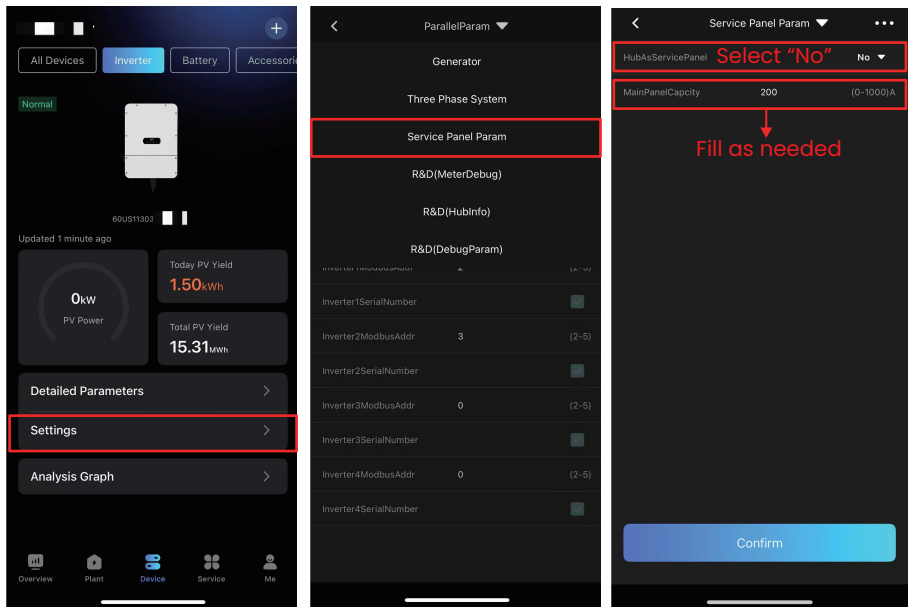
Item 1: Set up the time zone on the **"Plant"** dashboard.



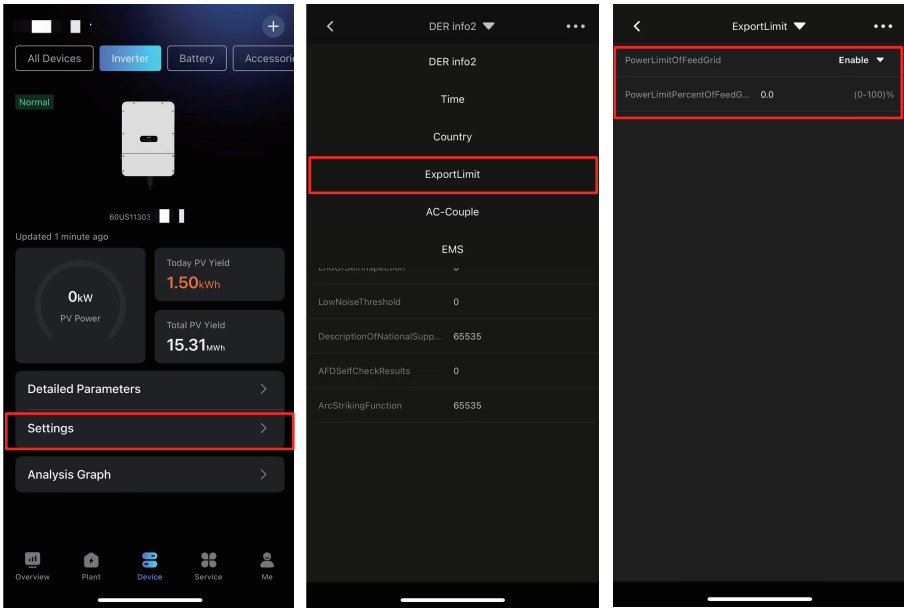
Item 2: Configure the energy management mode on the “**Plant**” dashboard.



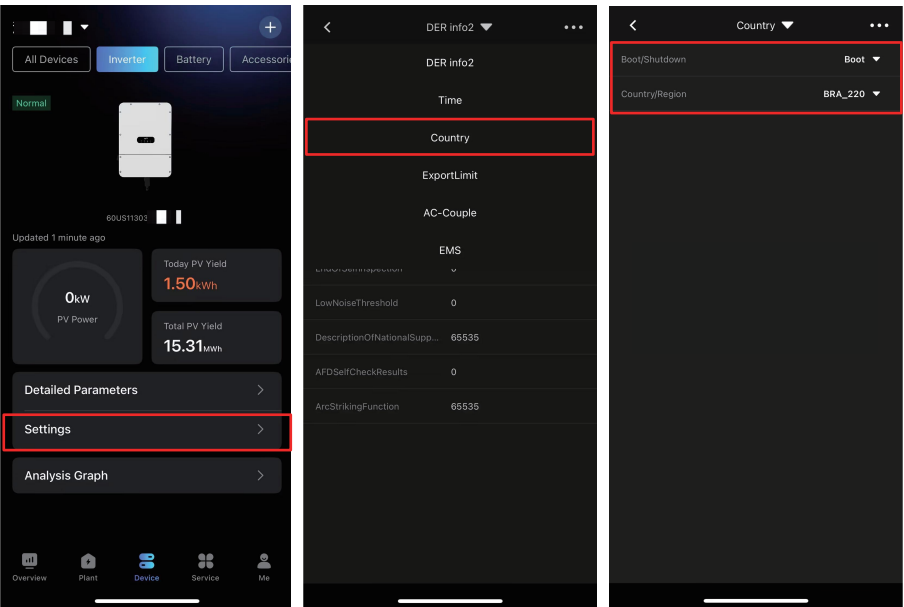
Item 3: Set service panel parameters on the “**Device**” dashboard.



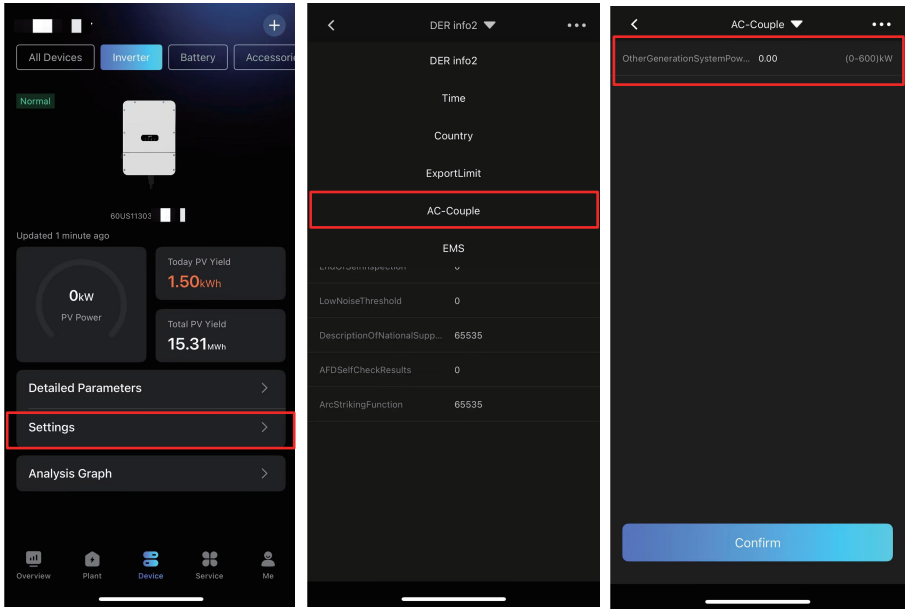
Item 4: Set the zero back-feed on the **“Device”** dashboard.



Item 5: Set the grid code on the **“Device”** dashboard.



Item 6: Set the existing solar inverter power on the “**Device**” dashboard.



Item 7: Set the the charge by grid value on the “**Device**” dashboard.

