

Fox PowerQ Energy Storage System

Quick Installation Guide

Issue: V1.0b

Date: 2024-04-01

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

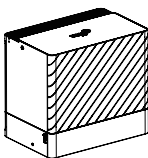
Testing Laboratory Name: CSA GROUP

Project Number: 80182817

Date of issue: April 2024

1 Packing List

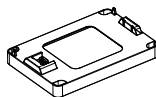
1.1 Cube Inverter Package Box



A



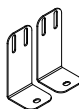
B



C



D



E



F



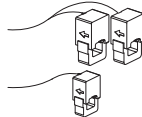
G



H



I



J



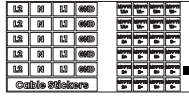
K



L

WARNING: THIS SENSOR IS PART OF A POWER CONTROL SYSTEM. DO NOT REMOVE.

M



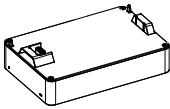
N



O

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	1	Label (stuck near the CTs)
F	4	Sleeve Expansion Bolt M8*60	N	1	Cable Sticker
G	4	Expansion Tube & Expansion Screw	O	1	Quick Installation Guide
H	2	Handle			

1.2 Battery Package Box



A



B

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

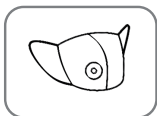
2 Required Tools



Safety Goggles



Steel Toe Boots



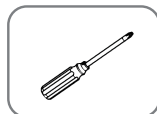
Dust Mask



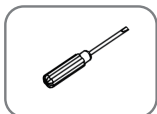
Helmet



Insulating Gloves



Phillips-Head Screwdriver



Flat-Head Screwdriver



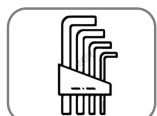
Wire Stripper



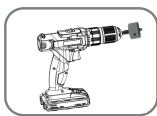
Electric Drill



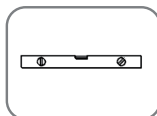
Adjustable Wrench



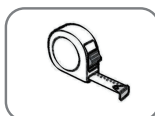
Hex Wrench Set



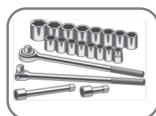
Hole Punch



Level



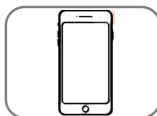
Tape



Sleeve



Multimeter



Phone



DANGER:

Special care must be taken to protect personal safety.

PPE must be worn during transfer and installation.

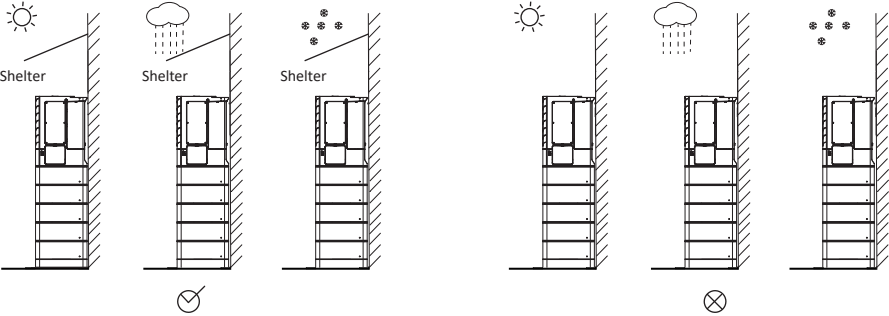


WARNING:

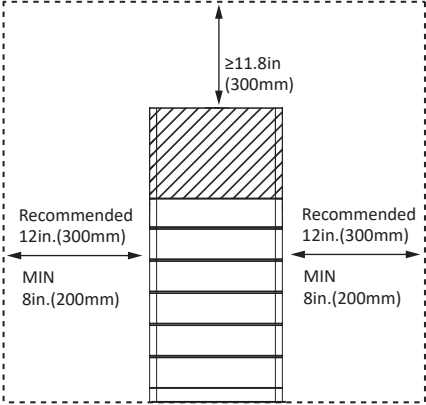
Please use proper protective measures, such as foam or protective cloth, keep the equipment well protected from hard objects that may damage their exterior appearance or body during handling and installation.

3 Installation Steps

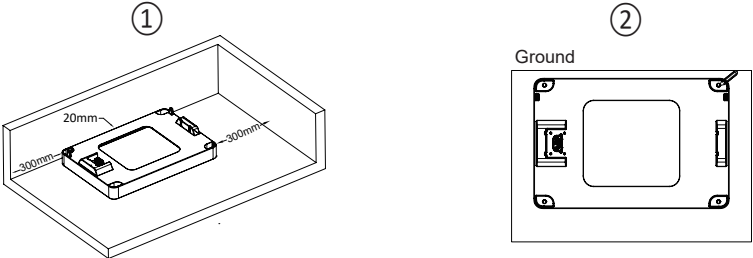
3.1 Installation Environment




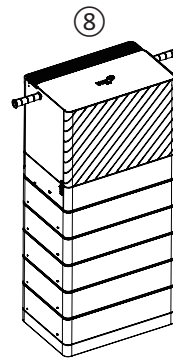
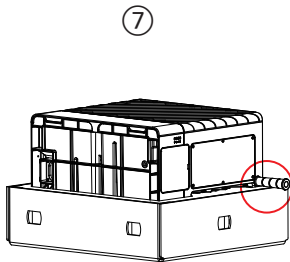
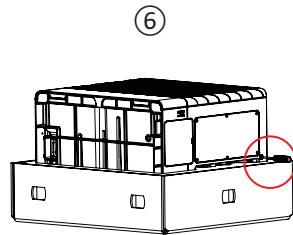
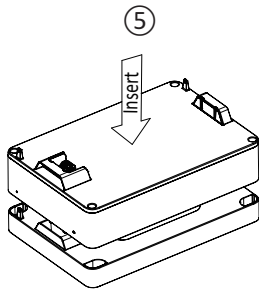
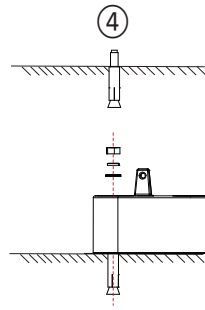
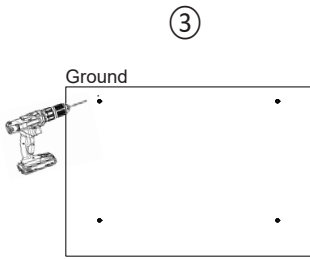
3.2 Installation Space

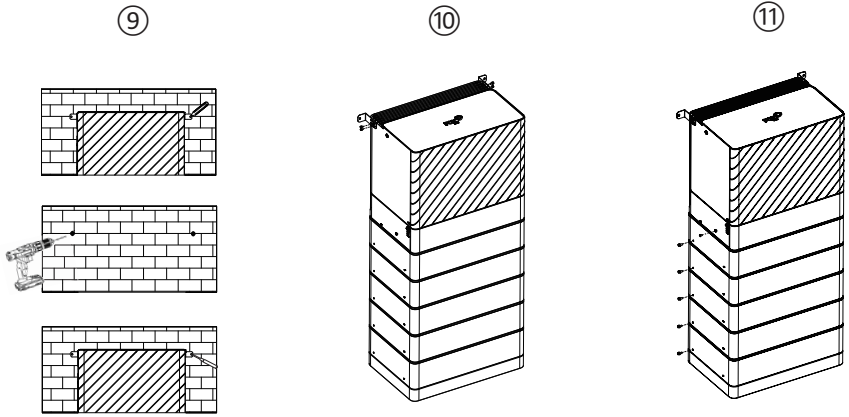


3.2 Installation Steps



 The base needs to be more than 20mm against the wall.

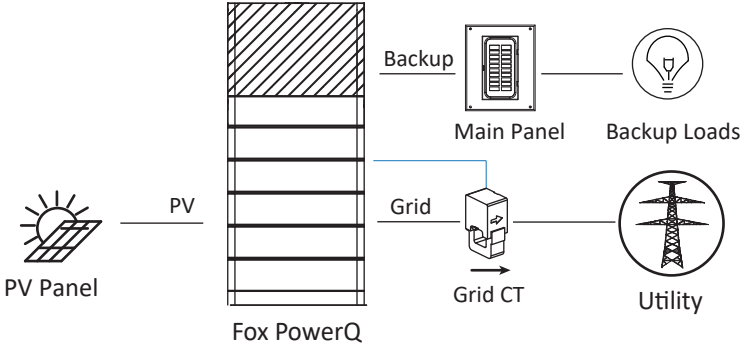
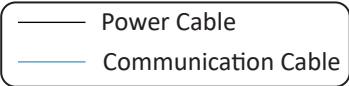




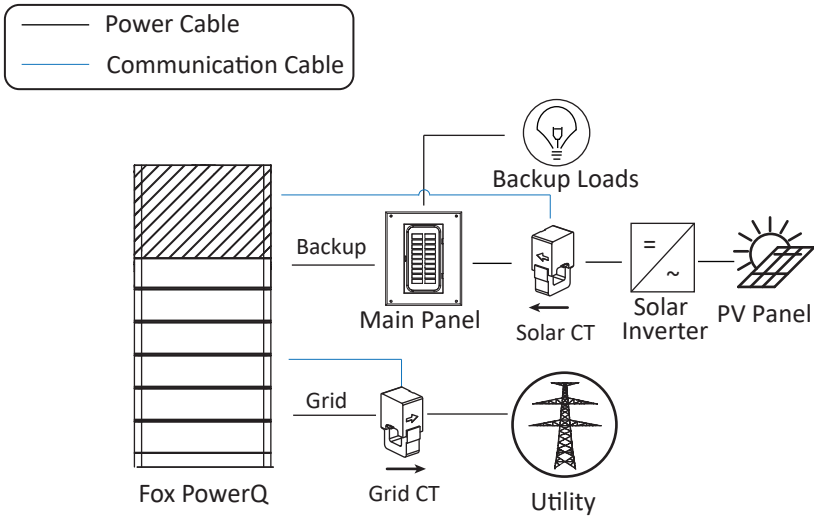
4 System Wiring Diagram

4.1 Whole-home Backup

Whole-home Backup (DC Couple)

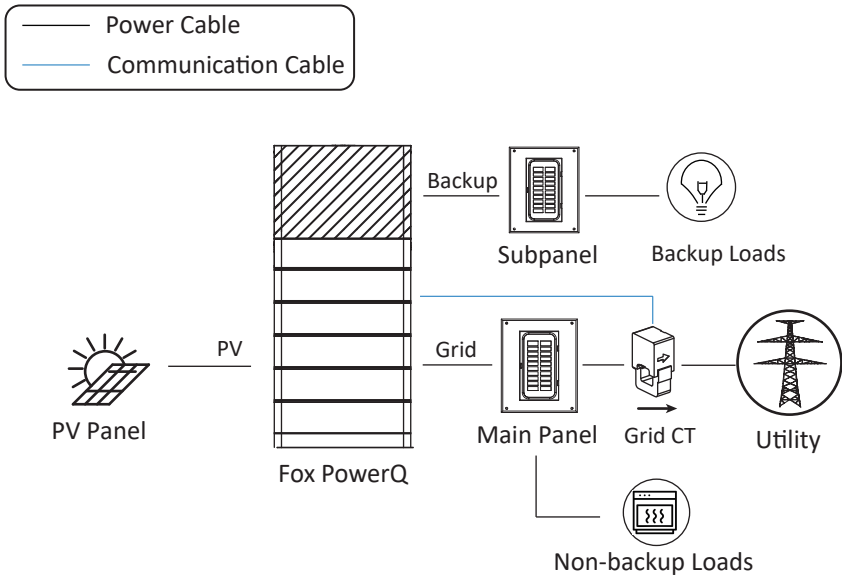


Whole-home Backup (AC Couple)

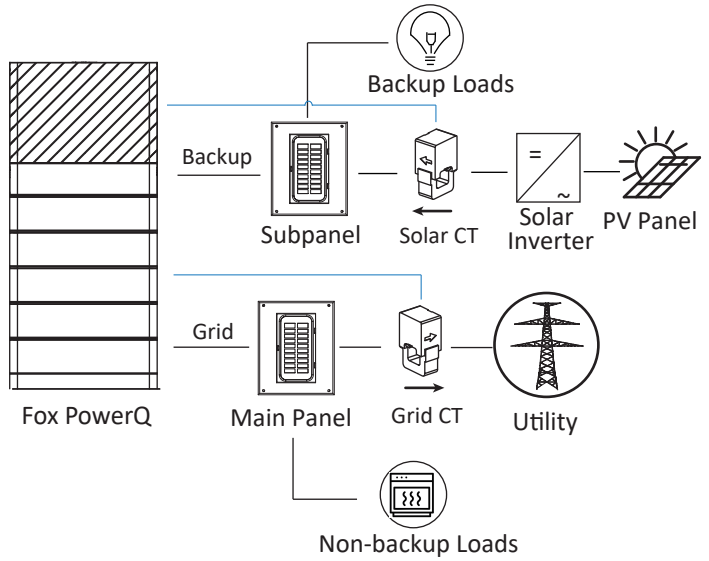
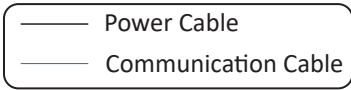


4.2 Partial-home Backup

Partial-home Backup (DC Couple)



Partial-home Backup (AC Couple)

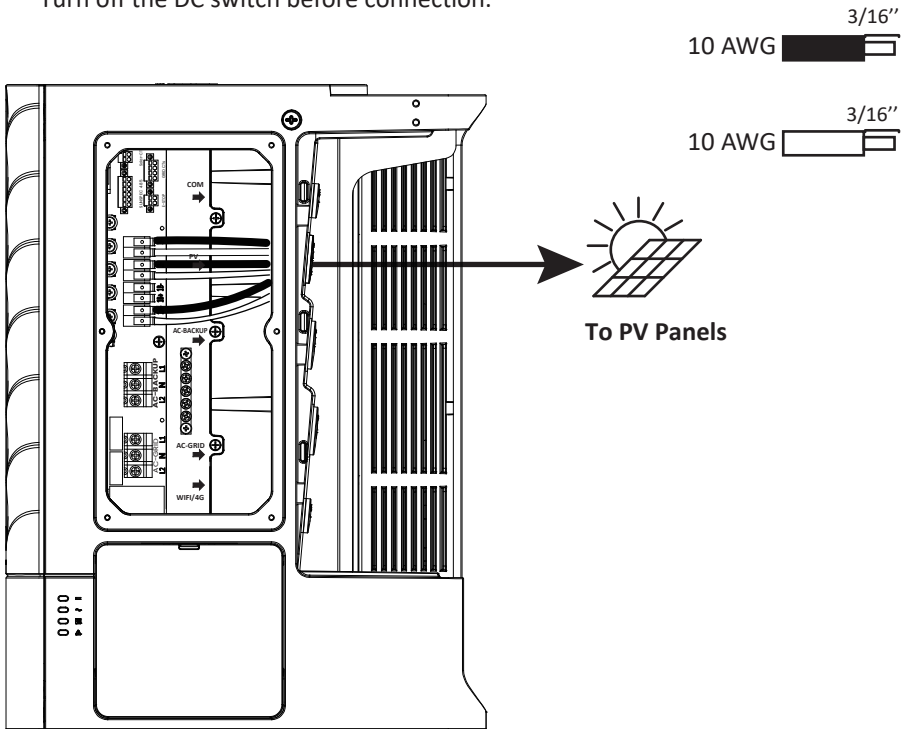


5 System Wiring Steps

5.1 Power Cable Wiring

- 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-.

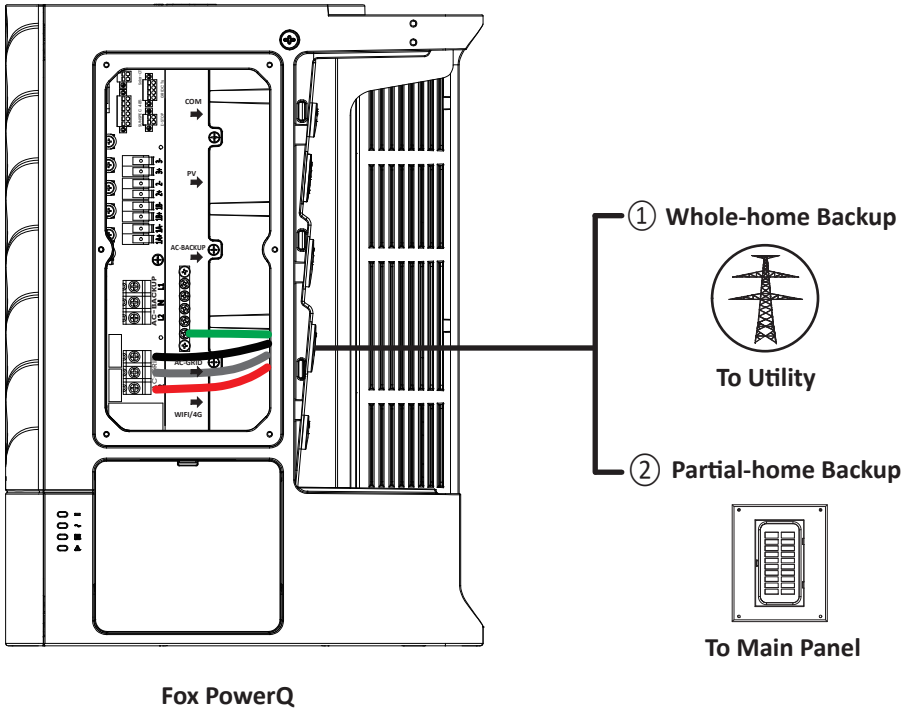
• The Utility Connections to the Fox PowerQ

L1:
6 AWG 

N:
6 AWG 

L2:
6 AWG 

PE:
6 AWG 



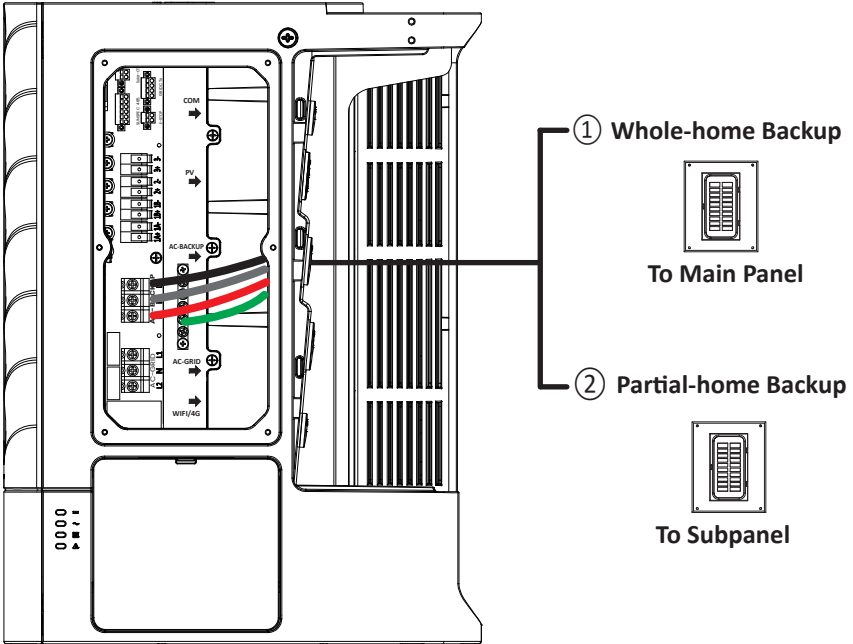
• The Backup Loads Connections to the Fox PowerQ

L1:
6 AWG 

N:
6 AWG 

L2:
6 AWG 

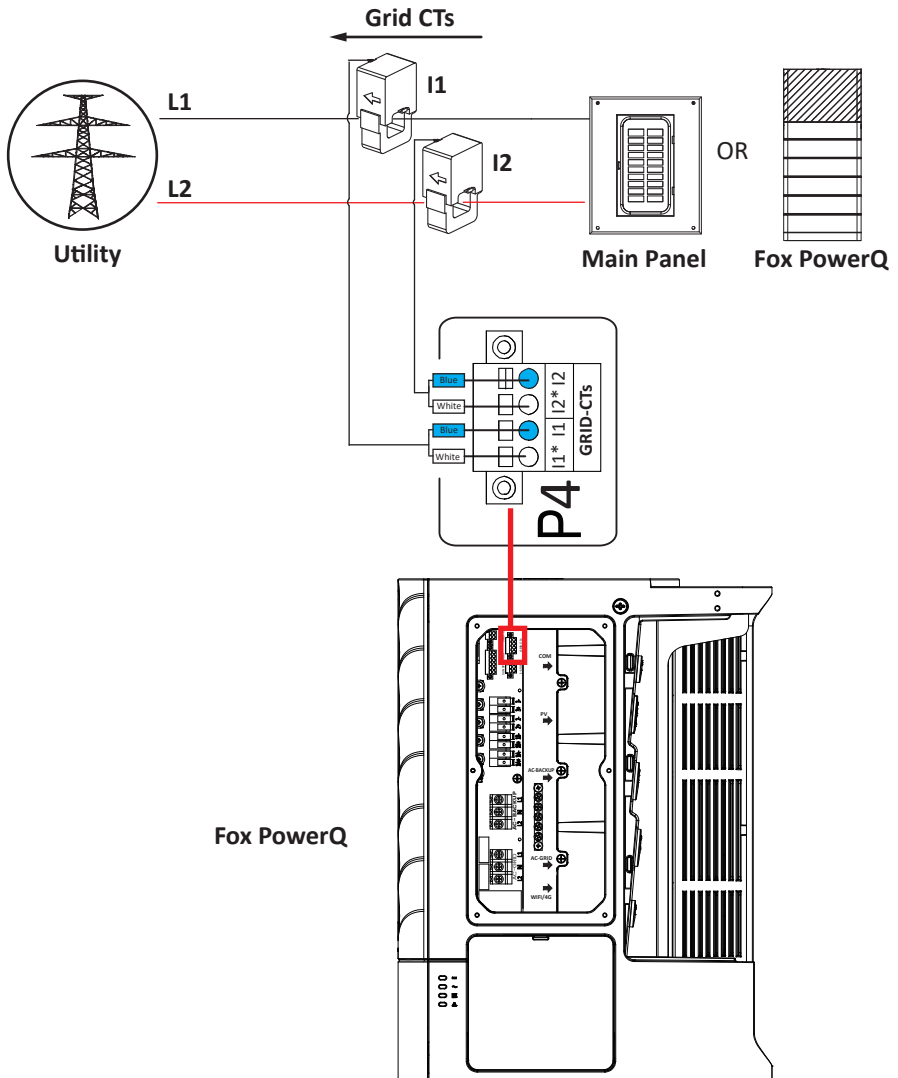
PE:
6 AWG 




Fox PowerQ

5.2 CT Wiring

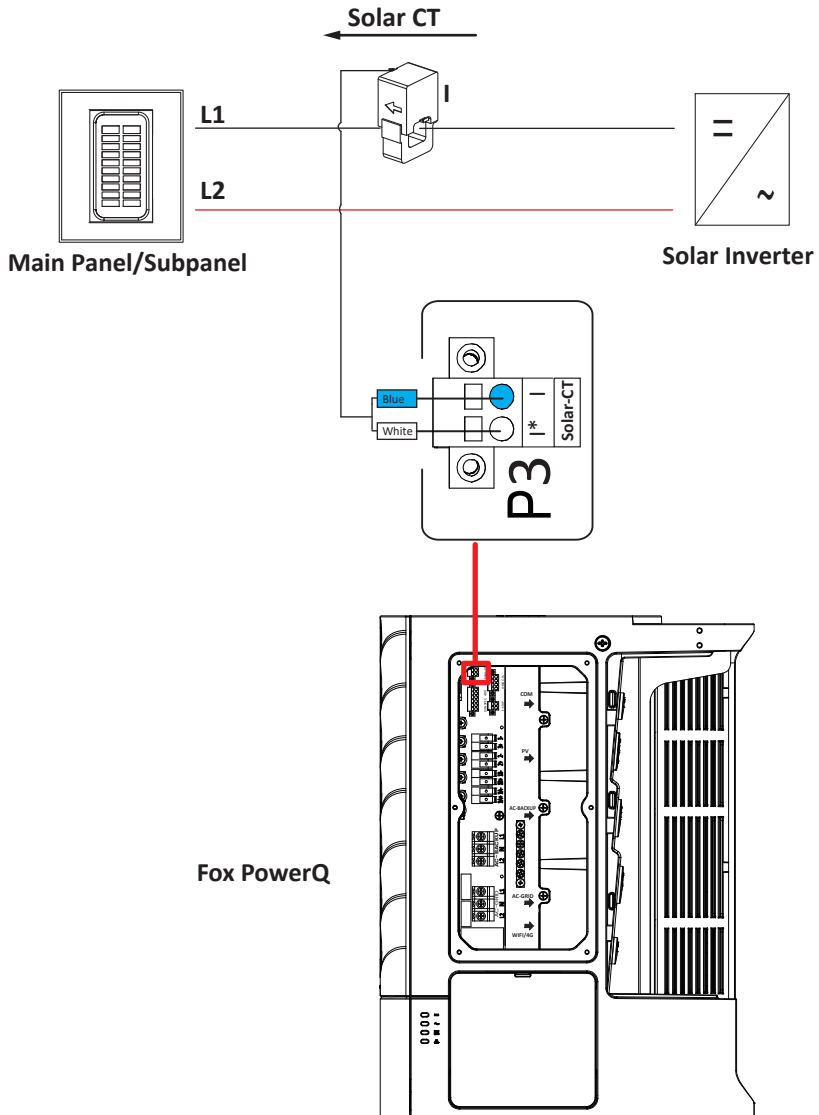
- Grid CT Wiring



NOTE:

-  The grid CTs are installed in the main panel or Fox PowerQ. Please refer to SLD for CTs location.

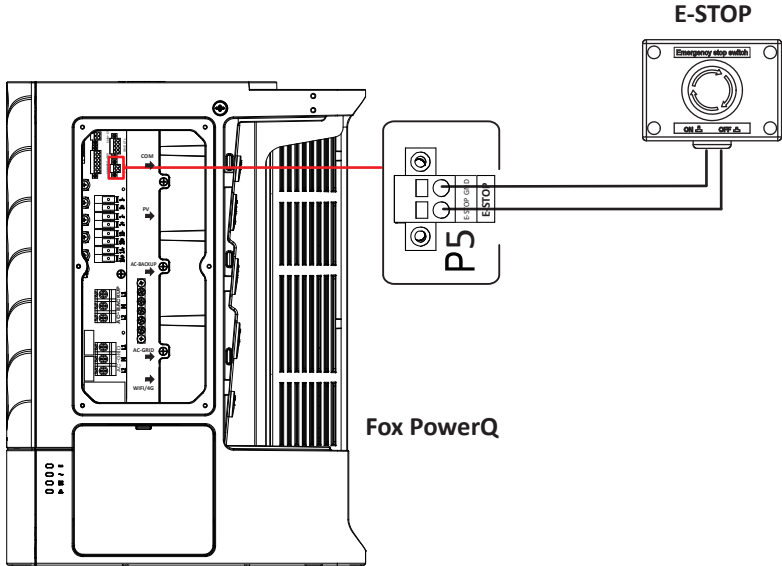
• Solar CT Wiring (Optional)



NOTE:

 The solar CT is installed in main panel or subpanel. Please refer to SLD for CTs location.

5.3 E-STOP Wiring



Step 1: remove the jumper on the P5 socket.

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

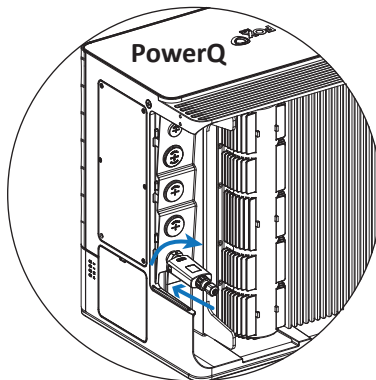
NOTE:



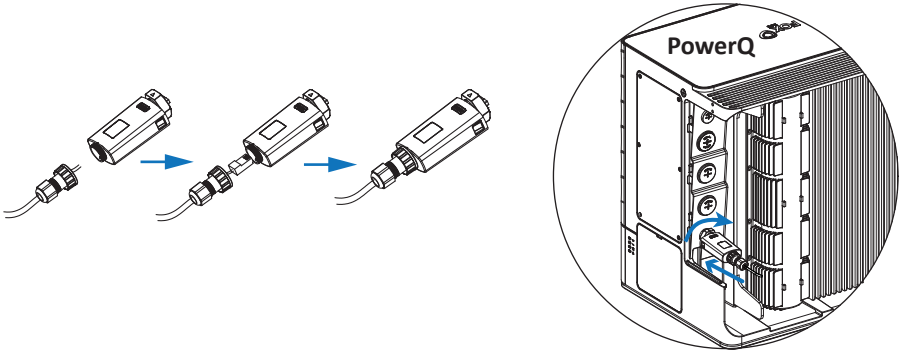
Do not remove the jumper at the P5 socket if E-STOP is not used.

5.4 Smart WiLAN or Smart 4GWiLAN Connection

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



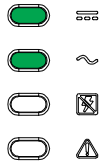
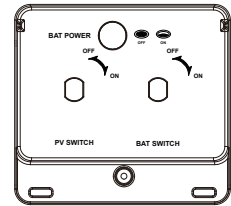
- **LAN Installation:** insert the network cable into the Smart WiLAN or Smart 4GWiLAN, and connect it to the Fox PowerQ.



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 “BAT POWER” button.
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, 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: Search for FoxCloud US and download the app.



Or, scan the QR code to download the app.




After the app is installed, the FoxCloud US icon is displayed on the home screen.

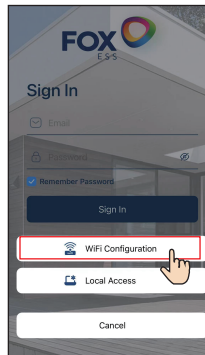
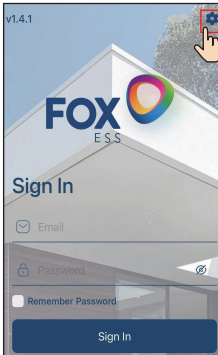


FoxCloud US

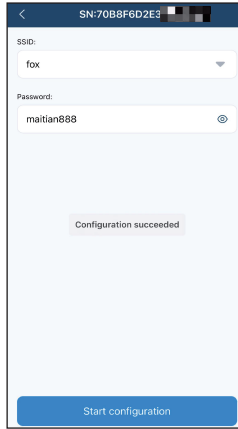
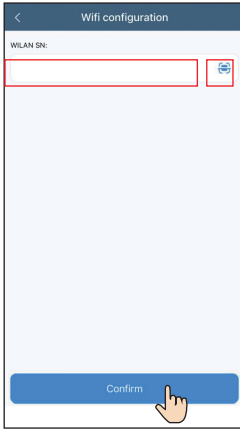
Step 2:

- WiFi Configuration

① If using WiFi, tap , and tap “WiFi Configuration”.



② Scan the QR code on the Smart WiLAN or the Smart 4GWiLAN, or enter the SN code, and then tap “confirm”. Input the house router WiFi’s information.



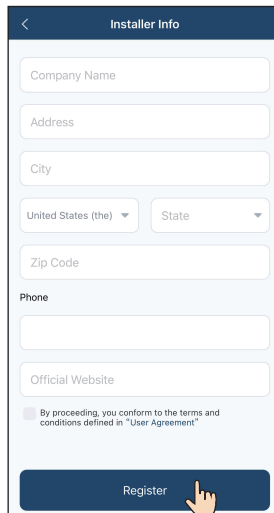
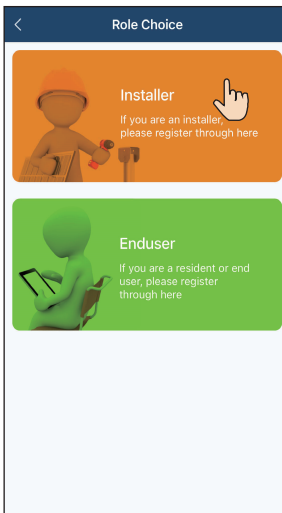
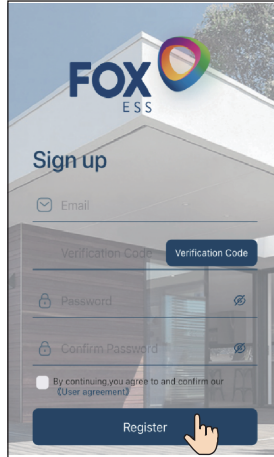
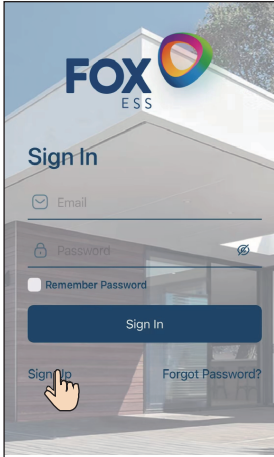
• 4G & LAN

If using 4G or LAN, there is no need for network configuration.

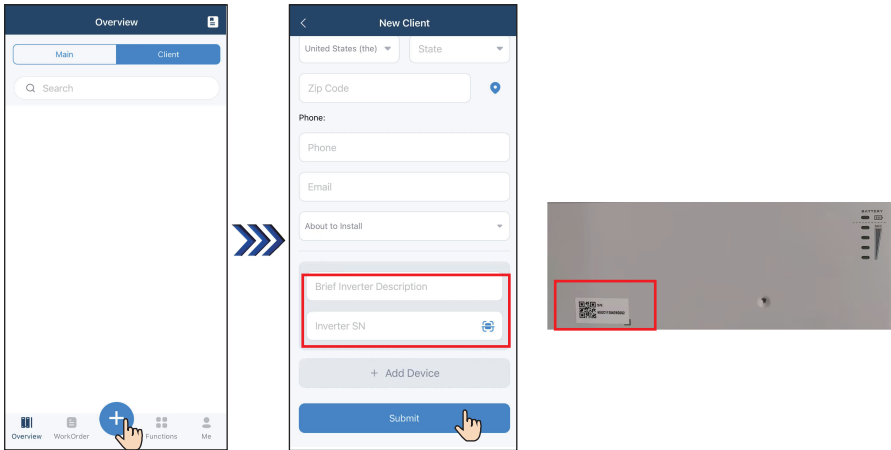
Light indication on the Smart WiLAN & Smart 4GWiLAN

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

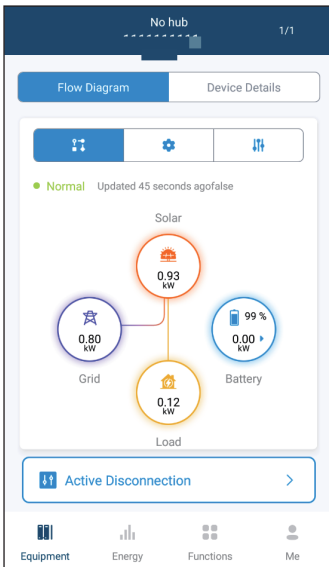
Step 3: The installers sign up.



Step 4: The installer signs in to bind the client's PowerQ. Scan the QR code or manually enter the PowerQ SN on the PowerQ.



Step 5: Check system performance via the end user's account.

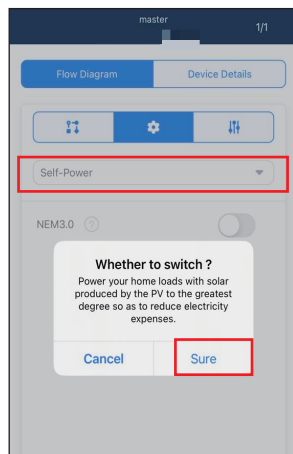
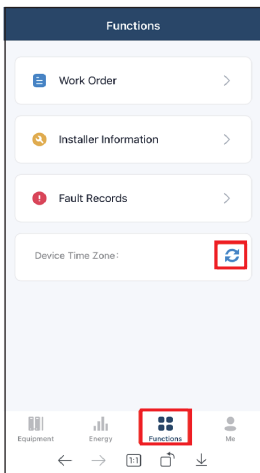


Step 6: Use the checklist below to make sure the necessary items are completed.

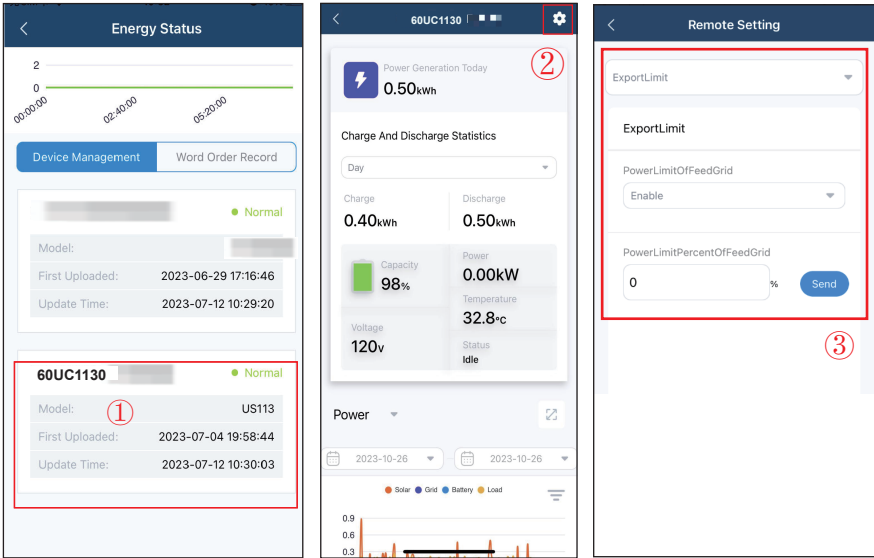
Item	Necessary or Optional	Status (✓ if completed)
1. Time Zone	Necessary	
2. Energy Mode	Necessary	
3. Zero Back-feed	Optional	
4. Grid Code	Optional (Only needed when selling to countries except US; Change "USA" into your own country)	
5. Existing Solar Inverter Power	Optional (Only needed in Existing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

Item 1: Set up the time zone via the end user's account.

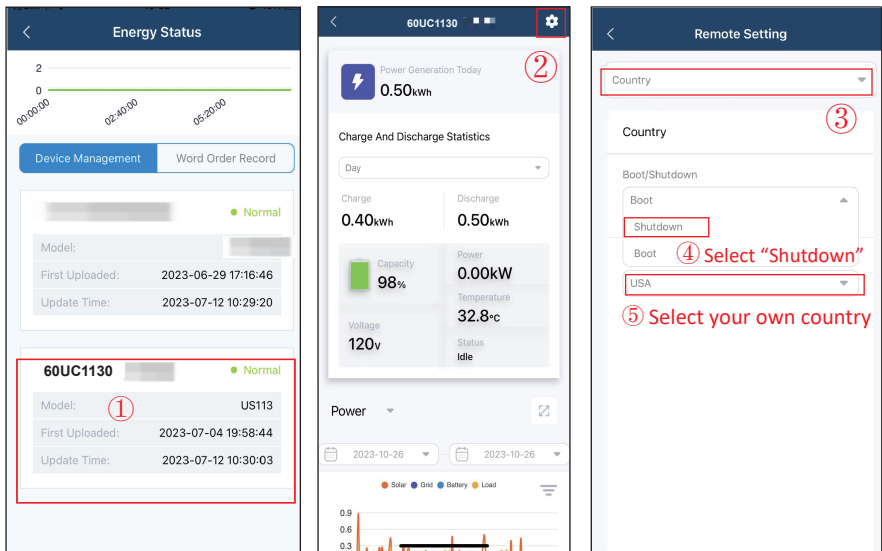
Item 2: Configure the energy management mode via the end user's account.



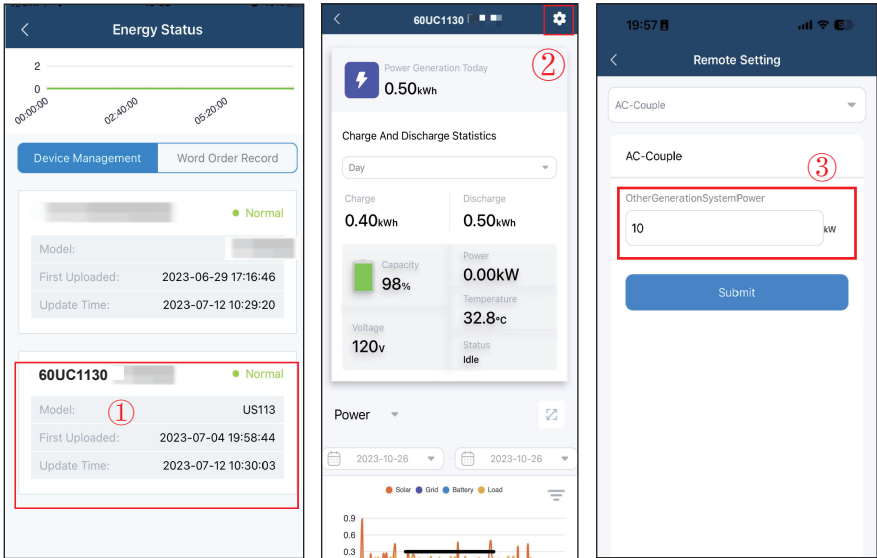
Item 3: Set the zero back-feed via the installer's account.



Item 4: Set the grid code via the installer's account.



Item 5: Set the solar inverter power via the installer's account (Existing inverter only).



Item 6: Set the charge by grid value via the installer's account.

