Fox PowerQ Energy Storage System

Quick Installation Guide

Issue: V1.0b Date: 2024-04-01



FOXESS CO., LTD.



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suitable fo residential indoor flooring installation Testing Laboratory Name: CSA GROUP

Project Number: 80182817

missing, contact your dealer.

Date of issue: April 2024

Packing List

1.1 Cube Inverter Package Box









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nel must wear proper personal protective equipment (PPE).

2. Only certified electricians are allowed to operate the device. Operation person-

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

4. The device damage caused by the violation of instructions in this document is





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12	93	63	66D		5	-	-		
12	8	63	66D		5			•	
12	8	63	66D		5			•	
12	8	63	66D		a,			•	
Ga	lble S	dek	808					÷	
			٢	١					



OBJ	QTY	DESC	OBJ	QTY	DESC
А	1	Cube Inverter	I	2	Flat-head Screw
В	1	Side Cover	J	3	Current Transformer (1*100A, 2*250A)
С	1	Base	к	1	Smart WiLAN/Smart 4GWiLAN (Optional)
D	4	Set Screw	L	1	E-STOP
E	2	Fixing Bracket	М	1	Label (stuck near the CTs)
F	4	Sleeve Expansion Bolt M8*60	N	1	Cable Sticker
G	4	Expansion Tube & Expan- sion Screw	0	1	Quick Installation Guide
н	2	Handle			

1.2 Battery Package Box





А

В

OBJ	QTY	DESC	OBJ	QTY	DESC
А	2-7	EQ4000	В	2	Set Screw

2 Required Tools





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





















4 System Wiring Diagram

4.1 Whole-home Backup

Whole-home Backup (DC Couple)

Power Cable
 Communication Cable



Whole-home Backup (AC Couple)



4.2 Partial-home Backup

Partial-home Backup (DC Couple)



Non-backup Loads

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 \leq 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



Fox PowerQ





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

E-STOP



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.



NOT OF

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.

📫 App Store



Or, scan the QR code to download the app.

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



Step 2:

• WiFi Configuration

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.

< Wifi configuration	<	SN:70B8F6D2E3	
WILAN SN:	SSID:		
8	fox		-
	Password:		
	maitian8	88	۲
		Configuration succeeded	
Confirm 0			
		Start configuration	

• 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.







< Installe	er Info
Ormanu Mana	
Company Name	
Address	
City	
United States (the) 💌	State
Zip Code	
Phone	
Official Website	
By proceeding, you conform	n to the terms and
conditions defined in lose	Agreement
Regi	ster The ster

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.

	Overview				< New Client	
Main		Client			United States (the) 👻 State	¥
Q Search					Zip Code	•
					Phone:	
					Phone	
					Email	
				•••	About to Install	
))))		
					Brief Inverter Description	
					Inverter SN	۲
					+ Add Device	
		Euroticos	• 		Submit	Jun J

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

	Nol	hub	
Flow D	iagram	Device D	etails
11			11+
Normal	Updated 45 sec	onds agofalse	
Gr	Sol	ar	a %
Activ	ve Disconnect	tion	>
Equipment	Energy	Functions	Me

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.

Functions	
E Work Order	>
Installer Information	>
Fault Records	>
Device Time Zone:	Q
Equipment Energy Functions	Me
\leftarrow \rightarrow D \bigtriangleup \downarrow	<u>.</u>



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

< Energy Status	< 60UC	1130 🗖 🗖 🗳	< Remote Setting
2 0 	Power Gener 0.50kwh	ation Today	ExportLimit
gr. gr. gs.	Charge And Dischar	ge Statistics	ExportLimit
Device Management Word Order Record	Day	*	PowerLimitOfFeedGrid
Normal	Charge 0.40kwh	Discharge 0.50kwh	Enable
Model:	Connection	Power	PowerLimitPercentOfFeedGrid
First Uploaded: 2023-06-29 17:16:46	98%	0.00kW	0 % Send
Update Time: 2023-07-12 10:29:20	Voltage	Temperature 32.8•c	
60UC1130 • Normal	1200	Idie	
Model: (1) US113	Power -	Z	
First Uploaded: 2023-07-04 19:58:44			
Update Time: 2023-07-12 10:30:03	2023-10-26 💌	2023-10-26 💌	
	😑 Solar 🔵 Grid	Battery Load	
	0.9	ul and a second	

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

< Energy Status	< 60UC1130 • • • 🗘	< Remote Setting
2 0 050000 052000 052000	Power Generation Today 2 0.50kwh Charge And Discharge Statistics	Country Country
Device Management Word Order Record	Day 💌	Boot/Shutdown
Norm	al Charge Discharge 0.40kwh 0.50kwh	Boot Shutdown
Model:	Capacity Power	Boot ④ Select "Shutdown"
Update Time: 2023-07-12 10:29:20	98% C.OOKW	USA 💌
	Voltage 32.8°C	(b) Select your own country
60UC1130 • Norm	al	
Model: US113	Power 👻 🛛	
First Uploaded: 2023-07-04 19:58:44		
Update Time: 2023-07-12 10:30:03	2023-10-26 ▼ 2023-10-26 ▼ Solar ● Grid ● Battley ● Load	

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

< 1	Energy Status	< 60UC	21130 🗖 🖣 🌞	19:57 🖥	all 🗢 🚯
2		Power Gener	ration Today	< Remote	Setting
00.00.00 02	40.00 0520.00	Charge And Dischar	ge Statistics	AC-Couple	•
Device Manage	ment Word Order Record	Day	*	AC-Couple	(3)
	Normal	Charge 0.40kwh	Discharge 0.50kwh	OtherGenerationSystem	Power
Model:			Power		
First Uploaded	2023-06-29 17:16:46	98%	0.00kW		
Update Time:	2023-07-12 10:29:20		Temperature	Sub	omit
		Voltage 120v	32.8°C		
60UC1130	Normal		late		
Model:	1 US113	Power 👻	2		
First Uploaded	2023-07-04 19:58:44				
Update Time:	2023-07-12 10:30:03	2023-10-26 💌	2023-10-26 💌		
		😑 Solar 🌒 Gric	Battery 😑 Load 📃		
L		0.9 0.6 0.3			

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

< Energy Status	< 60UC	1130 🗖 🗖 🏚	< Remote Setting
2 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Power Gener	ation Today	EMS •
Device Management Word Order Record	Day	ge Statistics	SOCLowerLimit
Normal	Charge 0.40kwh	Discharge 0.50kwh	ChargeByGridEnable
Model:	Constitu	Power	Enable
First Uploaded: 2023-06-29 17:16:46	98%	0.00kW	
Update Time: 2023-07-12 10:29:20	Voltage 120v	Temperature 32.8•c Status	ChargeByGridValue
60UC1130 • Normal		lale	EMSMode 4
Model: US113 First Uploaded: 2023-07-04 19:58:44	Power -	Z	ForceMode
Update Time: 2023-07-12 10:30:03	2023-10-26 💌	2023-10-26 💌	Charge/DischargeCMD
	😑 Solar 🌒 Grid	Battery Load	Stop
	0.9	d	

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