

T-MAX Plus Series ESS

Quick Installation Guide

Issue: V1.2

Date: 2026-09-01

FOXESS CO., LTD.



Notice

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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.

NOTE:

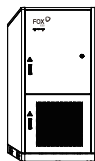


- The product is classified into two models: the Hybrid model (including T-MAX Plus-H-V1 and T-MAX Plus-H-V2) and the AC model (including T-MAX Plus-AC-V1 and T-MAX Plus-AC-V2).

- T-MAX Plus-H-V2 and T-MAX Plus-AC-V2 are only for on-grid mode. Off-grid mode and genset switching are not supported.

1

Packing List



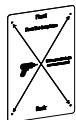
A



F



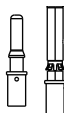
K



P



B



G



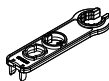
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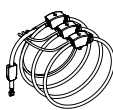
Q



C



H



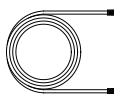
M



D



I



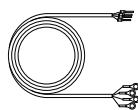
N



E



J

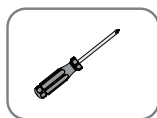


O

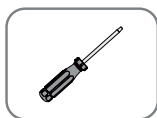
OBJ	QTY	DESC	OBJ	QTY	DESC
A	1	T-MAX Plus	J	4	PACK MSD
B	4	Eyebolt	K	1	EPS-PE Terminal
C	4	Sealing Clay	L	1	Meter
D	12	AC Terminal (DT120-10 300A×12)	M	2	Rogowski Coil (R-coil)
E	3	Transparent Protective Cover for AC Terminal	N	1	LAN Cable
F	16/32	DC Connector* (4 MPPT: Positive×8, Negative×8; 8 MPPT: Positive×16, Negative×16)	O	1	Voltage Sampling Cable
G	16/32	DC Pin Plug* (4 MPPT: Positive×8, Negative×8; 8 MPPT: Positive×16, Negative×16)	P	1	Drilling Template
H	1	DC Connector Removal Tool*	Q	1	Quick Installation Guide
I	5	Ground Terminal (RNB38-8S 150A×5)			

* For H version only.

2 Required Tools



Phillips-Head
Screwdriver



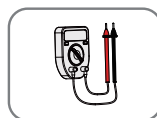
Flat-Head
Screwdriver



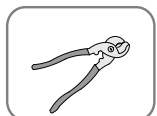
Wire Stripper



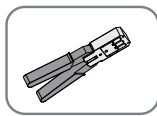
Impact Drill
(Bit: Φ 16mm)



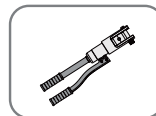
Multimeter
(≥1500 V dc)



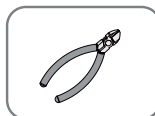
Wire Snips



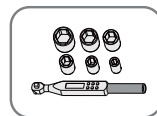
RJ45 Crimping
Pliers



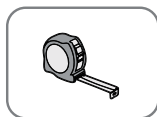
Hydraulic
Clamp



Tweezers



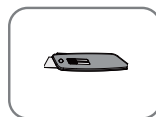
Socket Spanner
(M4~M12)



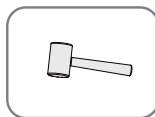
Tape



Marker



Utility Knife



Rubber Mallet



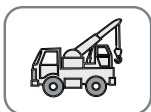
Cable Ties



Wire Crimper



Insulated
Ladder



Crane



Sling
(Length>2000mm*4)



Electric Forklift



Heat Gun



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 unit well protected from hard objects that may damage their exterior appearance or body during handling and installation.

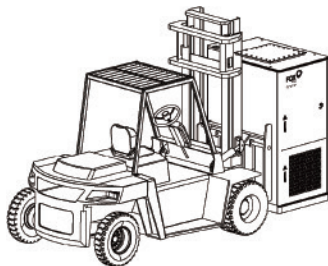
3

Handling

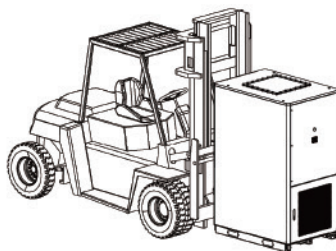
3.1 Forklift Handling

Forklift handling capacity: $\geq 3t$

Adjust the forklift tine width so that the load's center of gravity is centered between the tines.



Side



Front

3.2 Crane Handling

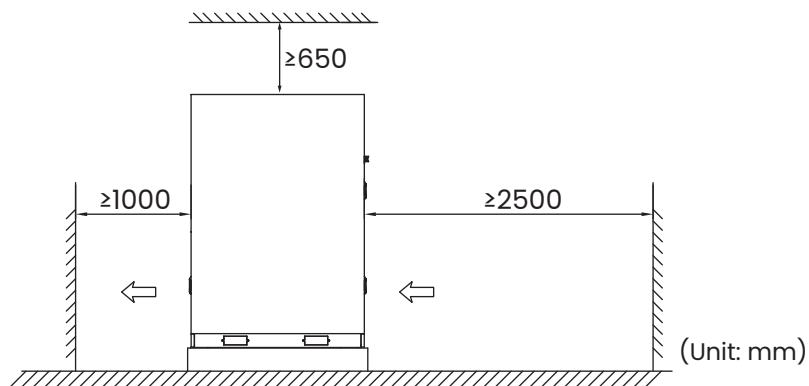
Use slings (min. 3t capacity each). Secure the cabinet, with hook $\geq 1\text{m}$ from the cabinet top and tilt maintained under 10° .



4 Installation Steps

4.1 Space Requirement

4.1.1 Single Unit

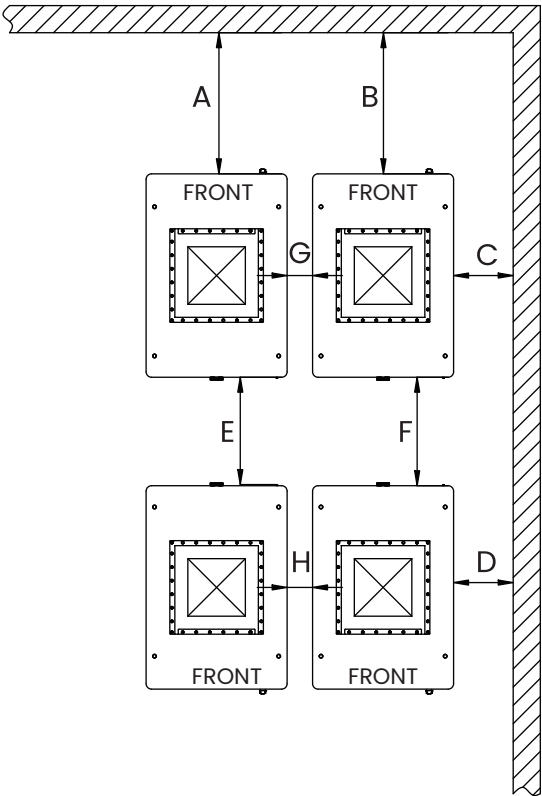


NOTE:



The unit is not recommended for indoor use. For indoor installation, compliance with local regulations is required. Ensure the ambient temperature is $\leq 45^\circ\text{C}$ with adequate ventilation.

4.1.2 Parallel Units

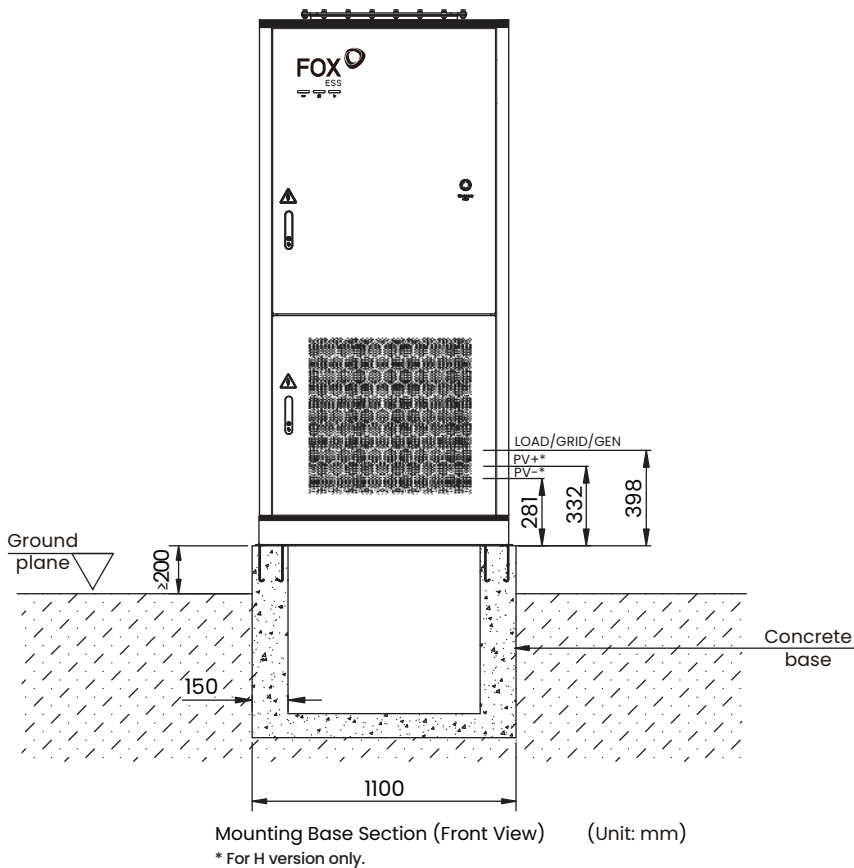


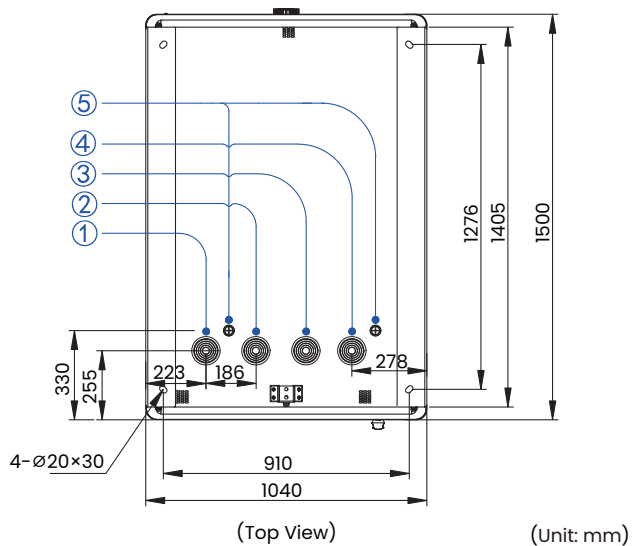
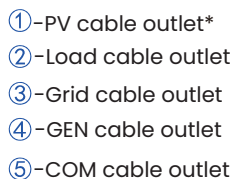
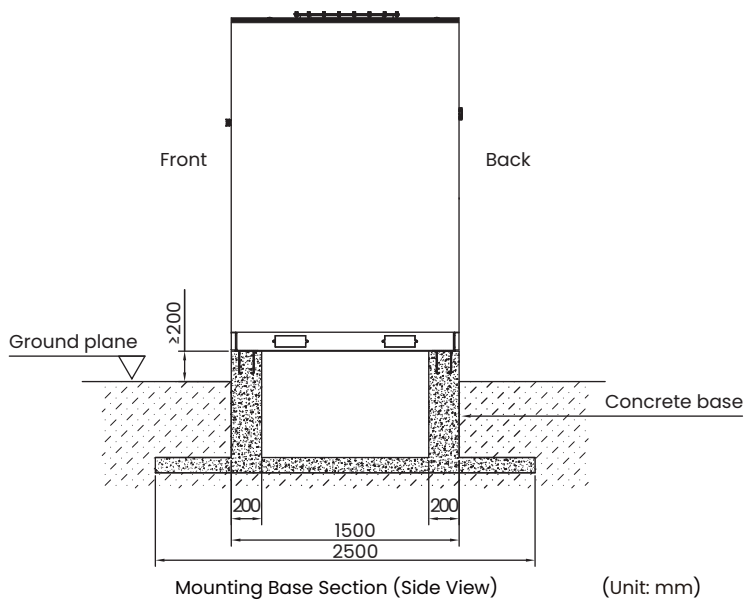
$A=B\geq 2500\text{mm}$, $C=D\geq 10\text{mm}$, $E=F\geq 1000\text{mm}$, $G=H\geq 0\text{mm}$

4.2 Foundation Requirement

Items	Requirements
Base Surface	Be concrete or non-combustible, level, firm, and load-bearing.
Load Capacity	Designed for total equipment weight; if the weight exceeds 3t, reassess and reinforce the foundation accordingly.
Connections	Adjusted based on site conditions. On hard surfaces, secure using welding or bolting.
Water Protection	Keep base above highest historical water level.

The following foundation drawings are for reference only.

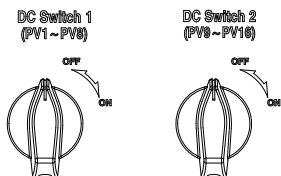




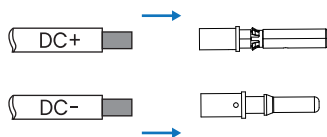
5 System Wiring Steps

5.1 PV Wiring (For H version only)

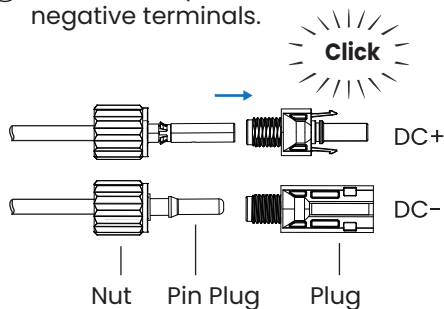
- ① Turn off **DC SWITCH 1** and **DC SWITCH 2**.



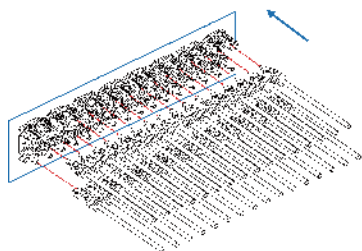
- ③ Prepare the terminals to be mounted on the cables.



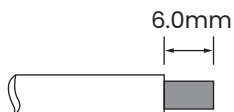
- ⑤ Connect the positive and negative terminals.



- ⑦ Finally, connect the photovoltaic cables to the PV input terminals of the unit.

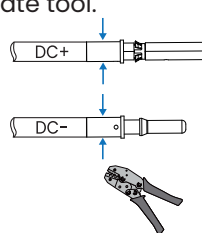


- ② Strip the photovoltaic cables for terminal installation.

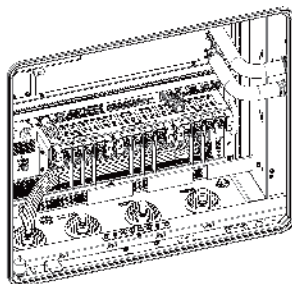
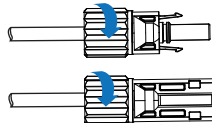


Cross-sectional area: 4–6 mm²

- ④ Perform the crimping process on the terminals using the appropriate tool.



- ⑥ Tighten the terminal locking and sealing nut.



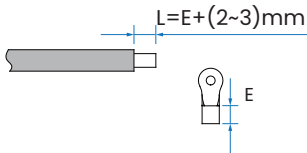
5.2 AC Wiring

-Recommended Specification:

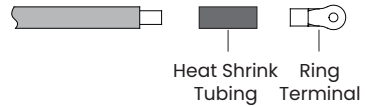
Cable Type	Outer Diameter (mm)	Copper Conductor Sectional Area (mm ²)
LOAD/GRID/GEN Cable	40-70	L1, L2, L3 (N) cables: 90-150 PE: S/2 (S is a sectional area of LOAD/GRID/GEN phase cable)

-Steps

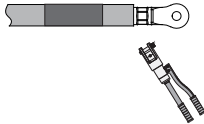
- ① Strip the AC power cables for terminal installation.



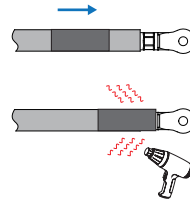
- ② Prepare the ring terminal and heat shrink tubing.



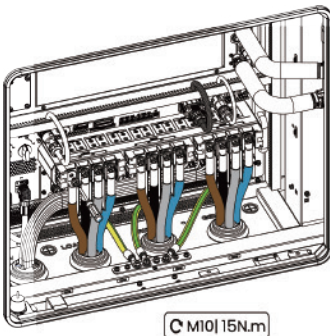
- ③ Crimp the terminal to the AC power cables.



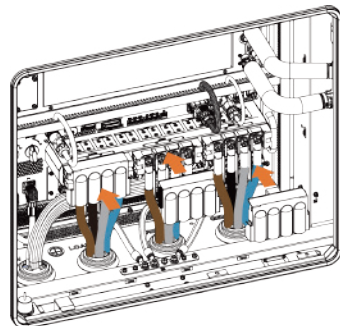
- ④ Apply the heat shrink tubing to the wiring.



- ⑤ Connect the AC cables to the unit input terminals.



- ⑥ Finally, install the transparent protective cover for AC terminals.

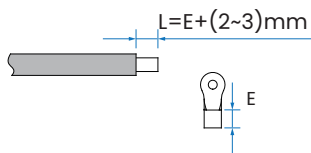


5.3 Ground Connection

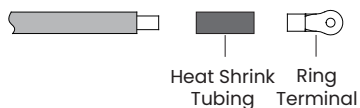
The conductor sectional area of the ground cable is 25–50 mm² (30–35 mm² is recommended).

–Steps

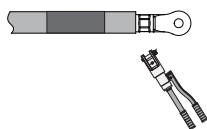
- ① Strip the grounding cables for terminal installation.



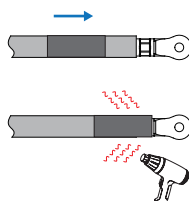
- ② Prepare the ring terminal and heat shrink tubing.



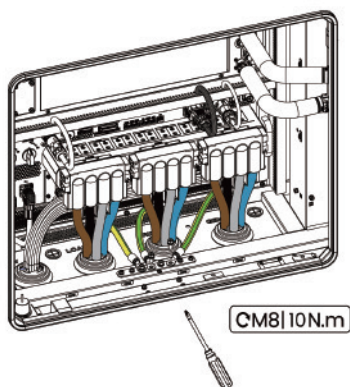
- ③ Crimp the terminal to the grounding cables.



- ④ Apply the heat shrink tubing to the wiring.



- ⑤ Finally, connect the grounding cables to the grounding terminals of the unit.

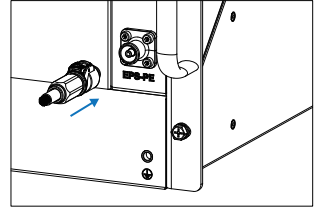
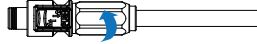
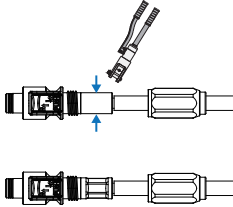


5.4 EPS Ground Connection

The conductor section area of the ground cable is 15-25 mm².

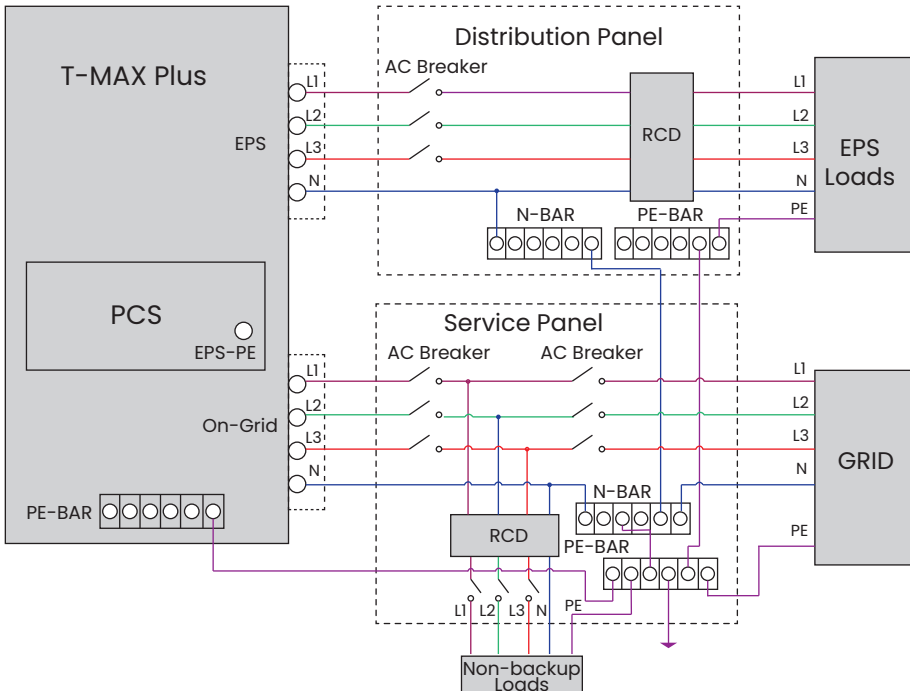
-Steps

- ① Mounting the EPS grounding connector on the unit's grounding cable.
- ② Securing the EPS grounding connector.
- ③ Connecting the grounding cable to the EPS terminal of the unit.



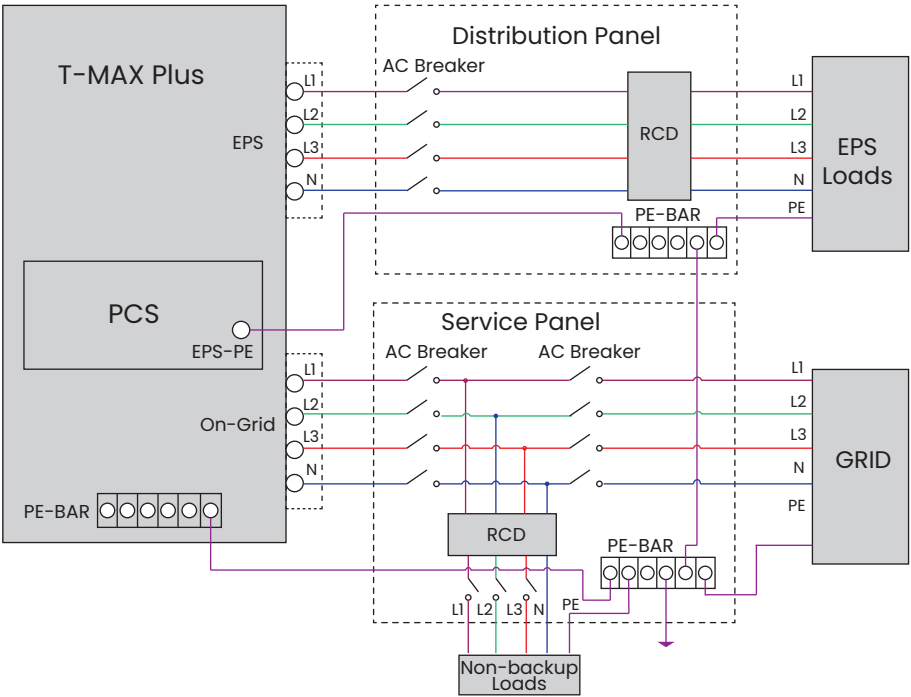
Scenario 1

The N and PE cables need to be connected together in the service panel. For Countries such as Australia, New Zealand, South Africa, etc., please follow local wiring regulations.



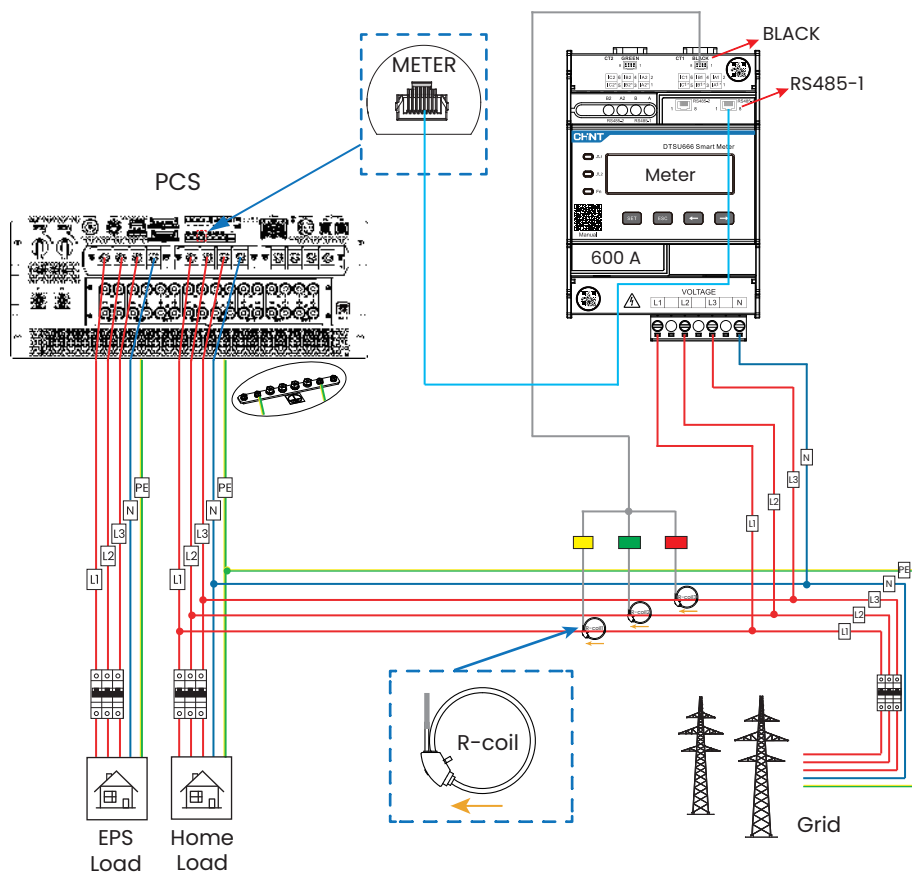
Scenario 2

The neutral is separated from the PE in the service panel.



5.5 Meter Connection

5.5.1 DC Couple

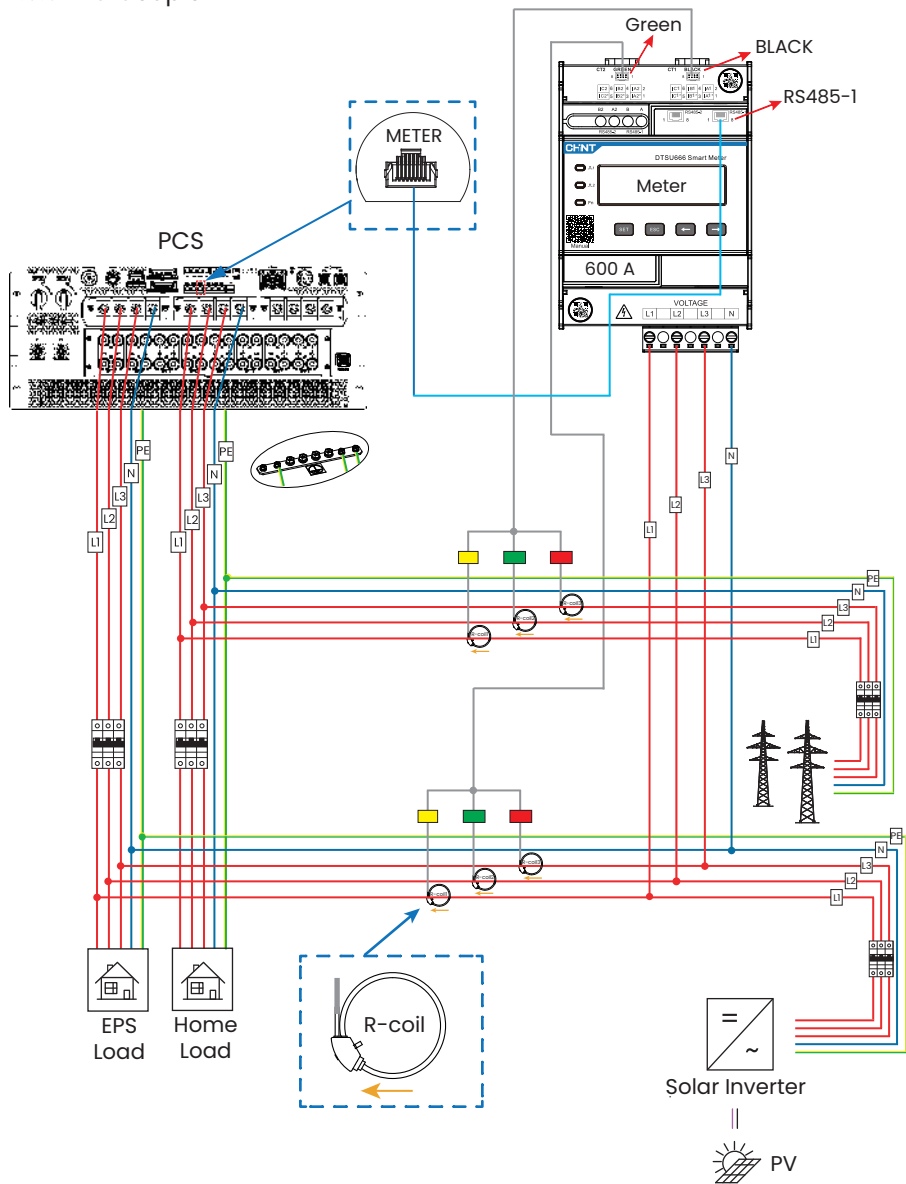


NOTE:



The unit is equipped with a 600 A CHNT smart meter, which must only be used with the R-coil supplied in the accessory kit. Do not use R-coils of other models, as this may result in operational failures.

5.5.2 AC Couple



NOTE:



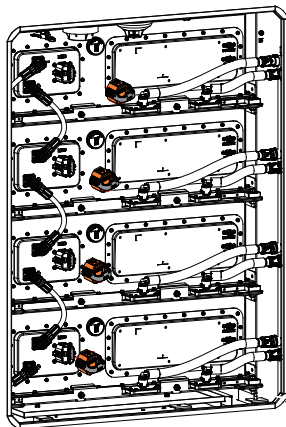
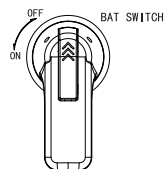
If the unit is connected to a diesel generator, grid-tied inverters shall not be connected to the load port.

6 MSD Installation

NOTE:

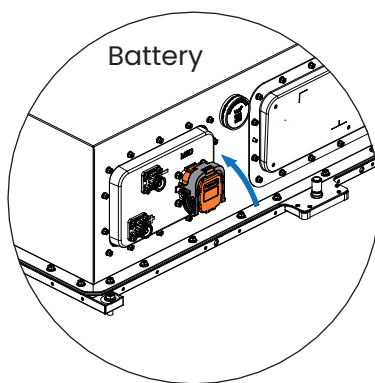
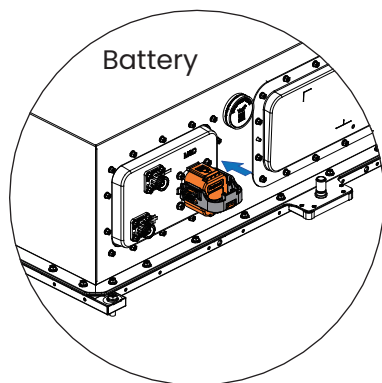


Ensure the **BAT SWITCH** is in the **OFF** state before installing the MSD.

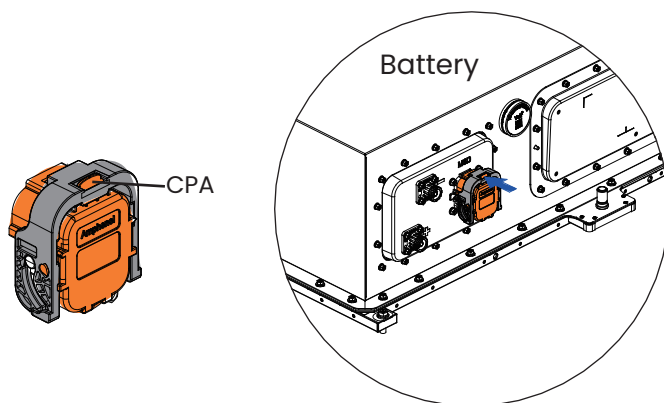


-Steps

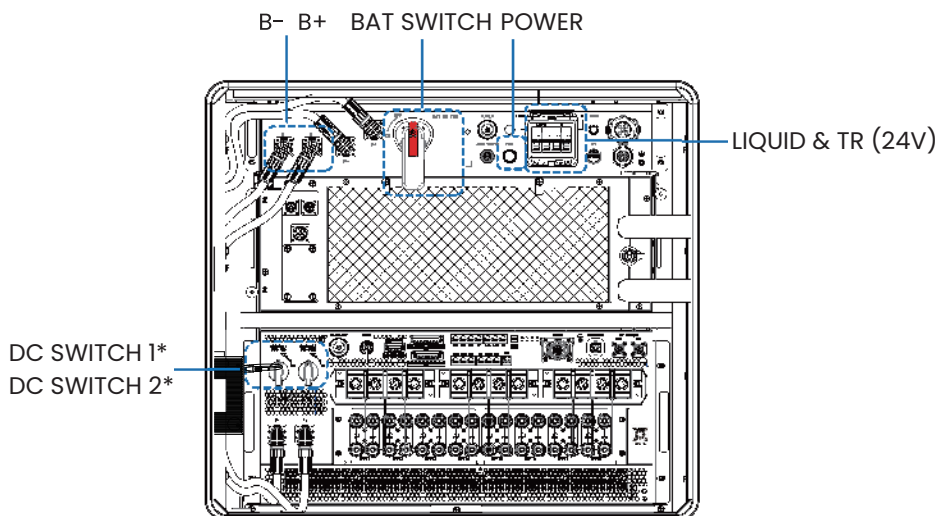
- ① Plug the MSD socket into the battery.
- ② Turn the wrench to the 90-degree position.



- ③ Push the CPA to the locking position.

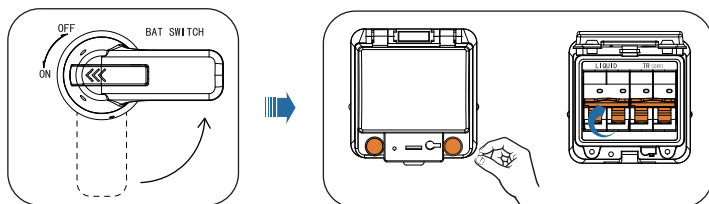


7 System Startup



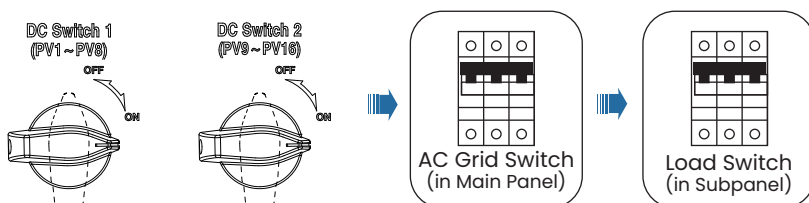
* For H version only.

1. Turn on the **BAT SWITCH**, **LIQUID** switch, and **TR (24V)** switch.



2. (Case 1) **Normal Mode**: When there is PV and grid access,

- Turn on the **DC Switch 1***, **DC Switch 2***, **AC Grid Switch** and **Load Switch**.



*DC Switch 1 and DC Switch 2 are available for H version only.

- (Case 2) **Black Start**: When there is no PV and grid access,

- Press and hold the battery **POWER** button for 3 seconds, and then release.
- Press the battery **POWER** button for 3 times within 4 seconds (completed within 30 seconds of the previous step).

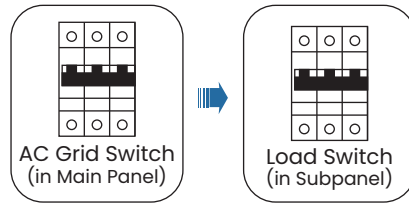


WARNING:

Do not turn on the **DC Switch 1*** and **DC Switch 2*** while the unit is running. Otherwise, it may cause a system failure.

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

1. Shut down the PCS through the shutdown operation command on the WEB interface, the Fox APP 2.0 setting page, or the local touch screen.
2. Open the electrical cabinet door.
3. Turn off **AC Grid Switch** and **Load Switch**.



4. Press and hold the **POWER** button for more than 5 seconds.



5. Turn off the **LIQUID** switch, **TR (24V)** switch, and **BAT SWITCH** on the high voltage box.

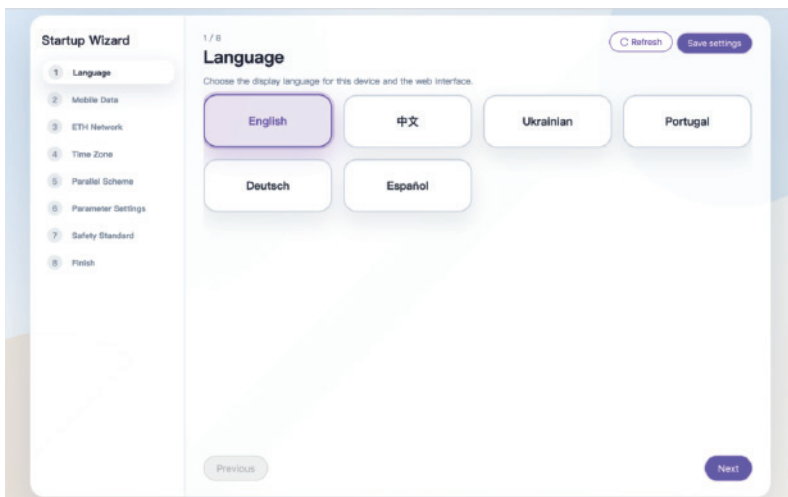
6. Turn off the **DC SWITCH1** and **SWITCH2** on the PCS.

8 EMS Configuration

1. Open the LCD screen of the unit and log in to the EMS with your account and password. Default account and password: "admin" and "admin1". You can also scan the QR code using a tablet or smartphone to connect to the device WiFi, then enter "192.168.138.1:8089" in the browser to access the local configuration page.



2. During initial unit deployment, the Startup Wizard will pop up. Users shall follow the on-screen prompts to complete basic configuration on each unit. On the "**Language**" interface, select a language and tap "**Next**" to continue.



3. Configure mobile data parameters as required.

- **Case 1 – 4G Connection**

- a. Check the **"Status"** section to confirm whether the 4G module is online.
- b. Enter the monthly traffic limit according to the local SIM card plan.
- c. Tap **"Next"** to save the configuration and continue.

- **Case 2 – Ethernet Connection**

For Ethernet connections, mobile data parameters do not need to be configured. Tap **"Skip"** at the bottom right.

Startup Wizard

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Mobile Data

Review the mobile data settings. You can skip this step and configure it later.

Status

SIM Card Network 10.10.25.215 Network Type 4G Signal Strength Online

Monthly traffic package 1.00 GB

APN Mode Automatic

APN

APN Username

Network Mode 4G/3G/2G(Automatic)

Authentication type None

APN Dialup Number *99#

APN User Password

Previous Skip Next

Reset 4G Module

4. Configure network parameters as required.

- **Case 1 – 4G Connection**

NOTE:



The following steps apply to parallel systems. If a single-unit system is used, refer to case 2 or case 3 for configuration.

For the main unit, follow the steps below to configure network parameters:

- a. Confirm whether the EMS icon is green.
- b. Set **"WAN/LAN"** to **"LAN"** and disable **"DHCP"**.
- c. Set **"IP Address"**, **"Gateway"**, **"Preferred DNS Server"** to **"192.168.0.1"**, and **"Subnet Mask"** to **"255.255.255.0"**.
- d. Tap **"Next"** to continue.

Startup Wizard

- Language
- Mobile Data
- ETH Network**
- Time Zone
- Parallel Scheme
- Parameter Settings
- Safety Standard
- Finish

3 / 8

ETH Network

Check the cable, cloud connection, and internet status before configuring Ethernet.

EMS — Router — Network — Server

ETH1

WAN/LAN: ☐ WAN ☒ LAN

DHCP: ☒

IP Address: 192.168.0.1 Subnet Mask: 255.255.255.0

Gateway: 192.168.0.1 Preferred DNS Server: 192.168.0.1

Alternate DNS Server:

[Previous](#) [Next](#)

For a sub unit, the network parameters do not need to be configured. Confirm whether the “EMS-to-router” link is green, the “**WAN/LAN**” is set to “**WAN**”, and “**DHCP**” is enabled. Tap “**Next**” to continue.

Startup Wizard

- Language
- Mobile Data
- ETH Network**
- Time Zone
- Parallel Scheme
- Parameter Settings
- Safety Standard
- Finish

3 / 8

ETH Network

Check the cable, cloud connection, and internet status before configuring Ethernet.

EMS — Router — Network — Server

ETH1

WAN/LAN: ☒ WAN ☐ LAN

DHCP: ☒

IP Address: 192.168.0.2 Subnet Mask: 255.255.255.0

Gateway: 192.168.0.2 Preferred DNS Server: 192.168.0.2

Alternate DNS Server:

[Previous](#) [Next](#)

• Case 2 – Ethernet Connection

- Check the connection status of the EMS, router, network and server, and confirm whether the corresponding icons are green.
- Tap “**Next**” to continue.

• Case 3 – Static IP Address

a. When a static IP address is required, disable the “**DHCP**” and enter the IP address, subnet mask, gateway, preferred DNS address and alternate DNS address.

b. Tap “**Next**” to continue.

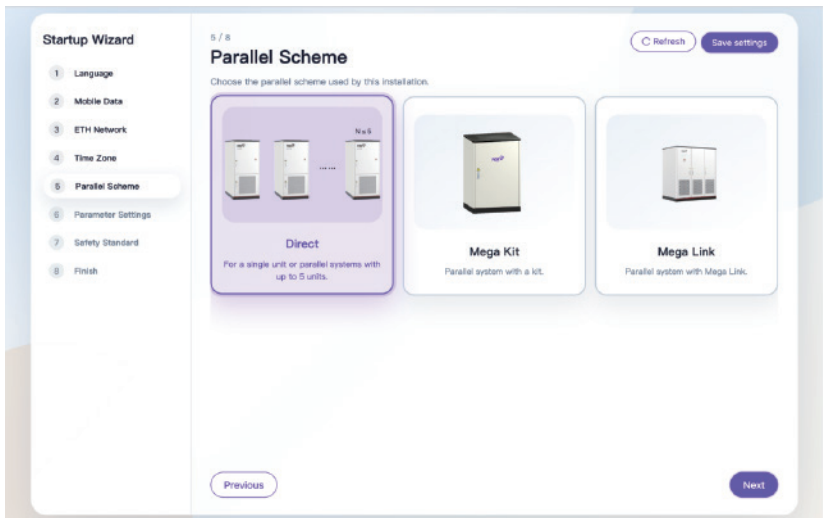
The screenshot shows the 'ETH Network' configuration screen, which is the third step (3 / 7) of the 'Startup Wizard'. On the left, a sidebar lists the steps: 1. Language, 2. Mobile Data, 3. ETH Network (selected), 4. Time Zone, 5. Parallel Scheme, 6. Parameter Settings, and 7. Safety Standard. The main area is titled 'ETH Network' and includes a sub-instruction: 'Check the cable, cloud connection, and Internet status before configuring Ethernet.' Below this is a network topology diagram showing a sequence of four components: EMS, Router, Network, and Server, connected by a green line. The configuration form for the 'ETH1' interface is displayed, with options for 'WAN/LAN' (WAN is selected) and 'DHCP' (disabled). Fields for 'IP Address' (192.168.10.18), 'Subnet Mask' (255.255.255.0), 'Gateway' (192.168.10.1), and 'Preferred DNS Server' (192.168.10.1) are filled in. There is also an empty field for 'Alternate DNS Server'. At the bottom, there are 'Previous' and 'Next' buttons. 'Refresh' and 'Save settings' buttons are located in the top right corner.

5. After the unit is connected to the network, the time zone is automatically synchronized. Confirm whether the displayed date and time are correct and tap “**Next**”.

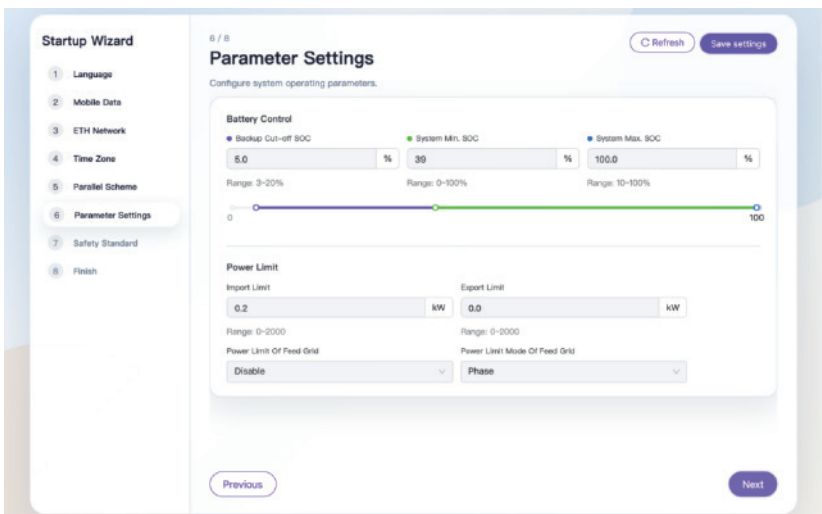
The screenshot shows the 'Time Zone' configuration screen, which is the fourth step (4 / 7) of the 'Startup Wizard'. The sidebar on the left shows the progression: 1. Language, 2. Mobile Data, 3. ETH Network, 4. Time Zone (selected), 5. Parallel Scheme, 6. Parameter Settings, and 7. Safety Standard. The main area is titled 'Time Zone' with the instruction: 'Set the clock source, time zone, date, and time for this system.' The configuration form includes 'Time Synchronization' set to 'Network Synchronization(NTP)' and 'Time Zone' set to 'Asia/Shanghai'. The 'Date' is displayed as '2026-07-20' and the 'Time' as '10:18:08'. There are 'Previous' and 'Next' buttons at the bottom. 'Refresh' and 'Save settings' buttons are in the top right corner.

6. Select the parallel scheme applicable to the current installation scenario and tap “**Next**”.

- For a single-unit system, select **“Direct”**.
- For a multi-unit system, select **“Mega Kit”** when a Mega Kit is installed; select **“Mega Link”** when a Mega Link is installed; otherwise, select **“Direct”**.



7. Configure the system operating parameters as required.



8. Configure safety regulation parameters.
- a. Select the region according to the project location.
 - b. Select the specific safety standard under that region.
 - c. Tap **“Next”** to continue.

Startup Wizard

1 Language
2 Mobile Data
3 ETH Network
4 Time Zone
5 Parallel Scheme
6 Parameter Settings
7 **Safety Standard**
8 Finish

7 / 8

Safety Standard

Select a region first, then choose the matching safety standard.

Europe Asia Africa North America
Oceania South America

Previous Next



Startup Wizard

1 Language
2 Mobile Data
3 ETH Network
4 Time Zone
5 Parallel Scheme
6 Parameter Settings
7 **Safety Standard**
8 Finish

7 / 8

Safety Standard

Select a region first, then choose the matching safety standard.

EC6172(Brazil & Colombia) Malaysia(Malaysia) PEA_TH(Thailand) MEA_TH(Thailand)
Sri Lanka(Sri Lanka) Pakistan(Pakistan) CQC_CN(China) Local(India)
CQC_CN-SE(China) CQC_CN-NE(China) Israel(Israel)

Return

Previous Next

9. On the **"Finish"** interface, complete the startup wizard according to the on-screen prompts.

a. Scan the QR code to download the FoxCloud App 2.0. Users can register or log in to the App as an installer.

b. Scan the QR code in the **"Create Plant"** section to retrieve the system SN list.

c. Create a power plant and add units on the cloud platform.

d. Tap **"Complete"** to finish all settings.

Startup Wizard

1 Language

2 Mobile Data

3 ETH Network

4 Time Zone

5 Parallel Scheme

6 Parameter Settings

7 Safety Standard

8 Finish

8 / 8

RefreshSave Settings

Finish

Complete setup and create the plant in the cloud platform.

FoxCloud App 2.0

1 Download FoxCloud App 2.0



2 Sign up / login

Sign up or login to monitor your devices as an installer

Create Plant

3 Scan or save the QR Code to get the system SN list



4 Create Plant

Add devices by entering the SN or scanning the QR code

PreviousComplete

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