

T-MAX Plus Series ESS

Quick Installation Guide

Issue: V1.0

Date: 2026-04-07

FOXESS CO., LTD.



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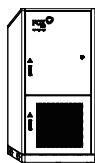


2. Only certified electricians are allowed to operate the device. Operation personnel must wear proper personal protective equipment (PPE).

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.

1 Packing List



A



B



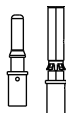
C



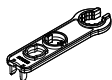
D



E



F



G



H



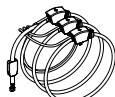
I



J



K



L



M



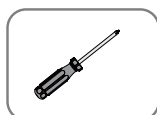
N



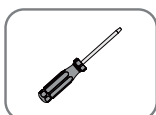
O

OBJ	QTY	DESC	OBJ	QTY	DESC
A	1	T-MAX Plus	I	4	PACK MSD
B	4	Eyebolt	J	1	EPS-PE Terminal
C	4	Sealing Clay	K	1	Meter
D	12	AC Terminal (SC120-10 300A×12)	L	1	CT
E	16/32	DC Connector (4 MPPT: Positive×8, Negative×8; 8 MPPT: Positive×16, Negative×16)	M	1	LAN Cable
F	16/32	DC Pin Plug (4 MPPT: Positive×8, Negative×8; 8 MPPT: Positive×16, Negative×16)	N	1	Drilling Template
G	1	DC Connector Removal Tool	O	1	Quick Installation Guide
H	5	Ground Terminal (RNB38-8S 150A×5)			

2 Required Tools



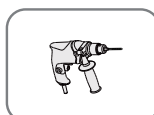
Phillips-Head
Screwdriver



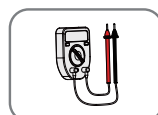
Flat-Head
Screwdriver



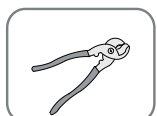
Wire Stripper



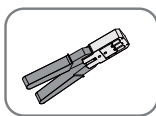
Impact Drill
(Bit: Φ 16mm)



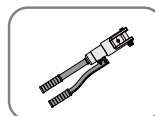
Multimeter
(≥1500 V dc)



Wire Snips



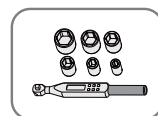
RJ45 Crimping
Pliers



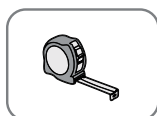
Hydraulic
Clamp



Tweezers



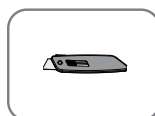
Socket Spanner
(M4~M12)



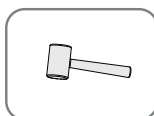
Tape



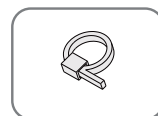
Marker



Utility Knife



Rubber Mallet



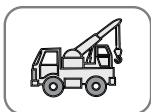
Cable Ties



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.

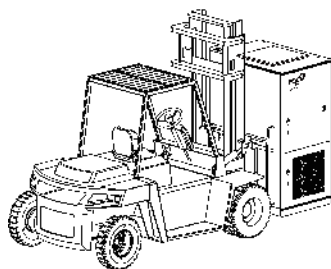
3

Handling

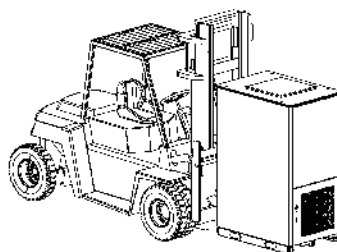
3.1 Forklift Handling

Forklift handling capacity: $\geq 3t$

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



Side



Back

3.2 Crane Handling

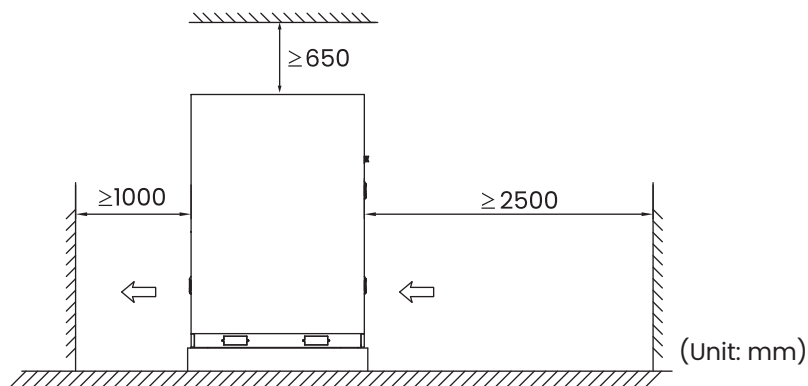
Use slings (min. 3t capacity each). Secure the cabinet, with hook $\geq 1\text{m}$ from the cabinet top and tilt maintained under 10° .



4 Installation Steps

4.1 Space Requirement

4.1.1 Single Unit

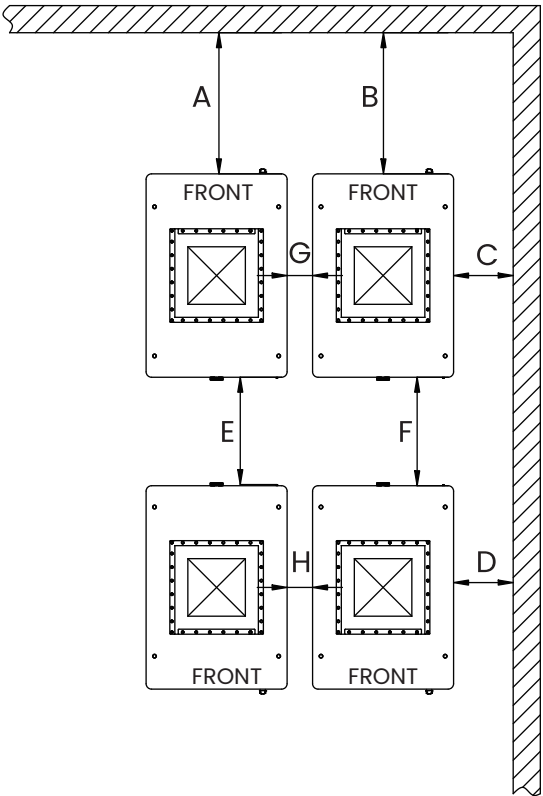


NOTE:



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

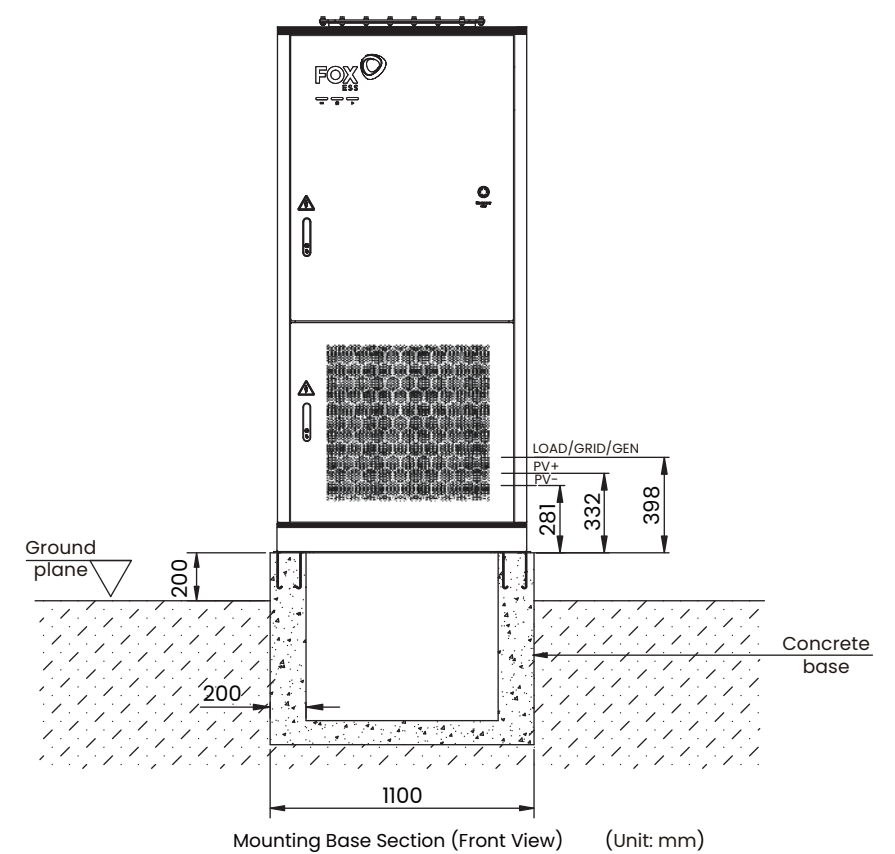


$A=B=2500\text{mm}$, $C=D=10\text{mm}$, $E=F=1000\text{mm}$, $G=H=0\text{mm}$

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.

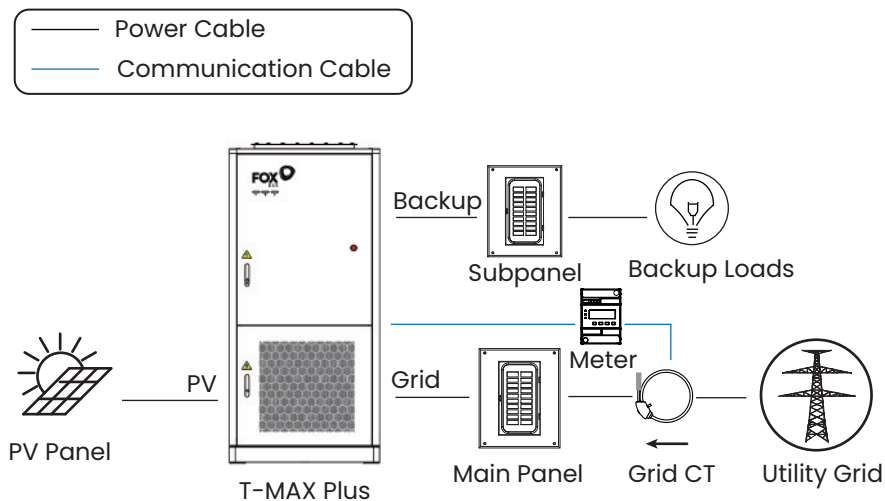
The following foundation drawings are for reference only.



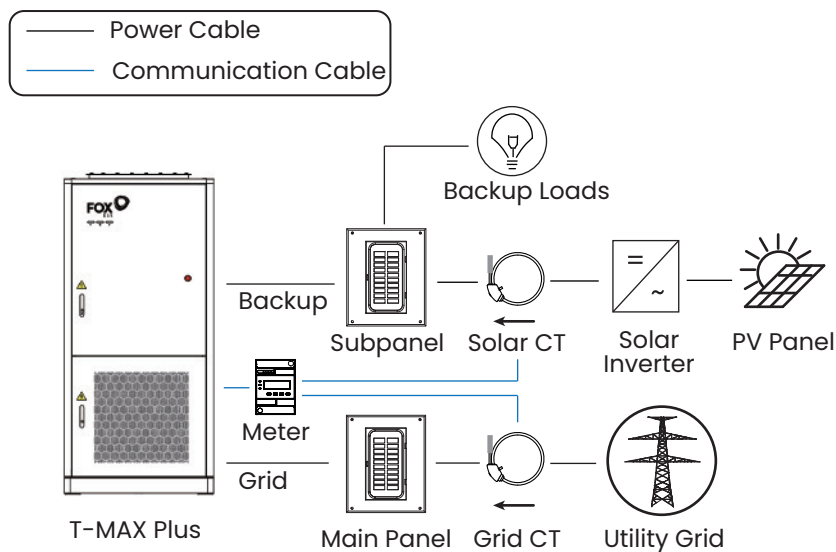
5 System Wiring Diagram

5.1 Whole-home Backup

Whole-home Backup (DC Couple)

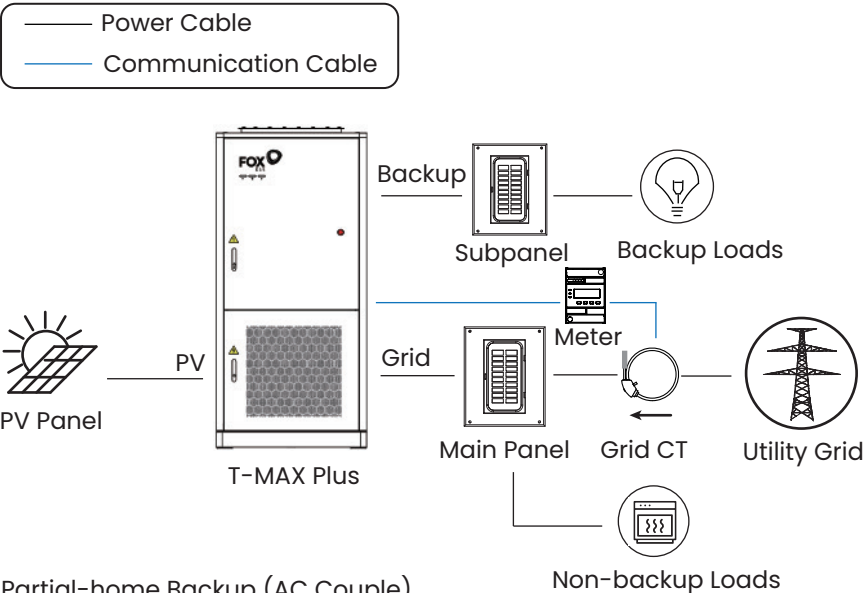


Whole-home Backup (AC Couple)

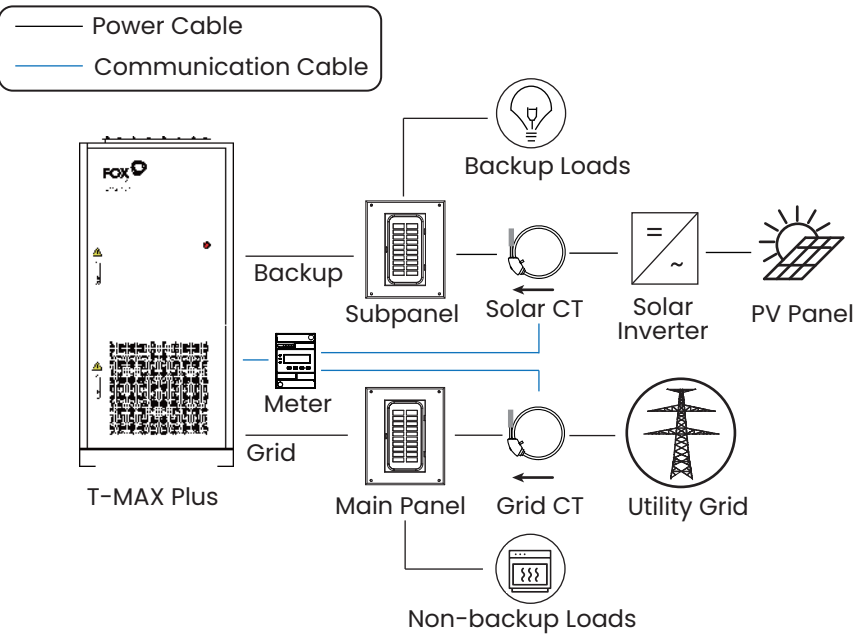


5.2 Partial-home Backup

Partial-home Backup (DC Couple)



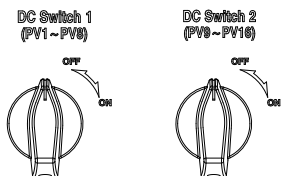
Partial-home Backup (AC Couple)



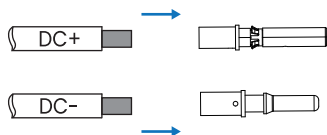
6 System Wiring Steps

6.1 PV Wiring

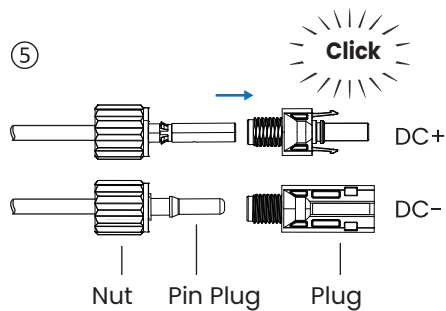
- ① Turn off **DC SWITCH 1** and **DC SWITCH 2**.



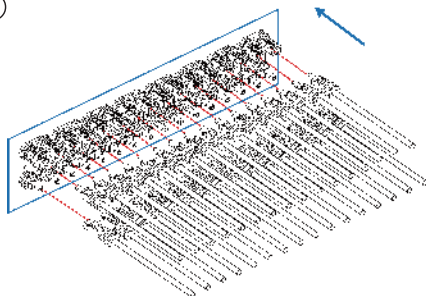
③



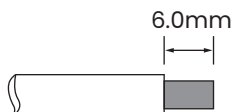
⑤



⑦

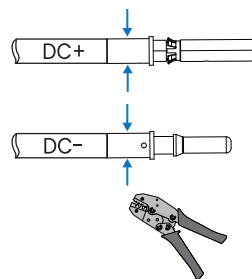


②

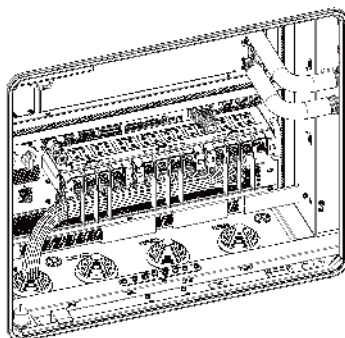
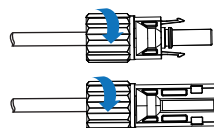


Cross-sectional area: 4-6 mm²

④



⑥

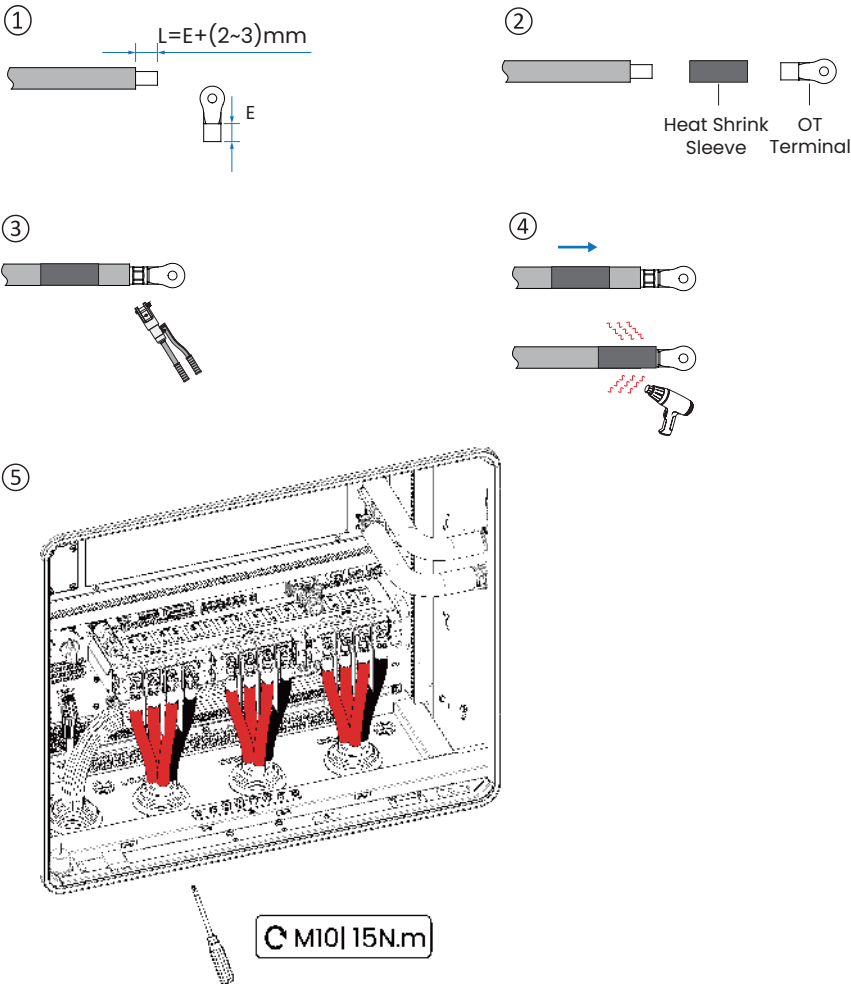


6.2 AC Wiring

-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

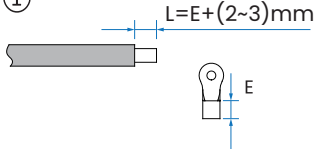


6.3 Ground Connection

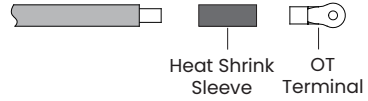
The conductor sectional area of the ground cable is 25–50 mm² (30–35 mm² is recommended).

-Steps

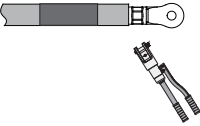
①



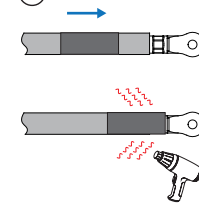
②



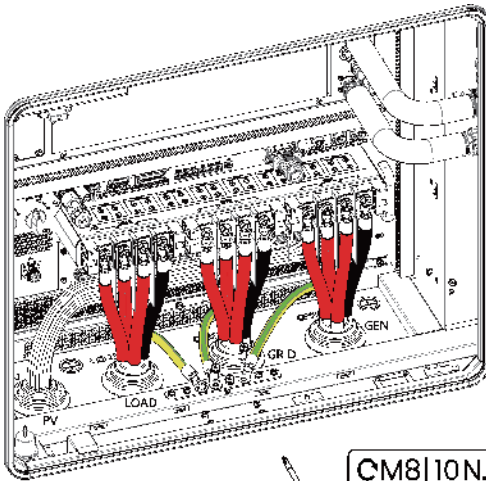
③



④



⑤



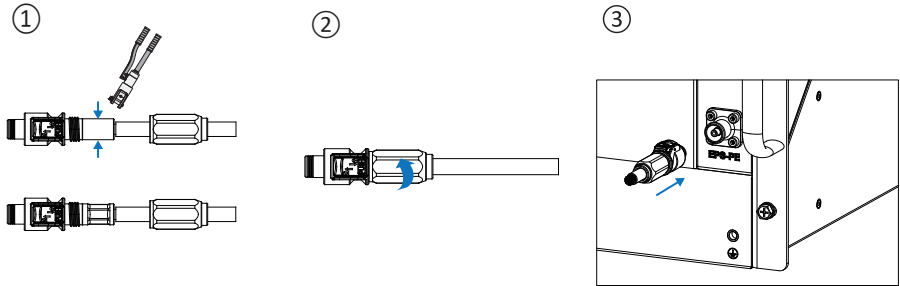
CM810N.m



6.4 EPS Ground Connection

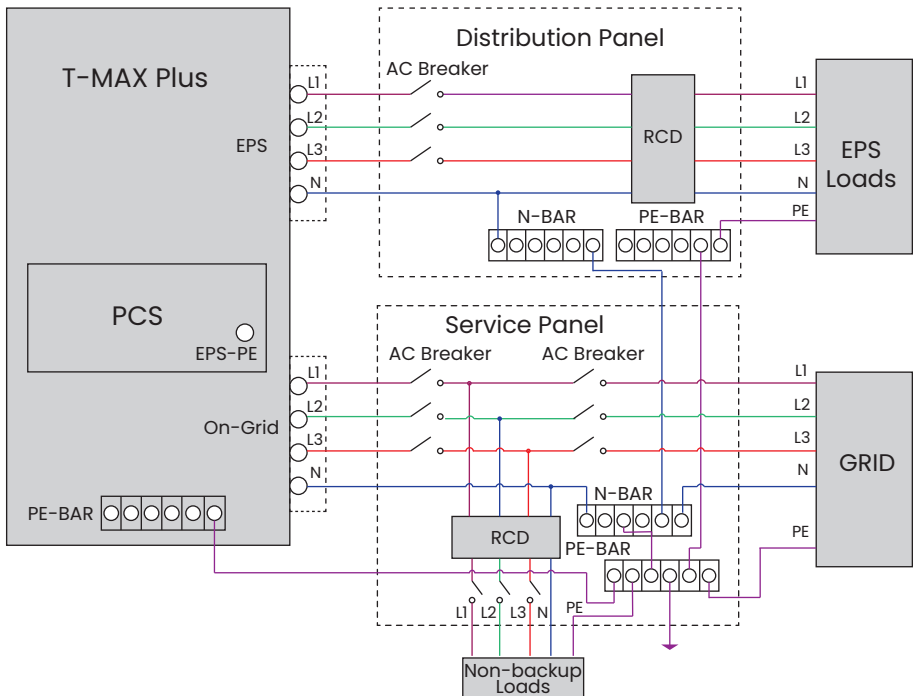
The conductor section area of the ground cable is 15-25 mm².

-Steps



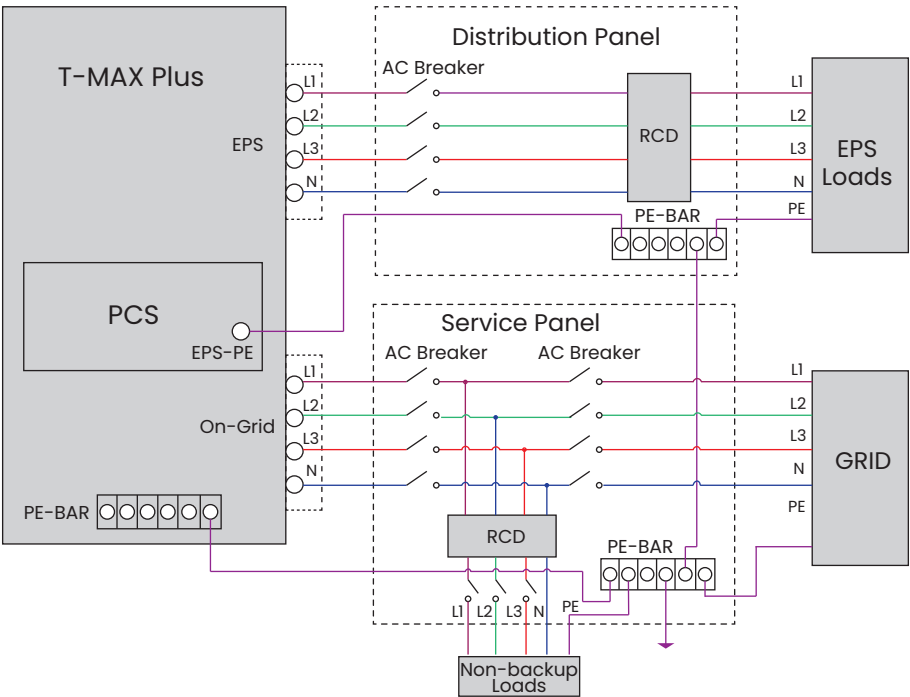
Scenario 1

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



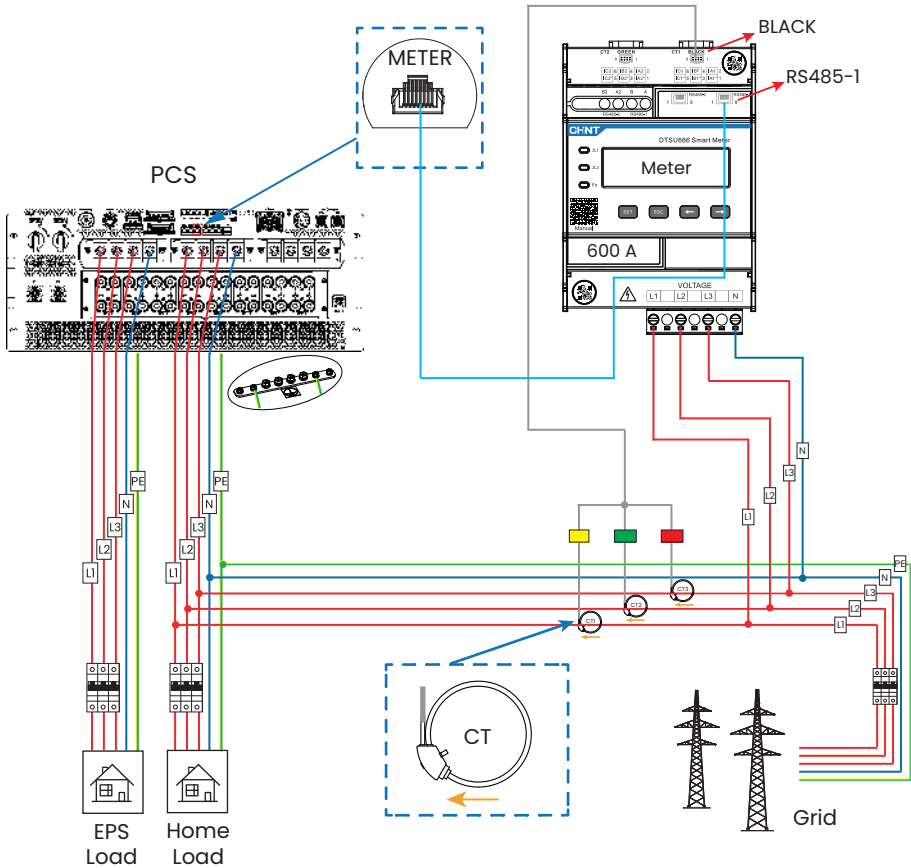
Scenario 2

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



6.5 Meter Connection

6.5.1 DC Couple

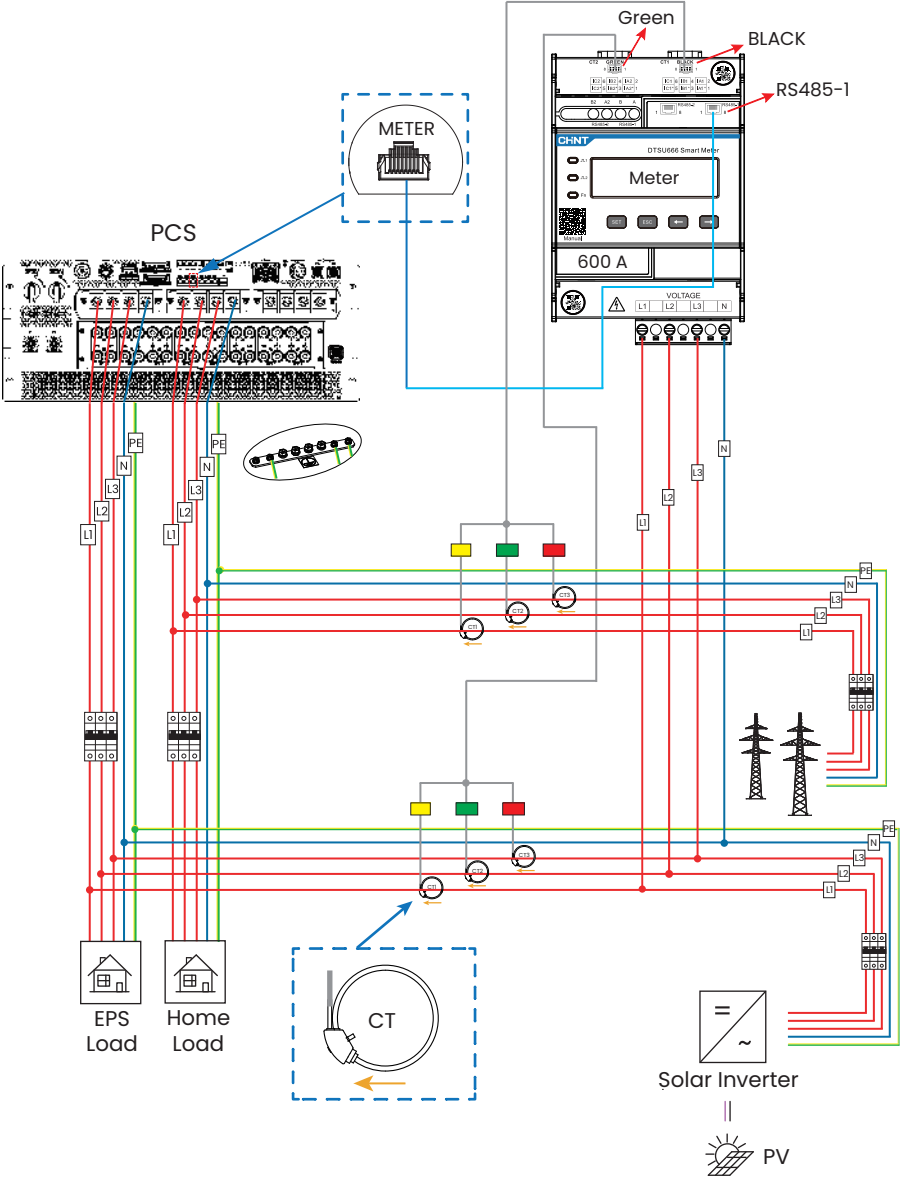


NOTE:



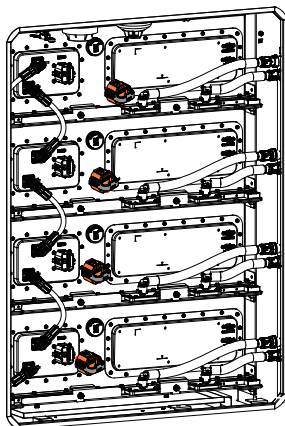
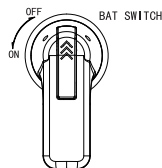
The unit is equipped with a 600 A CHNT smart meter, which must only be used with the CT supplied in the accessory kit. Do not use CTs of other models, as this may result in operational failures.

6.5.2 AC Couple

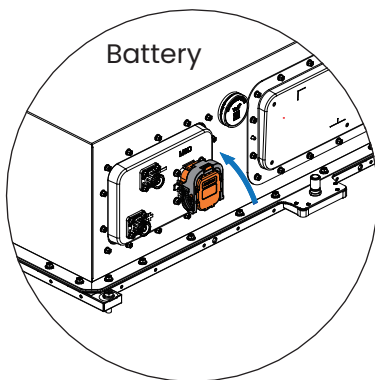
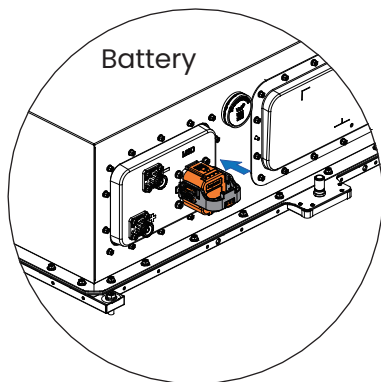


NOTE:

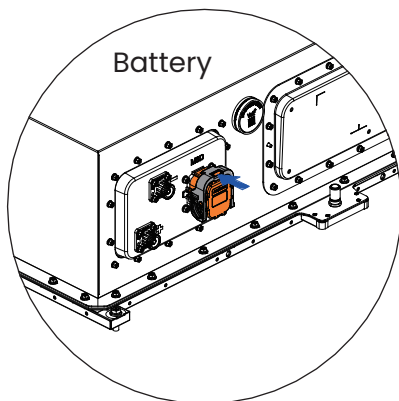
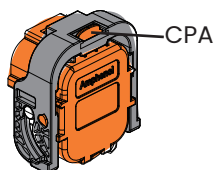
Ensure the **BAT SWITCH** is in the **OFF** state before installing the MSD.

**-Steps**

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



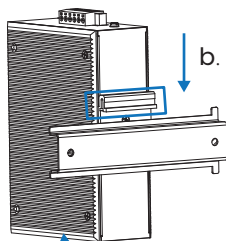
- ③ Push the CPA to the locking position.



8 Switch Installation

-Steps

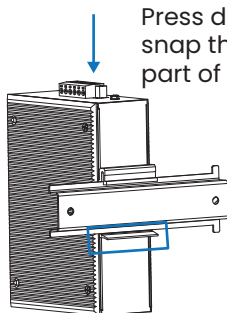
①



a. Tilt the switch forward.

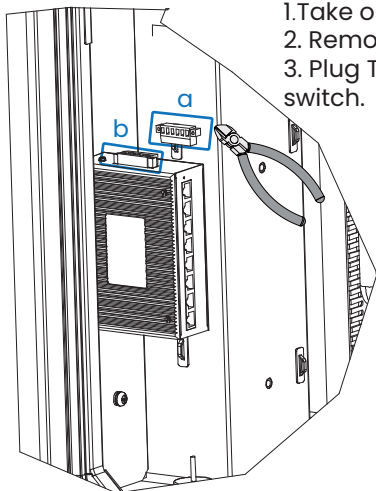
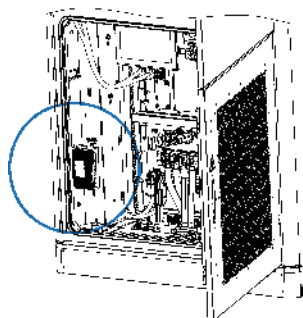
b. Snap into the rail.

②



Press down to snap the lower part of the buckle.

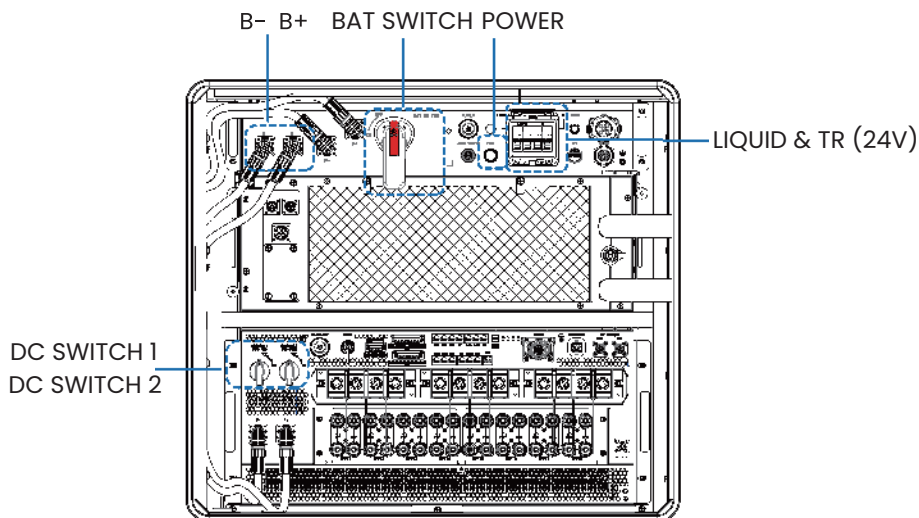
③



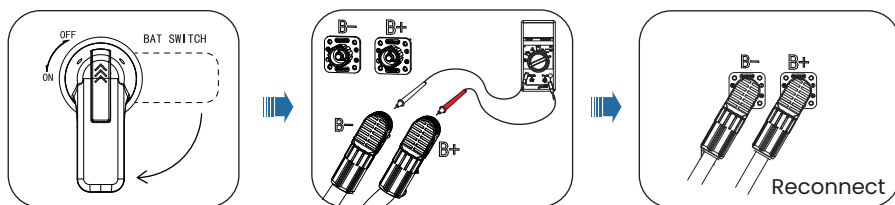
1. Take out Terminal a.
2. Remove Terminal b.
3. Plug Terminal a into the switch.

9

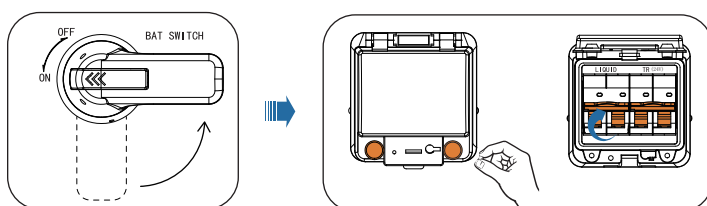
System Startup



1. Turn off the **BAT SWITCH**, test the voltage of battery connectors unplugged from **B+** and **B-** with a multimeter, voltage range 672-876Vdc, and reconnect battery connectors.

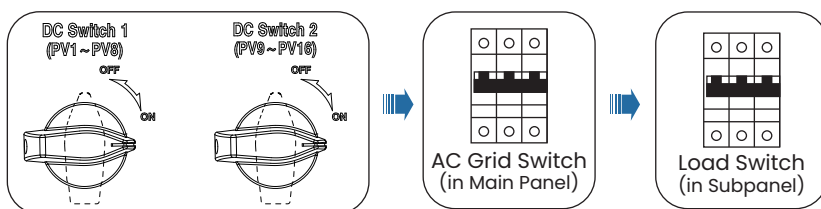


2. Turn on the **BAT SWITCH**, **LIQUID** switch, and **TR (24V)** switch.



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

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



(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:

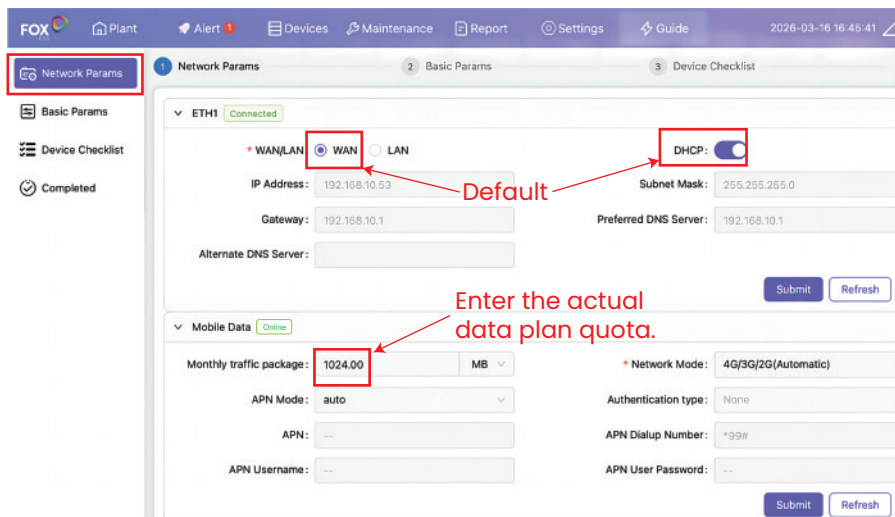
Do not turn on **DC Switches** while the unit is running. Otherwise, it may cause a system fault.

10 EMS Configuration

1. Enter the username “admin” and password “admin1”, and tap “Log In”. Or scan the QR code using a PAD or smartphone to connect to the device WiFi and enter 192.168.138.1:8089 in the browser to access the local configuration page.



2. The default WAN mode is DHCP, allowing the device to obtain an IP address automatically from the router. For third-party EMS control, disable DHCP and configure a static IP, then tap “Submit”. After inserting the 4G SIM card, enter the data plan quota to enable data usage alerts.



3. After connecting to the Internet, the date and time will be synchronized automatically. The user can manually modify it if necessary, and then tap “Submit”.

FOX Plant Alert 1 Devices Maintenance Report Settings Guide

Network Params ✓ Network Params 2 Basic Params 3 Device Checklist

Basic Params

Device Checklist

Completed

▼ Date Time

* Time Synchronization: Network Synchronization(NTP)

* Time Zone: Asia/Shanghai

* Date: 2026-03-16

* Time: 16:45:46

Submit Refresh

4. On Safety Settings page, select “Safety standard” as required (the latest PCS firmware version is required. If not available, disconnect the PCS AC and DC connections, then restart the PCS).

FOX Plant Alert 1 Devices Maintenance Report Settings Guide 2026-03-16 16:45:5

Network Params ✓ Network Params ✓ Basic Params 3 Device Checklist

Basic Params

Safety Settings

Device Checklist

Completed

Meter Settings

* Safety standard: Local

Select as required.

Submit Refresh

5. You can adjust the CT ratio on this page as needed. Tap “Submit”.

FOX Plant Alert 1 Devices Maintenance Report Settings Guide 2026-04-07 09:35:09 admin

Network Params ✓ Network Params ✓ Basic Params 3 Device Checklist 4 Completed

Basic Params

Safety Settings

Device Checklist

Completed

Meter Settings

* Grid Meter CT Ratio: 0 (1~2000)

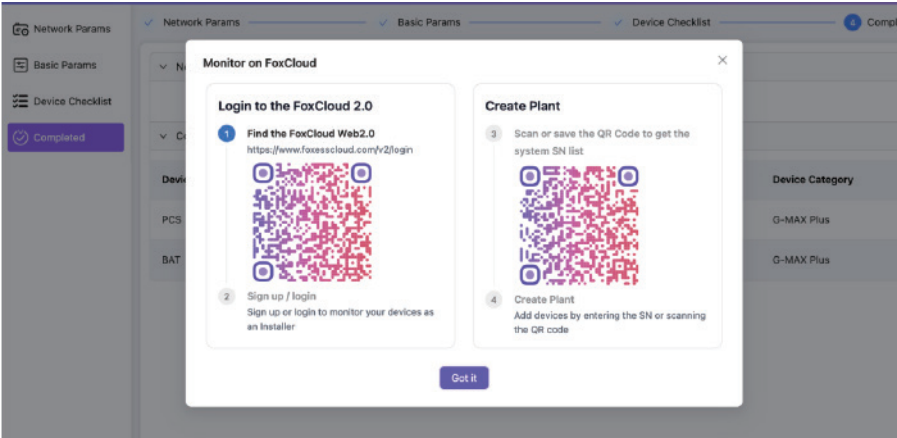
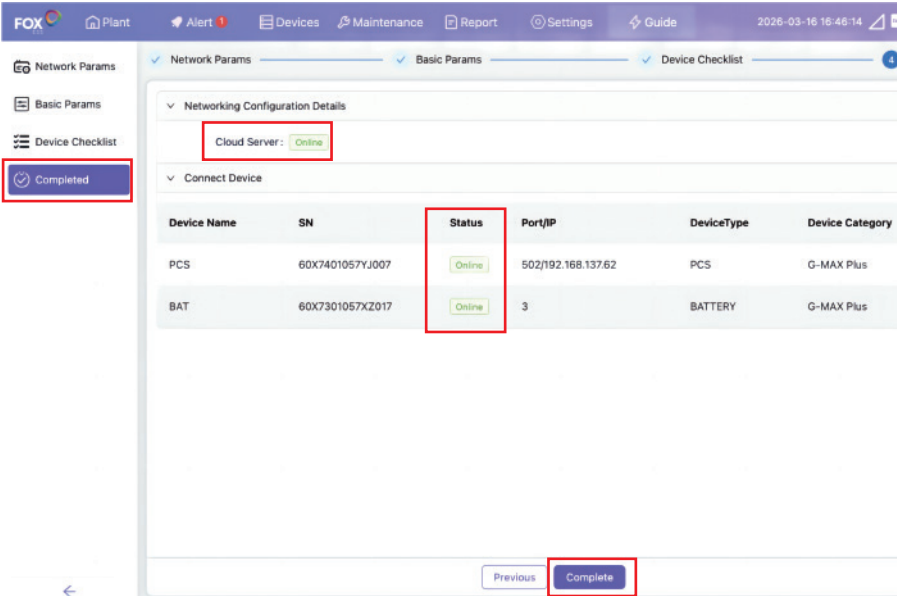
* Solar Meter CT Ratio: 100 (1~2000)

* Generator Meter CT Ratio: 100 (1~2000)

Adjust as needed.

Submit Refresh

6. Check that all devices are online. Tap “Complete”. A QR code will pop up, prompting the user to login to the FoxCloud 2.0 and create a plant.





10-203-00732-00-X