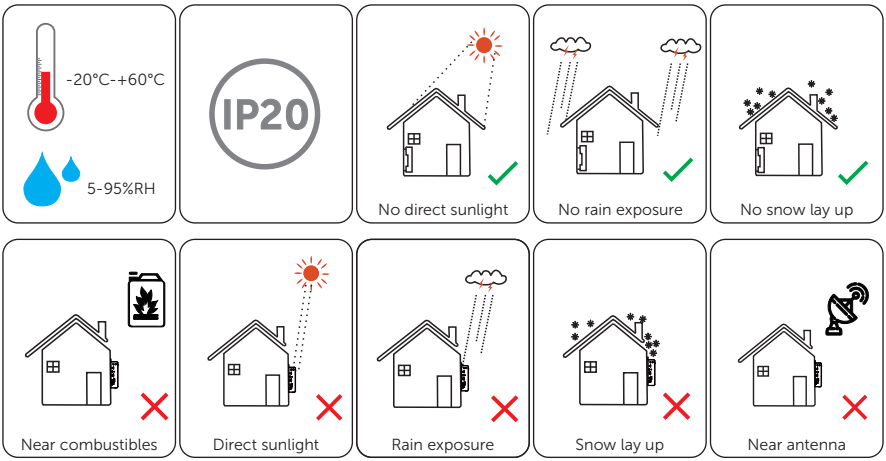
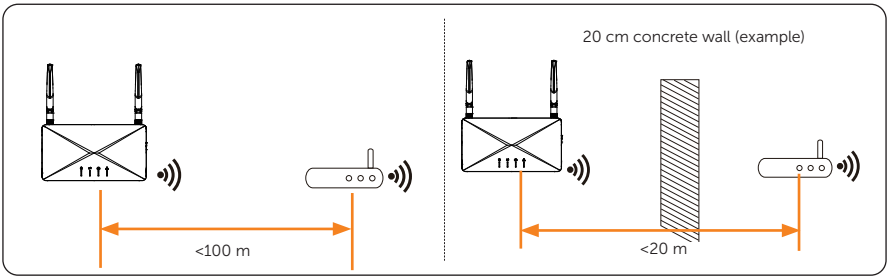
- Install all ECC-Bs and DC connectors under the PV modules.
- Avoid direct exposure to UV, rain and other harmful weather events.
- Avoid electromagnetic inlterference in case of the malfunction of electronic equipment.



4.3.2 Preinstallation check

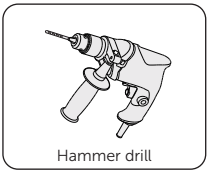
For Wi-Fi mode, the longest connection distance between the router and the device should be no more than 100 m; if there is a wall between the router and the device, the longest connection distance is 20 m.



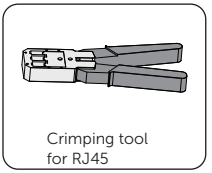
4.4 Tools Requirement

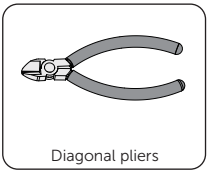
4.4.1 Recommended Equipment

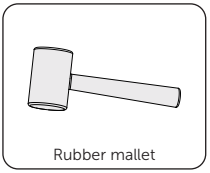
Installation tools include but are not limited to the following recommended ones. If necessary, use other auxiliary tools on site.

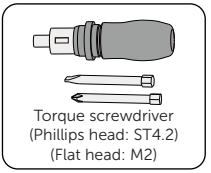

Hammer drill

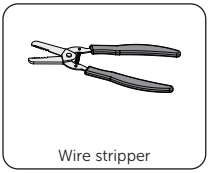
Marker


Crimping tool for RJ45


Diagonal pliers


Rubber mallet

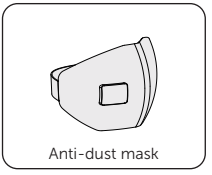

Torque screwdriver
(Phillips head: ST4.2)
(Flat head: M2)


Wire stripper

Safety gloves

Safety boots

Safety goggles


Anti-dust mask

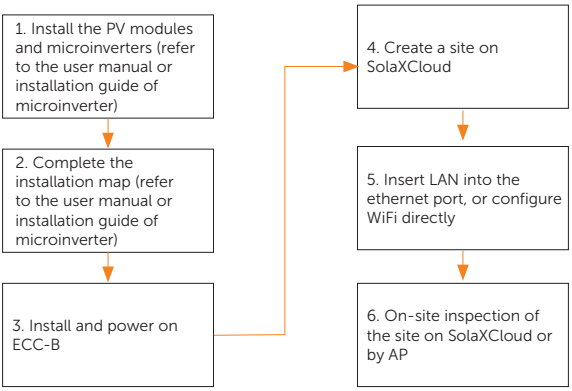
4.4.2 Additionally Required Items

Table 4-5 Additionally required wires

No.	Required Material	Type	Conductor Cross-section
1	Communication cable	Network cable CAT5	4 mm^2
2	RJ45 terminal	Standard	/

4.5 System Installation Steps

Step 1 to 6 have to be done on site. Step 7 to 9 can be finished either on site or at home. Step 6 must be finished correctly to create site on SolaXCloud.



NOTICE

- If you need to use ECC-B with A1-Micro 1 in 1, please refer to the **Quick Installation Guide or User Manual of ECC-PLC**.

5 Installation

5.1 Indoor Installation

5.1.1 Installation method 1 (on the wall):

Step 1: Check the box for the items as follows:

i) ECC-B

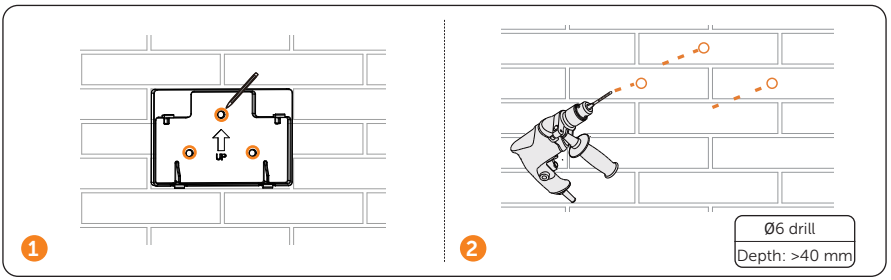
ii) Bracket

iii) Expansion tube

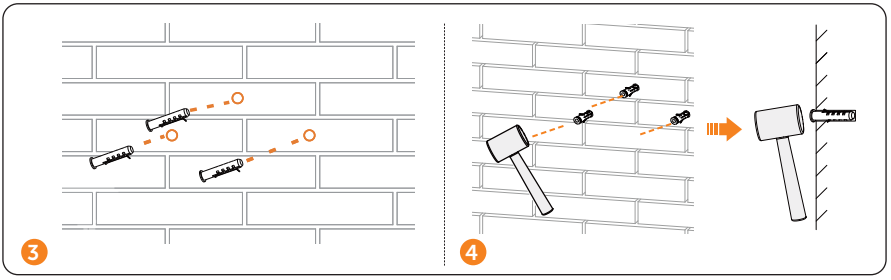
iv) Expansion bolt

Step 2: User the bracket as a template to mark the position of the 3 holes on the wall using a marker, and adjust it even using the spirit level.

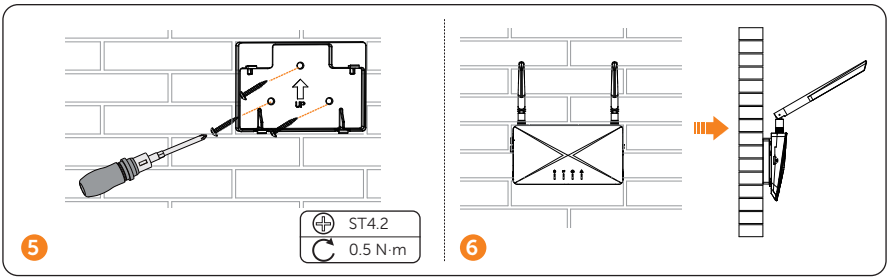
Step 3: Drill holes with a drill (drill bit: ø6 mm), make sure the holes are deep enough (at least 40 mm) for installation.



Step 4: Insert the expansion tubes in the holes.



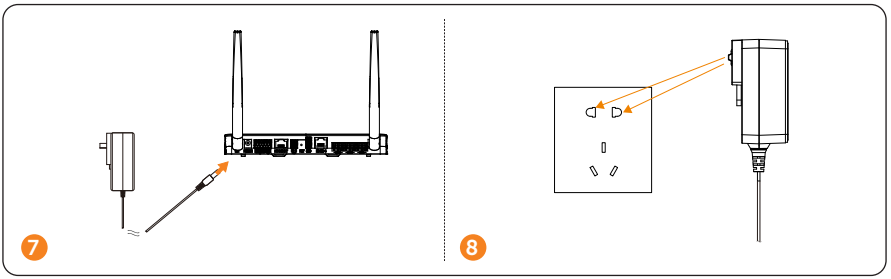
Step 5: Place the wall bracket and use self-tapping screws to tighten the bracket. Attach ECC-B to the bracket. Make sure the back side of ECC-B is fixed well with buckles on the bracket.



NOTICE

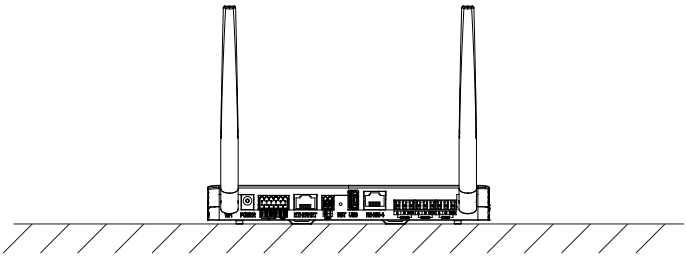
- Prior to step 6, please complete wiring process.

Step 6: Plug in the power adapter to power on ECC-B, and then plug in the power adapter to the socket.

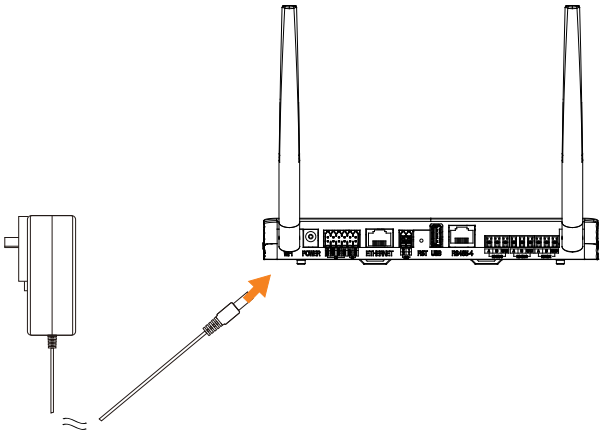


5.1.2 Installation method 2 (on the platform)

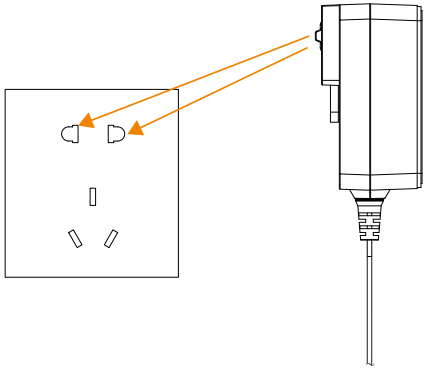
Step 1: Place ECC-B on a horizontal platform.



Step 2: Plug in the power adapter to power on ECC-B.

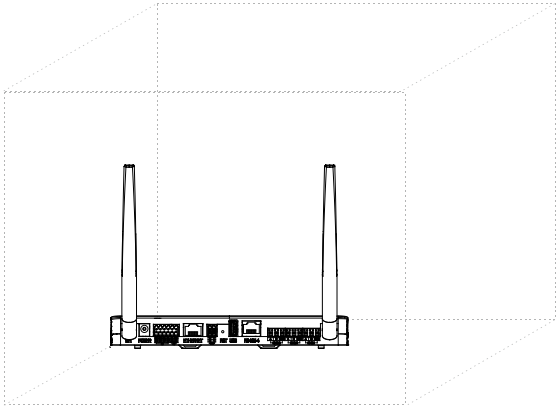


Step 3: Plug in the power adapter to the socket.



5.2 Outdoor Installation

The outdoor installation steps are the same as indoor installation. In addition, a water-proof box is needed to protect ECC-B.



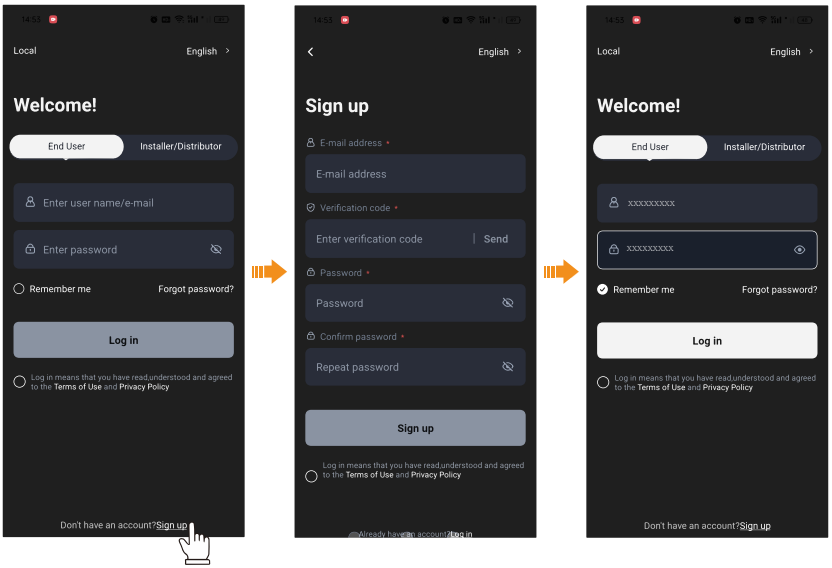
5.3 APP Operation

5.3.1 Download APP

Step 1: Scan the QR code to download the monitoring APP.

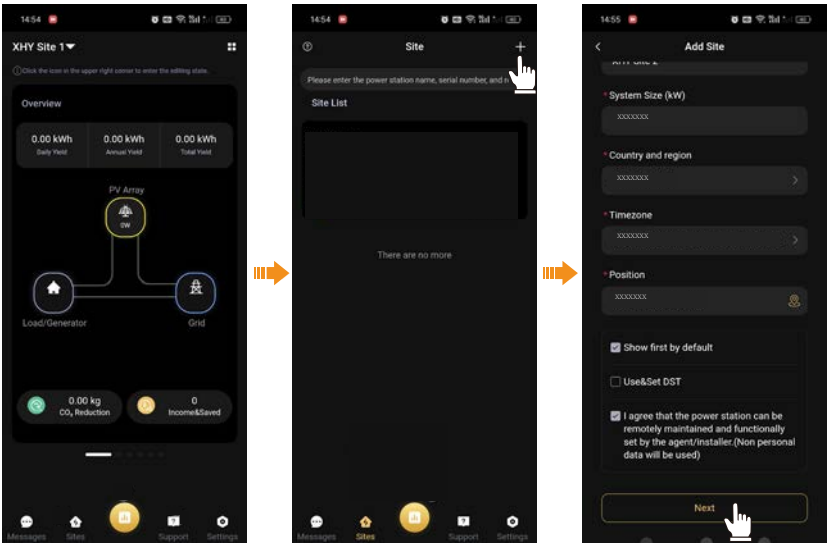
5.3.2 Create an account

Step 1: Click [Sign Up] to create an account, fill in your information and then log in your account.



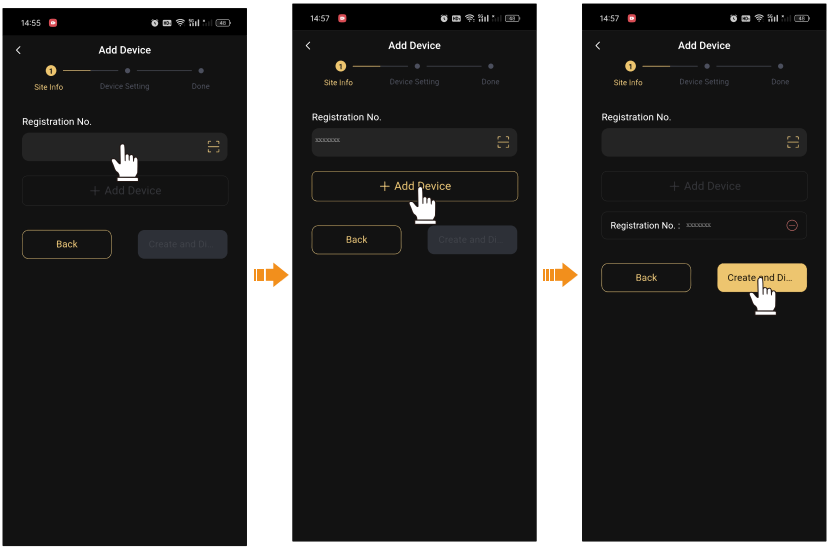
5.3.3 Create a site

Step 1: Clike [+] in the main interface and then fill in the corresponding information to create your site.



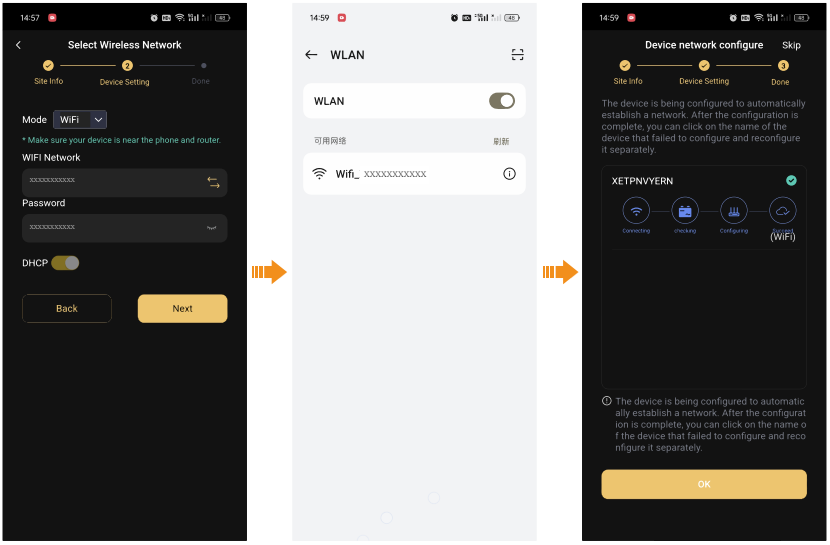
5.3.4 Add device

Step 1: Following the last step, you will enter the [Add Device] interface. Input the SN code on the device, and then click [Add Device].

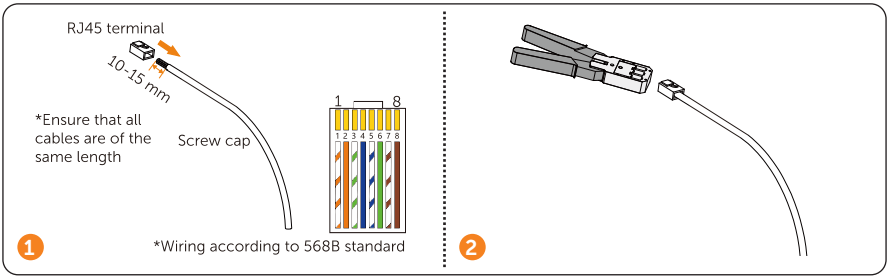


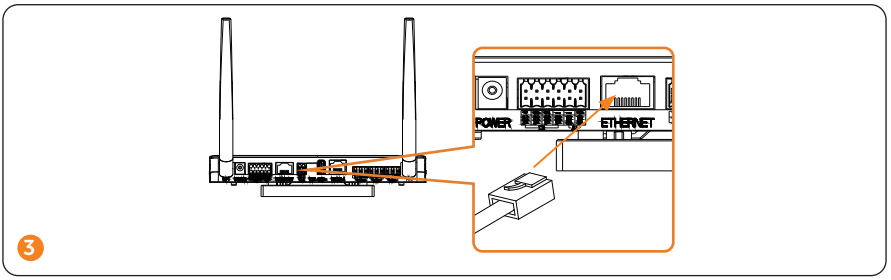
Step 2: In this step, you will start to configurate WiFi. We provide 2 methods: WiFi mode and LAN mode.

Method 1: Choose WiFi mode (the default one) and input your home WiFi account and password. Next, the interface will redirect to the WiFi interface. Please choose the WiFi of your device (WiFi_XXXXXX, XXXXXX refers to the SN on your device). After connects successfully, the APP will start to configurate.



Method 2:Insert LAN into the ethernet port to connect ECC-B to the routher in a wired way.





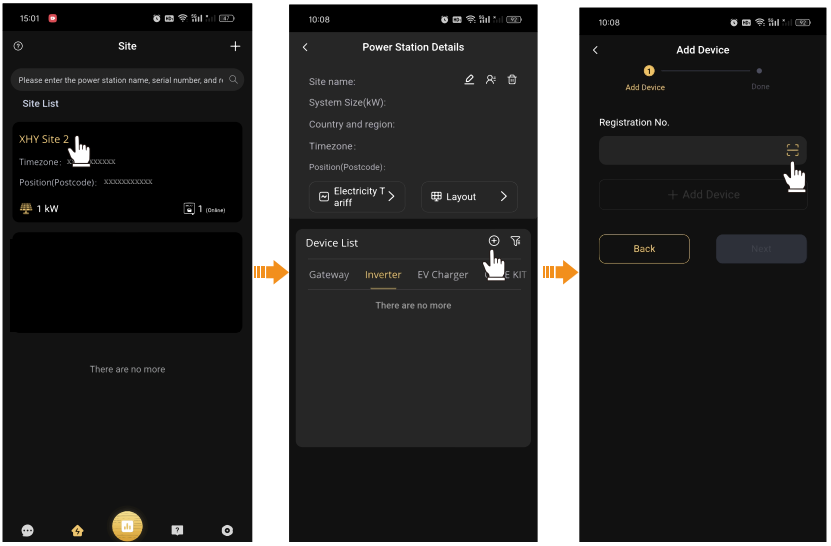
5.3.5 Bind microinverter

If you need to bind microinverter, please follow steps as below.

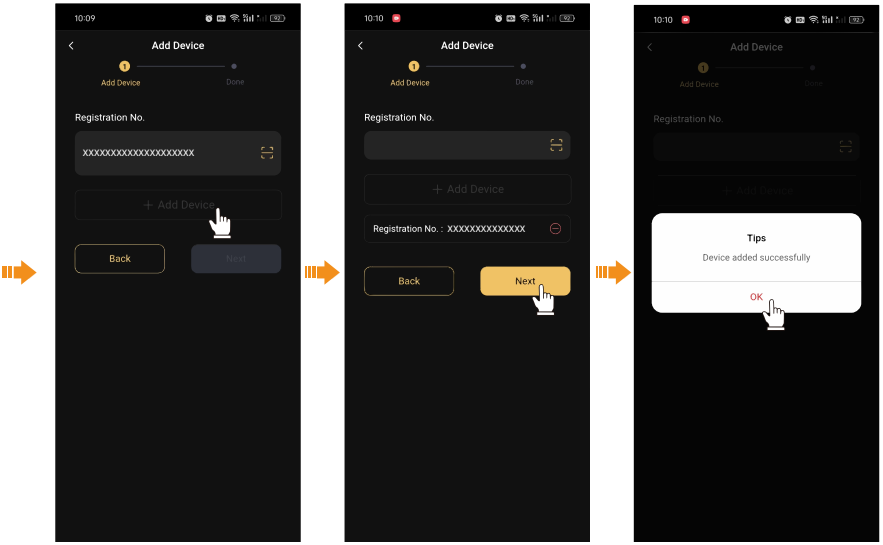
Step 1: Click a site that you need to bind microinverter, click [⊕] icon, and input or scan the QR code on the microinverter.

NOTICE

- If scanning the QR code step fails,.then try to scan the one dimensional code. Scanning one dimensional code may lead.to inaccurate scan results).

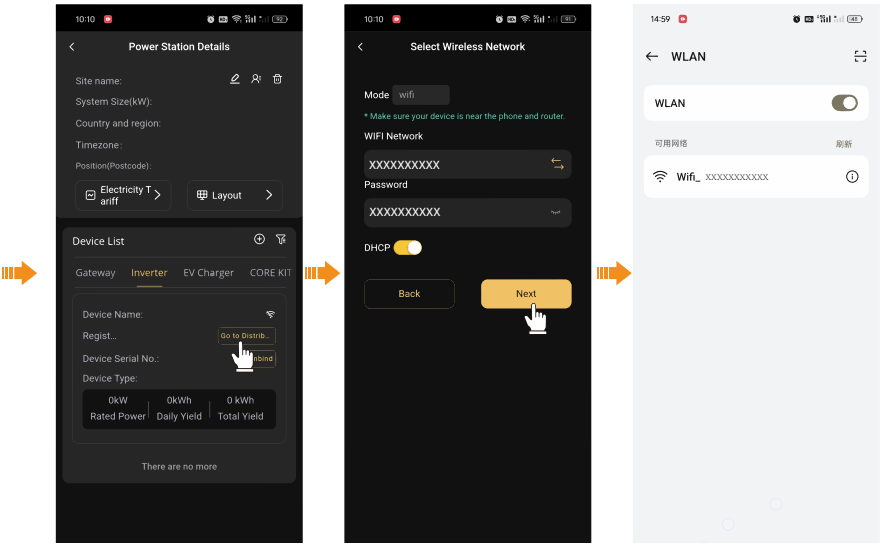


Step 2: After APP recognize the code, click [Add Device] and then [Next] until the interface pop up [Device added successfully].



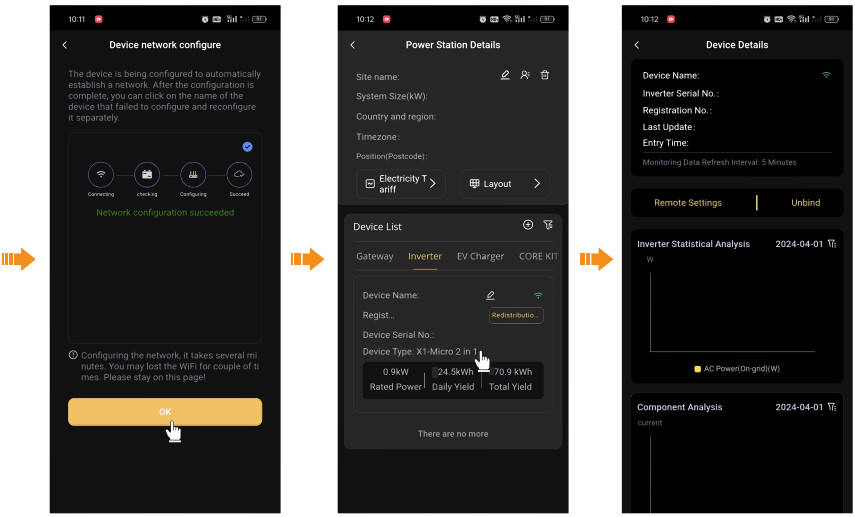
5.3.6 Microinverter data

Step 1: Click [Go to Distrib...] to configurate WiFi. Fill in your Home WiFi network and password, Select [Next], and connect [WiFi_XXXXXXX] (XXXXXX refers to the SN of your device).



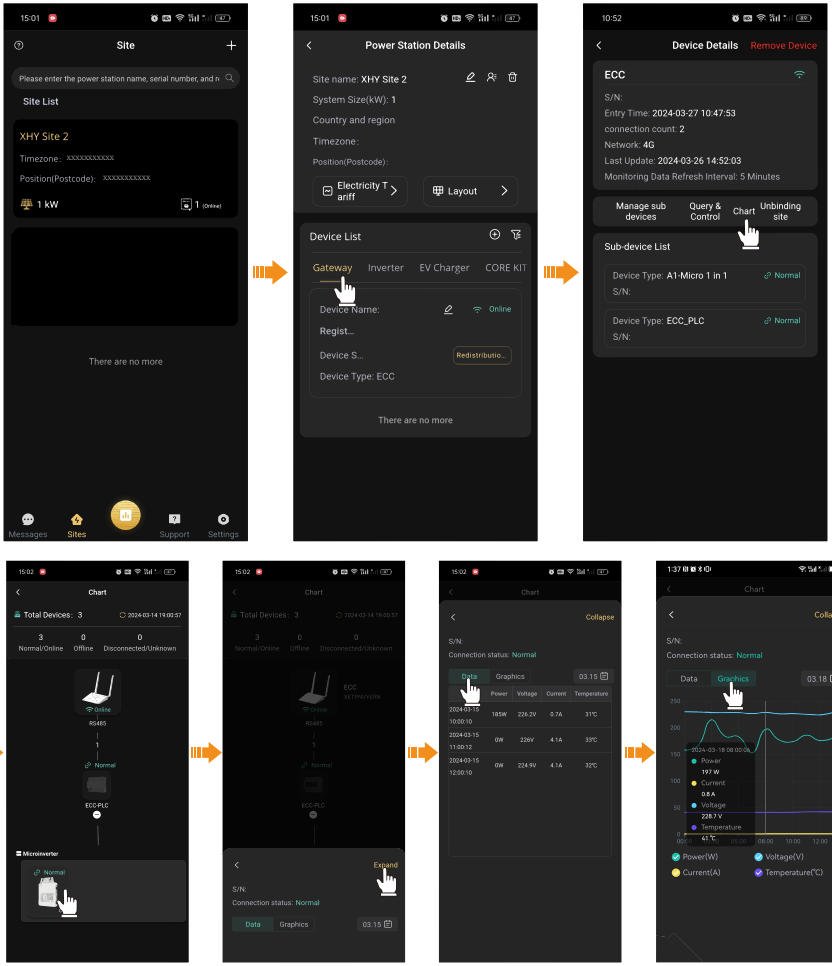
Step 2: After successfully connecting to WiFi_XXXXXX, system will start to configurate WiFi automatically.

Step 3: Click the specific inverter you bind in the last step to see more details of the device.



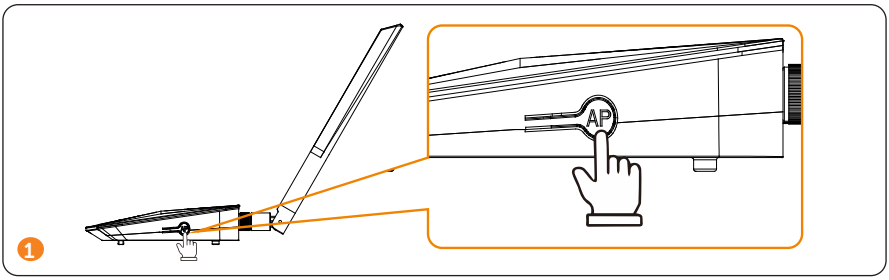
5.3.7 On-site inspection

Step 1: To inspect your site, please click the site, and choose Gateway. Click [Chart], device, [Expand], [Data] or [Graphics] to see the data of your device.



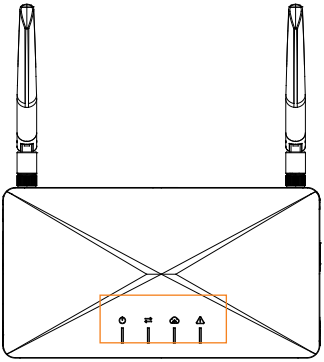
NOTICE

- You can also finish this step by clicking AP button of the ECC-B.


AP
1

6 Troubleshooting and Maintenance

6.1 LED Indicator



LED indicator status

Symbol	LED indicator	Definition
	Power	Display the status of electricity power
	Local communication	Display the local communication status
	SolaXCloud communication	Display the communication with SolaXCloud
	Warning	Warning important faults

- **Troubleshooting for ECC-B + X1-Micro 2 in 1 / 4 in 1 + meter scence**

Indicator	Status	Description
RUN	Steady on	Connected to the power
	Steady off	ECC-B not power on
SERVE1	Steady off	Meter scence (Device in one site: microinverter with bulit-in WiFi + ECC-B; no communication between microinverter with bulit-in WiFi and ECC-B)

Indicator	Status	Description
SERVE2	Green light steady on	ECC-B is connecting to the SolaXCloud; communication is normal
	Green light flashes quickly (1 s)	The AP hotspot of ECC-B is activated (with the highest priority); after configuration, green light will be steady on
	Red light steady on	Not connected to the routher
	Red light flashes quickly (1 s)	Connected to the routher; not connected to the server
ALARM	Steady off	Normal; no errors
	Red light flashes quickly (1 s)	Not connected to the meter (no data were transferred)
	Red light steady on	ECC-B report error

- **Troubleshooting for ECC-B + ECC-PLC + A1-Micro 1 in 1 scence**

Indicator	Status	Description
RUN	Steady on	Connected to the power
	Steady off	ECC-B not power on
SERVE1	Green light steady on	ECC-B communicates normally with all microinverters (the data of PLC microinverter will be transmitted to ECC)
	Green/red light flashes quickly (1 s) and alternately	ECC-B connected to partial microinverters
	Red light steady on	Not connected to any microinverters
	Green light flashes quickly (1 s)	ECC-B is connecting to all microinverters
SERVE2	Green light steady on	ECC-B is connecting to the SolaXCloud; communication is normal
	Green light flashes quickly (1 s)	The AP hotspot of ECC-B is activated (with the highest priority)
	Red light steady on	Not connected to the routher
	Red light flashes quickly (1 s)	Connected to the routher; not connected to the server

Indicator	Status	Description
ALARM	Steady off	Normal; no errors
	Red light flashes quickly (1 s)	Not connected to the meter (no data were transferred)
	Red light steady on	ECC-B report error

6.2 Maintenance

Regular maintenance is required for the ECC-B. The table of "Proposal of Maintenance" below lists the operational maintenance for expressing the optimum device performance. More frequent maintenance service is needed in the worse work environment. Please make records of the maintenance.

WARNING!

- Only qualified person can perform the maintenance for the ECC-B .
- Only use the spare parts and accessories approved by SolaX for maintenance.

6.2.1 Maintenance routines

Item	Check Notes	Maintenance Inverval
Safety check	• Check the items mentioned in section 1 "Safety" • The safety check shall be performed by manufacturer's qualified person who has adequate training, knowledge, and practical experience.	Every 12 months

6.2.2 Upgrading Firmware

Upgrade precautions

- Please make sure that the power supply is normal.

- If the firmware upgrade fails or stops, please unplug the U disk power off the ECC-B and restart it. Then repeat the upgrade steps.

Upgrade preparation

- Please check the ECC-B version and prepare a U disk (USB 2.0/3.0) and personal computer before upgrading. Please make sure that the format is FAT FAT 32.
- Please contact our service support to obtain the firmware, and store the firmware in the U disk according to the following path.
  - » ECC-B_Gateway/xxxxxxxxxxxx_xxx_xxxxxxx_Vxxx.xx_xxxxxxxx.usb (for example: ECC-B_Gateway/323101049400_ECC-B_Gateway_V001.01_20240102.usb)

NOTICE!
• VX.XX refers to the file version, XX.XX refers to date.

Upgrade steps

a. Plug the U-disk into the USB port of ECC-B.

b. Wait for ECC-B to detect the upgrading files and upgrade automatically.

6.2.3 Device Replacement

a. To disassembling the ECC-B

- » Pull the power adapter.
- » Unbind the original ECC-B on the APP and bind a new one in the previous site.

7 Decommissioning

7.1 Disassembling the Gateway

Refer to a. To disassembling the ECC-B for disassembling the ECC-B.

7.2 Packing the Gateway

- Load the ECC-B into the original packing material if possible.
- If the original packing material is not available, you can also use the packing material which meets the following requirements:
  - » Suitable for the weight of product.
  - » Easy to carry.
  - » Be capable of being closed completely.

7.3 Transportation and Storage

If the ECC-B is not put into use immediately, the transportation and storage requirements needs to be met:

Transportation

- Observe the caution signs on the packaging of ECC-B before transportation.
- Pay attenting to the weight of ECC. Handle with care.
- Wear protective gloves when carrying the equipment by hand to prevent injuries.
- When lifting up the ECC-B, hold the bottom position of the ECC-B. Keep ECC-B horizontal in case of falling down due to tilt.

Storage

- The ECC-B must be stored indoors.
- Do not remove the original packaging material and check the outer packaging material regularly.
- The storage temperature should be between -40°C and +60°C. The humidity should be between 5% and 95%.
- Stack the ECC-B in accordance with the caution signs on the ECC-B carton to prevent their falling down and device damage. Do not place it upside down.

- If the ECC-B has been stored for more than 10 years, it must be checked and tested by professionals prior to use.

7.4 Disposal of the Gateway

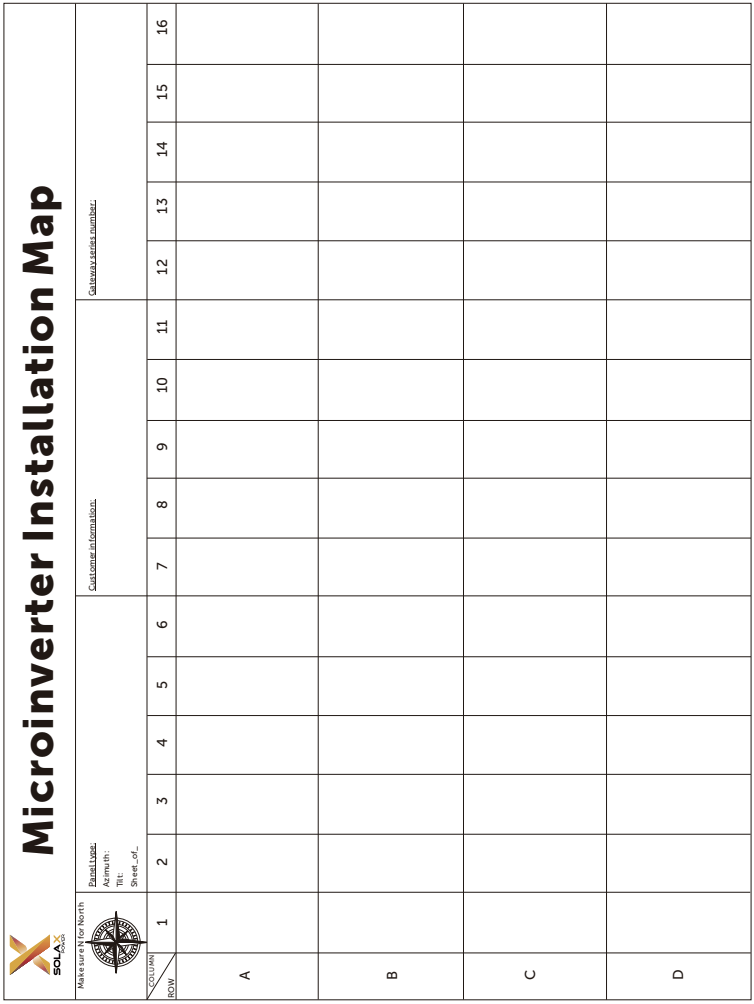
Please dispose of the ECC-Bs or accessories in accordance with the disposal regulations for electronic waste applied at the installation site.

8 Technical Data

Power adapter	100~240 V 50/60 HZ 0.8 A AC input 12 V 2 A DC output
Ethernet	10/100 M
Wi-Fi frequency range	2.4 GHz
Wi-Fi EIRP power	19.5 dBm
Degree of protection	IP20
Operating temperature range [°C]	-20°C ~ 60°C
Humidity	5%~95%
Dimensions [mm]	210 * 113 * 26
Safety	EN 62368-1:2014+A11:2017
EMC	EN 55032: 2015+A11: 2020 EN IEC 61000-3-2: 2019+A1: 2021 EN 61000-3-3: 2013+A2: 2021 EN 55035: 2017+A11: 2020 ETSI EN 301 489-1 V2.2.3: 2019 ETSI EN 301 489-17 V3.2.4: 2020
Radio	ETSI EN 300 328 V2.2.2: 2019
Health	EN IEC 62311: 2020 EN 50665:2017

9 Appendix

9.1 INSTALLATION MAP



Contact Information

UNITED KINGDOM

Unit C-D Riversdale House, Riversdale Road, Atherstone, CV9 1FA
+44 (0) 2476 586 998
service.uk@solaxpower.com

AUSTRALIA

21 Nicholas Dr, Dandenong South VIC 3175
+61 1300 476 529
service@solaxpower.com.au

TURKEY

Fevzi Çakmak mah. aslım cd. no 88 A Karatay / Konya / Türkiye
service.tr@solaxpower.com

GERMANY

Am Tullnaupark 8, 90402 Nürnberg, Germany
+49 (0) 6142 4091 664
service.eu@solaxpower.com
service.dach@solaxpower.com

USA

3780 Kilroy Airport Way, Suite 200, Long Beach, CA, US 90806
+1 (408) 690 9464
info@solaxpower.com

NETHERLANDS

Twekkeler-Es 15 7547 ST Enschede
+31 (0) 8527 37932
service.eu@solaxpower.com
service.bnl@solaxpower.com

POLAND

WARSAW AL. JANA P. II 27. POST
+48 662 430 292
service.pl@solaxpower.com

SPAIN

+34 9373 79607
tecnico@solaxpower.com

ITALY

+39 011 19800998
support@solaxpower.it

BRAZIL

+55 (34) 9667 0319
info@solaxpower.com

PAKISTAN

service.pk@solaxpower.com

SOUTH AFRICA

service.za@solaxpower.com

Warranty Registration Form

For Customer (Compulsory)

Name _____ Country _____

Phone Number _____ Email _____

Address _____

State _____ Zip Code _____

Product Serial Number _____

Date of Commissioning _____

Installation Company Name _____

Installer Name _____ Electrician License No. _____

For Installer

Module (If Any)

Module Brand _____

Module Size(W) _____

Number of String _____ Number of Panel Per String _____

Battery (If Any)

Battery Type _____

Brand _____

Number of Battery Attached _____

Date of Delivery _____ Signature _____

Please visit our warranty website: https://www.solaxcloud.com/#/warranty or use your mobile phone to scan the QR code to complete the online warranty registration.

For more detailed warranty terms, please visit SolaX official website: www.solaxpower.com to check it.