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1. About This Guide

1.1 Purpose and Scope

This guide covers the installation, wiring, and commissioning of the Anker SOLIX XE system and is intended for qualified electricians and installers. For the system overview, daily operation, and user app features, refer to Anker SOLIX XE (AE111) User Guide.

1.2 Installer Responsibilities

Important: The energy storage system must be installed by qualified professionals in accordance with this Installer Guide.

Equipment damage directly caused by failure to properly install, commission, power off, and hand over the system as required by this guide will be deemed improper use and non-compliant installation, which may affect the installer's eligibility to submit an RMA (Return Merchandise Authorization) request for the affected equipment, or the eligibility of such a request to be reviewed and processed, and the installer shall bear any resulting repair or replacement costs.

Circumstances falling within the foregoing include, but are not limited to:

1. Failing to complete the required installation, electrical connection, and commissioning steps specified in this Installer Guide, or interrupting or aborting commissioning without authorization;
2. Leaving the site without performing the standard power-off procedure while the system remains in an incomplete commissioning state, including but not limited to initialization not completed, the BMS not calibrated, the firmware update not completed, or the system not yet in normal operating mode;
3. Failing to follow the app handover process specified in this Installer Guide to ensure the homeowner can view the correct operating status of the system in the app;
4. Failing to confirm with the homeowner, after commissioning is complete, that the system has properly entered the relevant mode (on-grid, off-grid, or operating mode);
5. Any other act that fails to comply with this Installer Guide or official technical update guidance, or that violates local mandatory electrical installation and safety codes, and that directly causes equipment malfunction or damage.

Whether any of the foregoing circumstances has occurred shall be preliminarily determined by Anker based on Anker SOLIX device logs and system event records. If the installer disputes such a determination, the installer may submit a written objection together with supporting evidence (including but not limited to on-site records, photographs, and communication records) within 10 business days of receiving written notice. Anker shall review and respond within a reasonable period.

1.3 Model Reference

This guide applies to the following products.

Product Name	Shortened Form
Anker SOLIX XE	Main Module
Anker SOLIX XE Battery Module	Battery Module

1.4 Model Number Format

All system model numbers follow the same naming pattern.

The example model number below indicates a system with one main module and one battery module.



No.	Meaning	Value
1	Product	Anker SOLIX XE
2	Number of Battery Modules	1 to 5: One to five battery modules No suffix: No battery module

2. Unboxing

2.1 Check Before Installation

Inspect the Outer Packaging

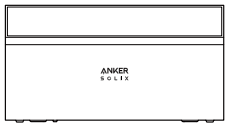
Before unpacking, inspect the outer packaging for holes, cracks, or other damage, and verify the equipment model number.

If any damage is found or the model does not match your order, do not unpack the equipment. Contact customer support immediately.

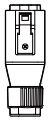
Verify Contents

After unpacking, check that all items are present and undamaged. If any item is missing or damaged, please contact customer support.

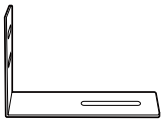
2.2 In the Main Module Box



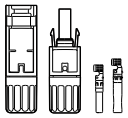
Anker SOLIX XE



AC Connector ×2



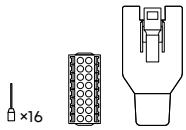
Wall Mount Bracket ×2



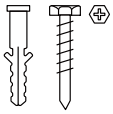
PV Connector Kit ×3



PV Wrench



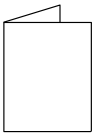
COM Connector Kit



Screw (M6 50 mm) ×2

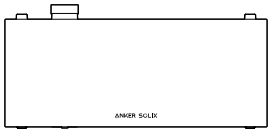


Screw (M5 16 mm) ×2



Documents

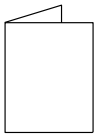
2.3 In the Battery Module Box



Anker SOLIX XE Battery Module



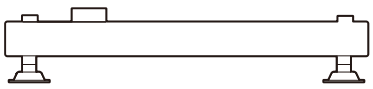
Screw (M5 16 mm) ×2



Documents

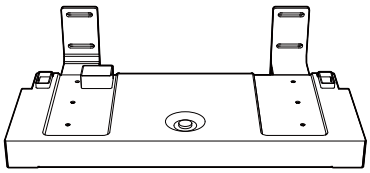
2.4 Optional Accessories

The following accessories can be ordered separately.



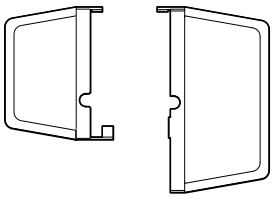
Floor-Mounted Base

Raises the system and provides stable support on uneven hard surfaces.



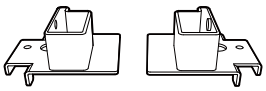
Wall-Mounted Base

Supports wall mounting in flood-prone areas or where floor mounting is not suitable, such as on lawns.



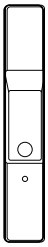
Cable Cover Set

Covers connected cables on the AC and DC sides of the main module.



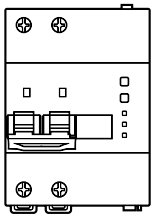
Stack Parallel Connection Accessory Kit

Enables parallel connection of two main modules in one column.



Smart Meter Gen 2 (Single-Phase / Three-Phase)

Measures grid power flow and solar generation.

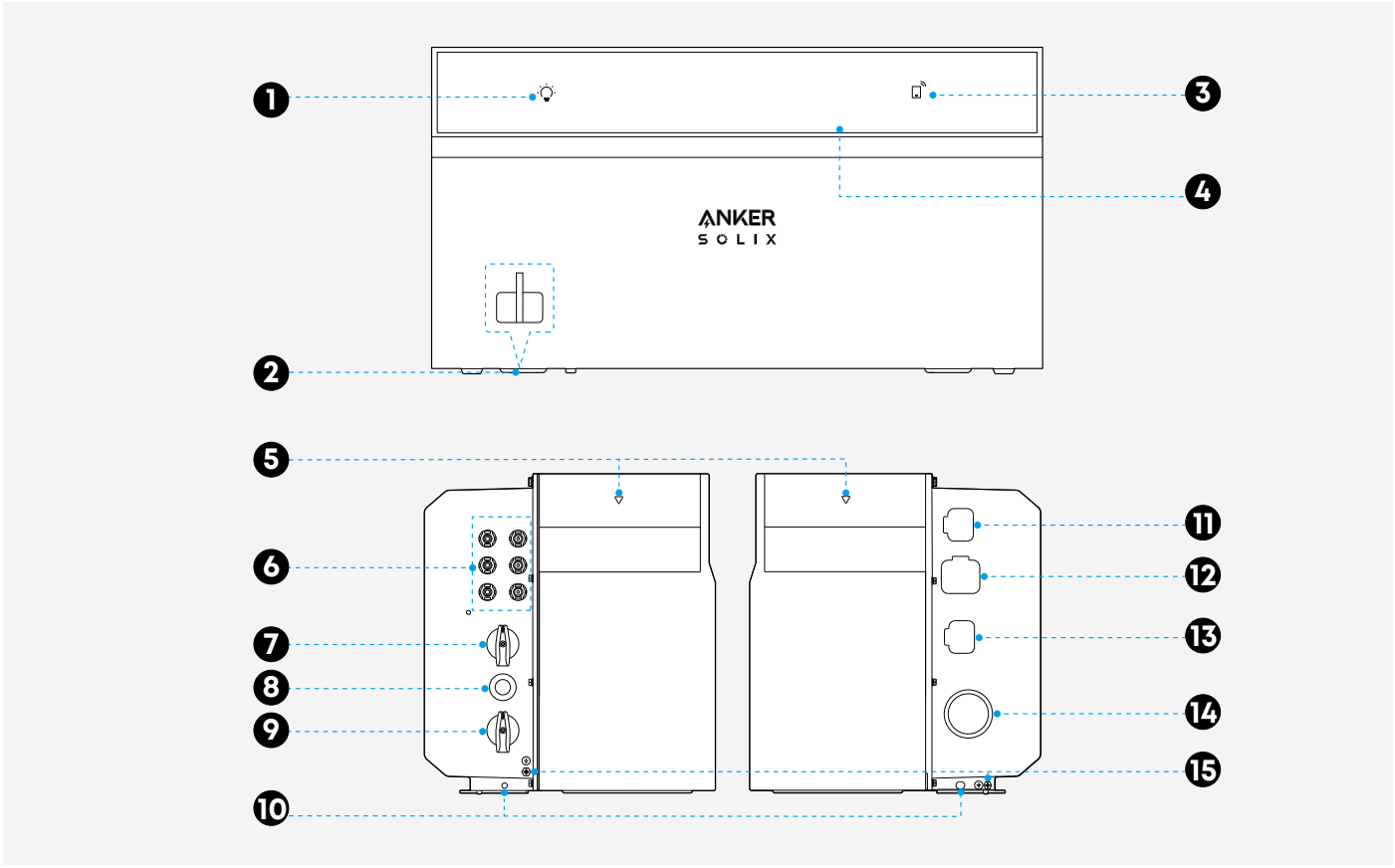


Backup Auto-Switch (Single-Phase)

Enables whole-home backup when used with the energy storage system.

3. Product Overview

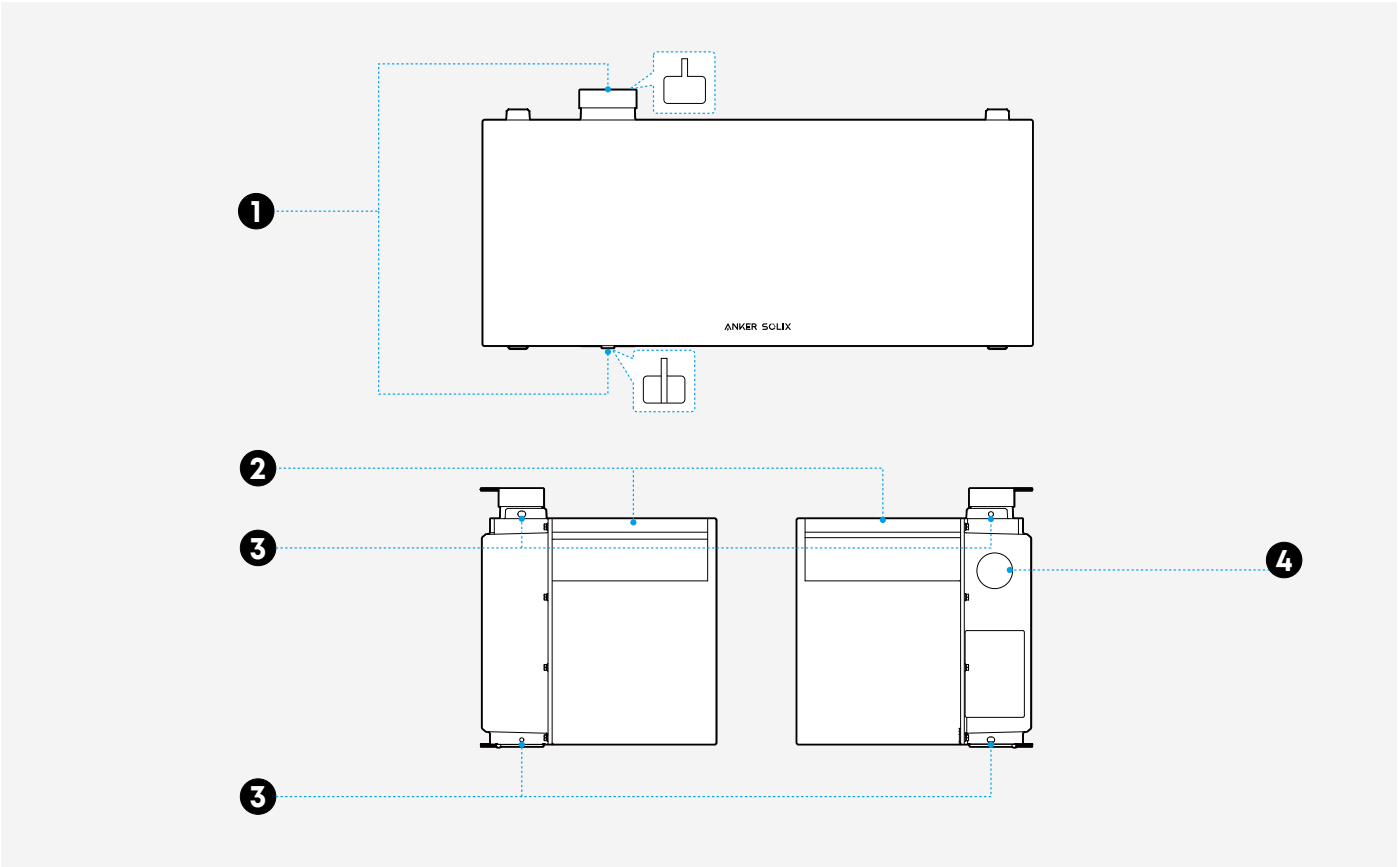
Anker SOLIX XE



1. Screen On/Off Button
2. Battery Port
3. IoT Button
4. Display
5. Handle
6. PV Input Ports
7. PV Switch
8. Power Button
9. Battery Switch
10. Interlocking Screw Holes
11. On-Grid Port
12. COM Port
13. Backup Port
14. Pressure Relief Valve

    This valve is a safety device. Do not remove or damage it.
15. Ground Terminals

Anker SOLIX XE Battery Module



1. Battery Port
2. Handle
3. Interlocking Screw Holes
4. Pressure Relief Valve

   This valve is a safety device. Do not remove or damage it.

4. Pre-installation

Before installation, verify that the site, space, and tools meet the requirements for safe and efficient setup.

4.1 Site Selection

General Environment Requirements

· Read all safety instructions in Section 11. Safety Information.

· Ensure the site is protected from potential hazards such as floods.

· Do not place the modules near a wall facing the maximum sunlight direction (usually south for the northern hemisphere, or north for the southern hemisphere) or in an area exposed to direct sunlight, fire, or explosive materials.

· Do not install the equipment in living spaces or habitable areas of dwelling units,

such as living rooms.

- The equipment with an IP66 protection rating can be installed both indoors and outdoors.
- The maximum operating altitude is 4,000 m.
- The ambient temperature must not be lower than -20 °C or higher than 55 °C.
- The relative humidity should be 5% to 95%.
- The operational environment must be properly ventilated to dissipate heat. Maintain a minimum safe distance from surrounding objects to improve heat dissipation and prolong equipment life.

Wall Requirements

The following table lists the wall requirements for wall mount bracket installation and wall-mounted base installation.

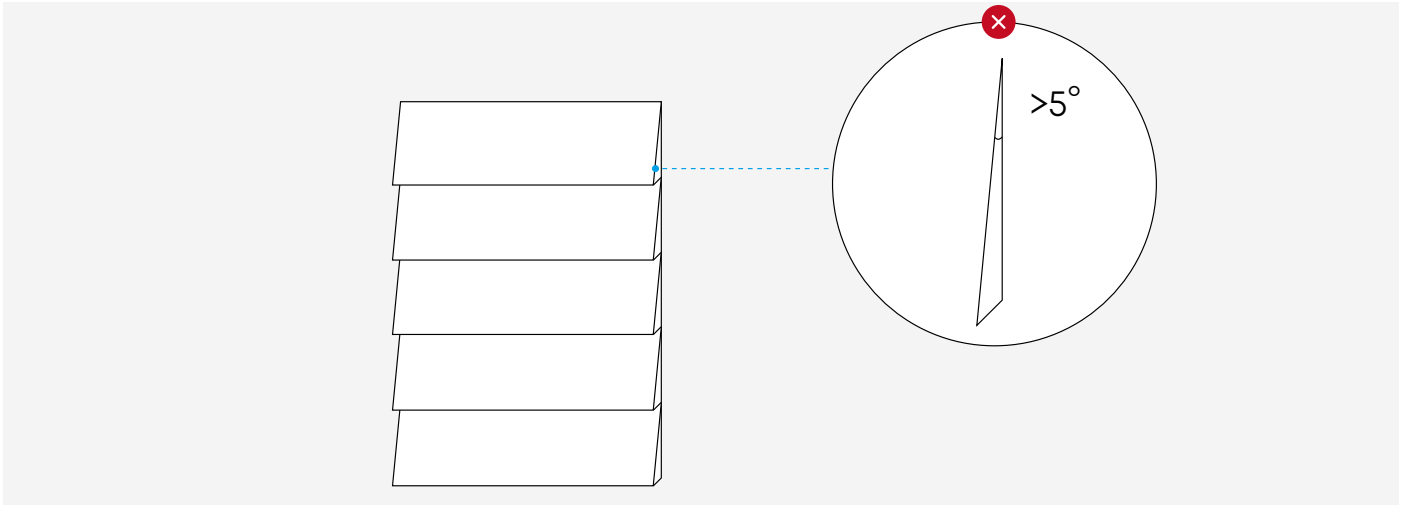
Wall Type	Requirement
Concrete / Masonry	· Minimum strength requirements are 18 MPa for concrete, 12 MPa for clay brick, and 11 MPa for masonry. · Use the included expansion bolts and fully embed them into the wall. · Prior to mounting, inspect the surface and avoid using weak compositions.
Blocking / Wood Studs	Use the included self-tapping screws to fully embed them into the studs.
Other Wall Types	Select fasteners in accordance with the local building codes.

For wall-mounted base installation, verify that the selected wall meets the load-bearing requirements and choose appropriate screws. Choose a wall capable of supporting the full weight of the equipment.

- Main module: 76.5 kg
- Battery module: 63 kg

For Inclined Walls

Do not install the equipment on a wall with an inclination greater than 5°. An inclined wall may complicate installation, restrict heat dissipation, reduce mounting stability, and create safety hazards.



Coastal Installation Requirements

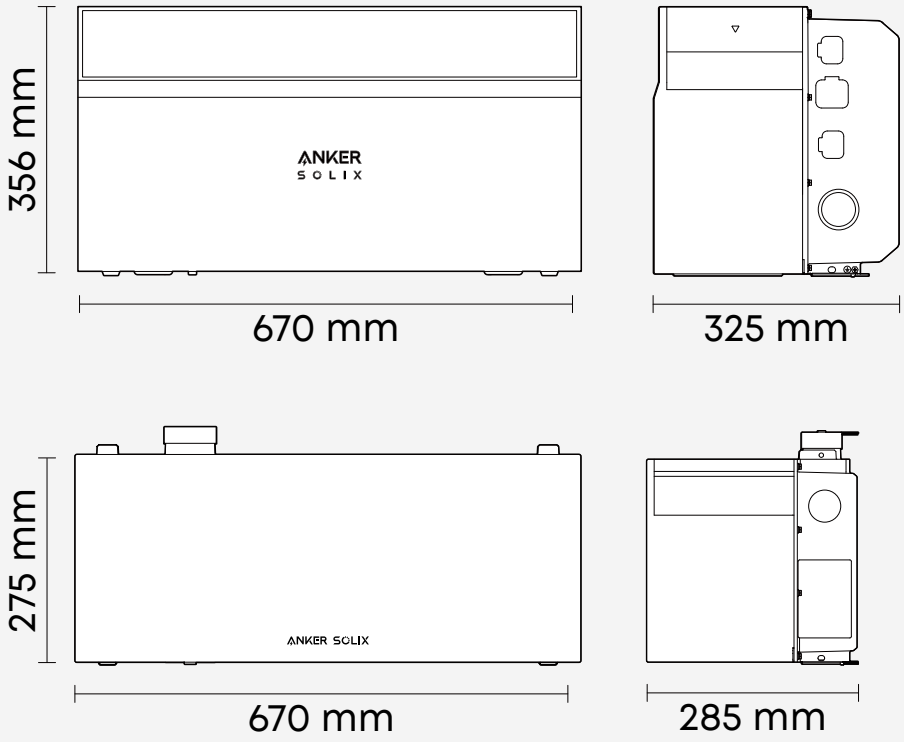
Do not install the equipment outdoors in salt-affected areas to prevent corrosion. These areas typically include regions within 300 (± 50) meters of the coast or prone to sea breezes. In such areas, install the equipment indoors or in a sheltered location.

Note: Requirements for regions prone to sea breezes may vary depending on weather conditions (such as typhoons and monsoons) and terrain features (such as dams and hills).

Distance from Coast	Requirement
Less than 50 m	Installation is prohibited due to high salt fog concentration, intense corrosion, and climate conditions, which violate operational safety standards.
50 to 300 m	Protective measures must be taken. · Indoor installation is recommended and should be prioritized. · Semi-enclosed sites: If the installation site directly faces the ocean, install effective barrier structures between the equipment and the coastline to block marine airflow. · Outdoor sites: Outdoor installation is permitted only when indoor installation is not possible. Construct a physical protective structure to shield the equipment from sea breezes. Position the equipment 40 to 100 cm from the structure, and cover the top to avoid vertical ocean airflow.
More than 300 m	The equipment can be installed indoors or outdoors without special requirements.

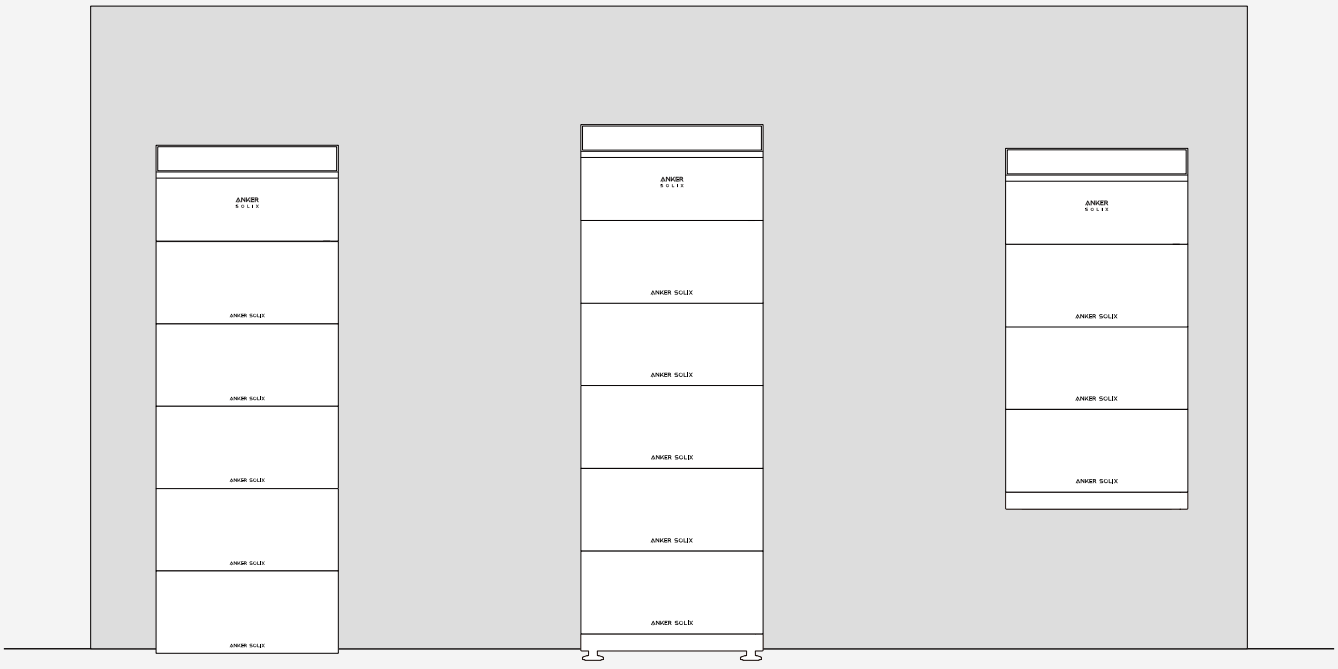
4.2 Measurement

Equipment Dimensions



Stacking Configurations

The system can be installed using different mounting methods.



On Floor

5 Battery Modules Max

On Floor-Mounted Base

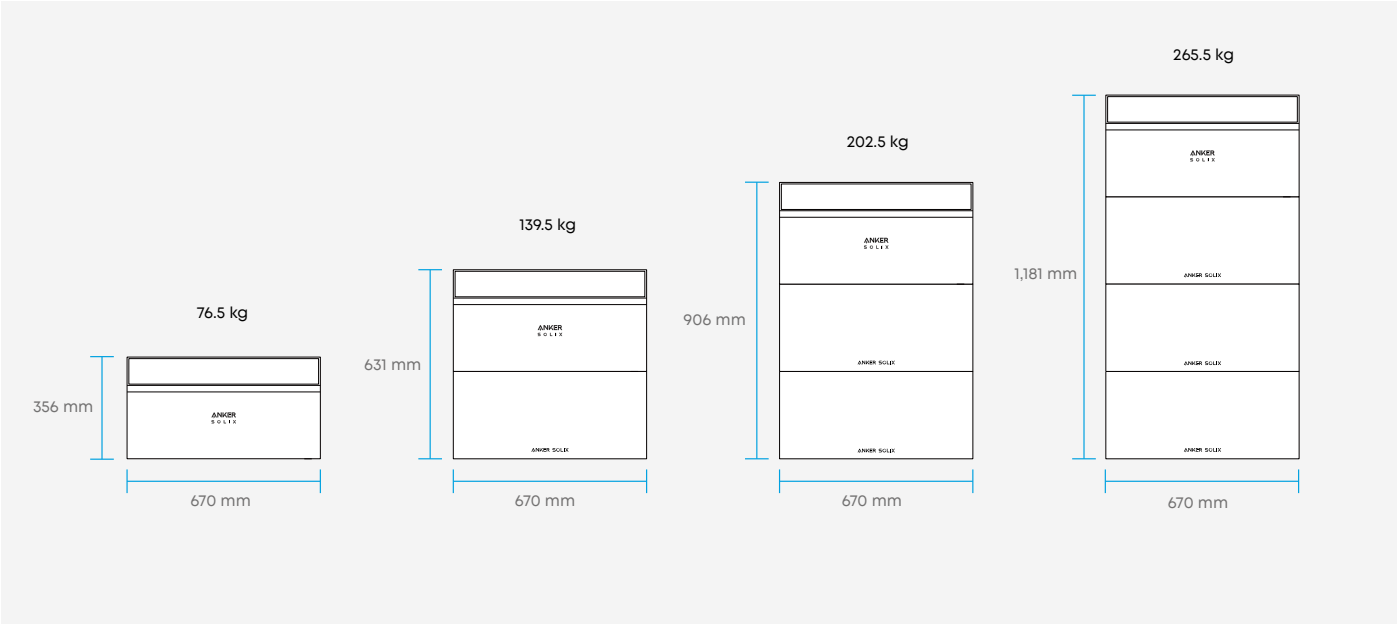
5 Battery Modules Max

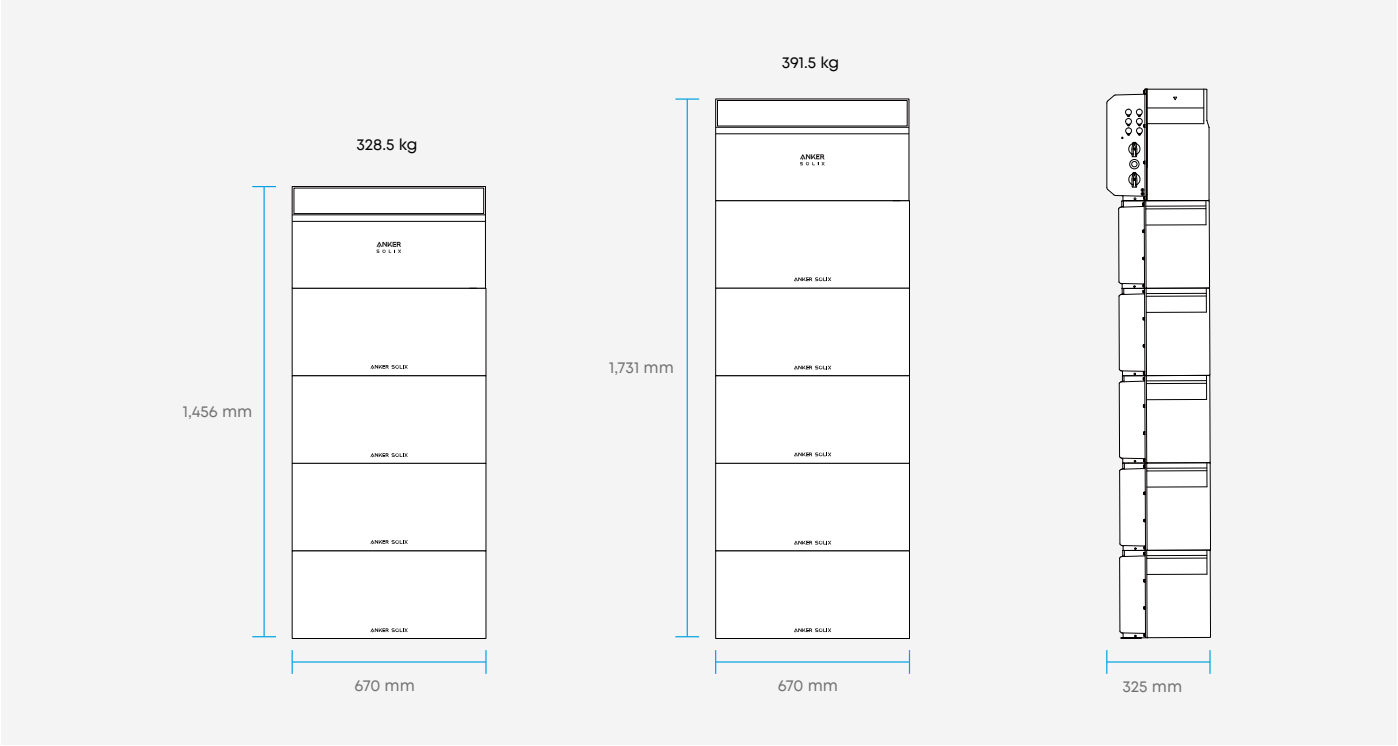
On Wall-Mounted Base

3 Battery Modules Max*

*Note: The wall-mounted base can support one main module and up to three battery modules. Ensure that the wall can support the full weight of the equipment.

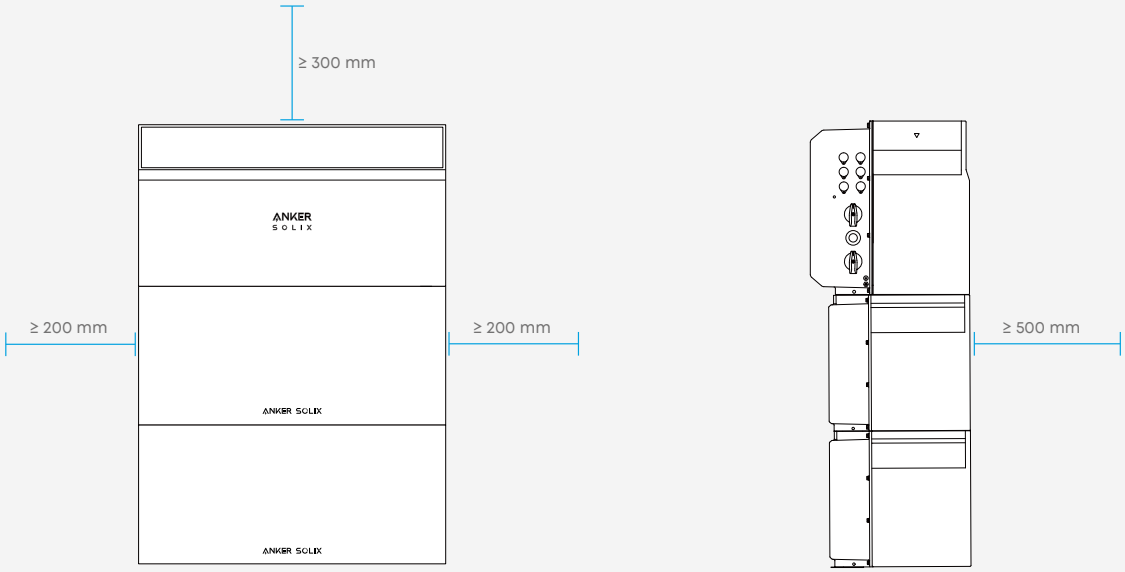
The illustrations show how to stack up to 5 battery modules in one column, from bottom to top.





Spacing Requirements

Ensure sufficient spacing for cabling, heat dissipation, and safety isolation. Keep the equipment at least 600 mm away from heat sources.

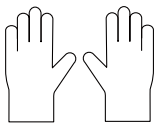
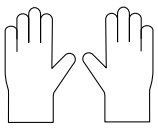
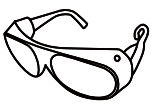


4.3 Tools and Supplies

Prepare the following tools and supplies before installation. They are not included in the package.

Tools

Wear appropriate personal protective equipment (PPE) and follow safe electrical work practices.

Personal Protective Equipment		
 Protective Gloves	 Insulated Gloves	 Dust Mask
 Safety Goggles	 Protective Footwear	 Safety Hat

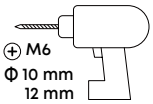
Installation and Wiring Tools



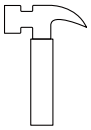
Pen



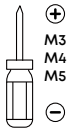
Measuring Tape



Power Drill



Hammer



Screwdriver



Wire Stripper



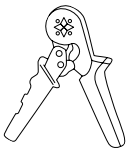
Cable Cutter



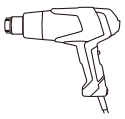
Solar Crimping Tool



OT Terminal Crimper



Tube Terminal Crimper



Heat Gun



PV Wrench

Supplies

· Ensure all cables comply with local electrical requirements.

· Use copper cables only. The cables must be rated for temperatures from -40 to 90 °C.

· For more information on PV cables, see Section 6.4 Connect to the PV Panels.

Connect to the Ground	
Ground Cable	Conductor: 2.5 mm^2
Ring Terminal	Fits the selected ground cable.
Heat Shrink Tubing	Fits the selected ground cable.
Connect to the PV Panels	
PV Cables	Conductor: 4 to 6 mm^2
Connect to the Grid	
Circuit Breaker	32 A
Power Cables (L, N, PE)	Conductor: 4 to 6 mm^2 Outer Diameter: 9 to 16 mm
Connect to Backup Loads	
Circuit Breaker	32 A
Power Cables (L, N, PE)	Conductor: 4 to 6 mm^2 Outer Diameter: 9 to 16 mm
Connect to the Smart Meter	
Signal Cable	Conductor: 0.35 mm^2 Outer Diameter: 5.5 to 6.5 mm
Connect to the Heat Pump	
Signal Cable	Conductor: 0.35 mm^2 Outer Diameter: 5.5 to 6.5 mm
Connect to the EPO Device	
Signal Cable	Conductor: 0.35 mm^2 Outer Diameter: 5.5 to 6.5 mm

5. Installation

This section describes three mounting methods for the system: floor installation, floor-mounted base installation, and wall-mounted installation.

5.1 Precautions

· Read all safety instructions in Section 11. Safety Information.

· Wear protective gloves when moving the equipment by hand.

· Before installation, ensure that the main module is powered off and that the PV switch and battery switch are in the OFF position.

· If the stack height becomes difficult to reach safely, place the module on a stable platform before lifting it into position.

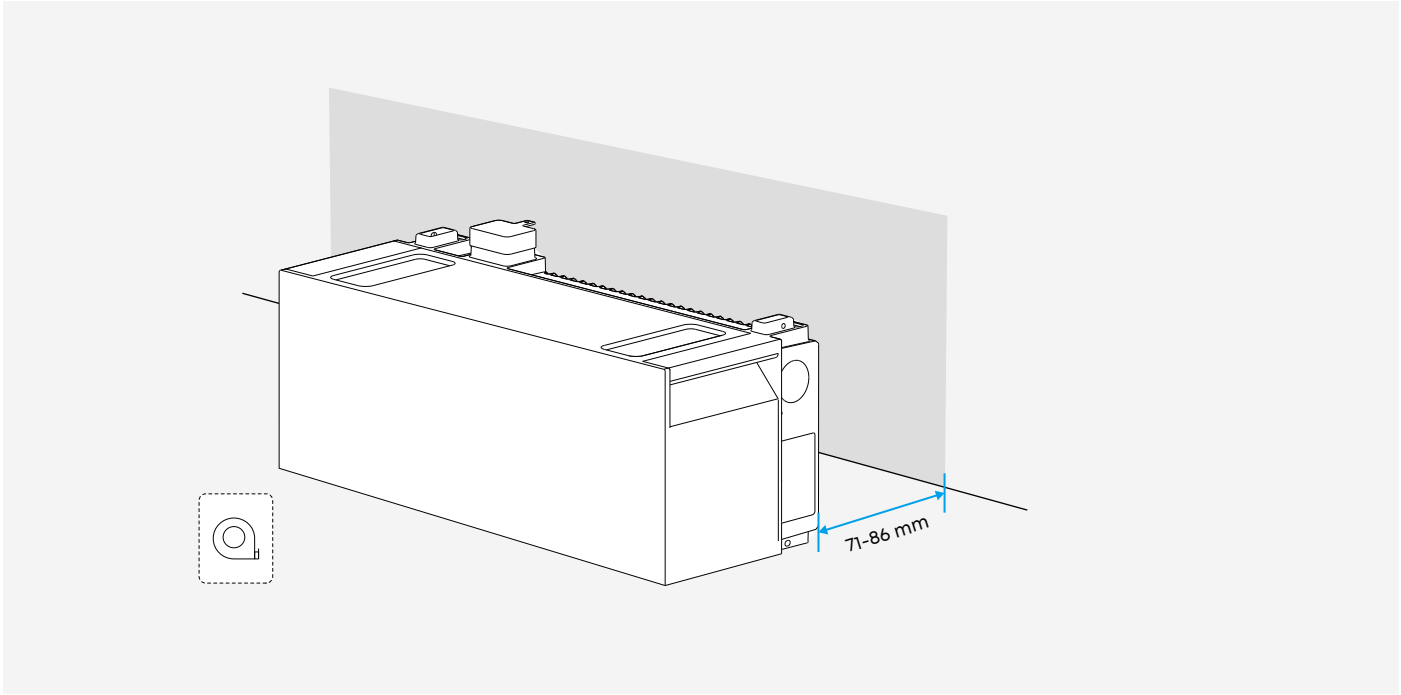
· To remove a module from the stack, lift it horizontally and evenly to avoid shifting or misaligning the other modules.

5.2 Floor Installation

This method supports installation of one main module and up to five battery modules. The following procedure uses one main module and two battery modules as an example.

Step 1. Place the Bottom Battery Module

Place the battery module on a flat, solid surface within Wi-Fi range.



For standalone installation with main module only:

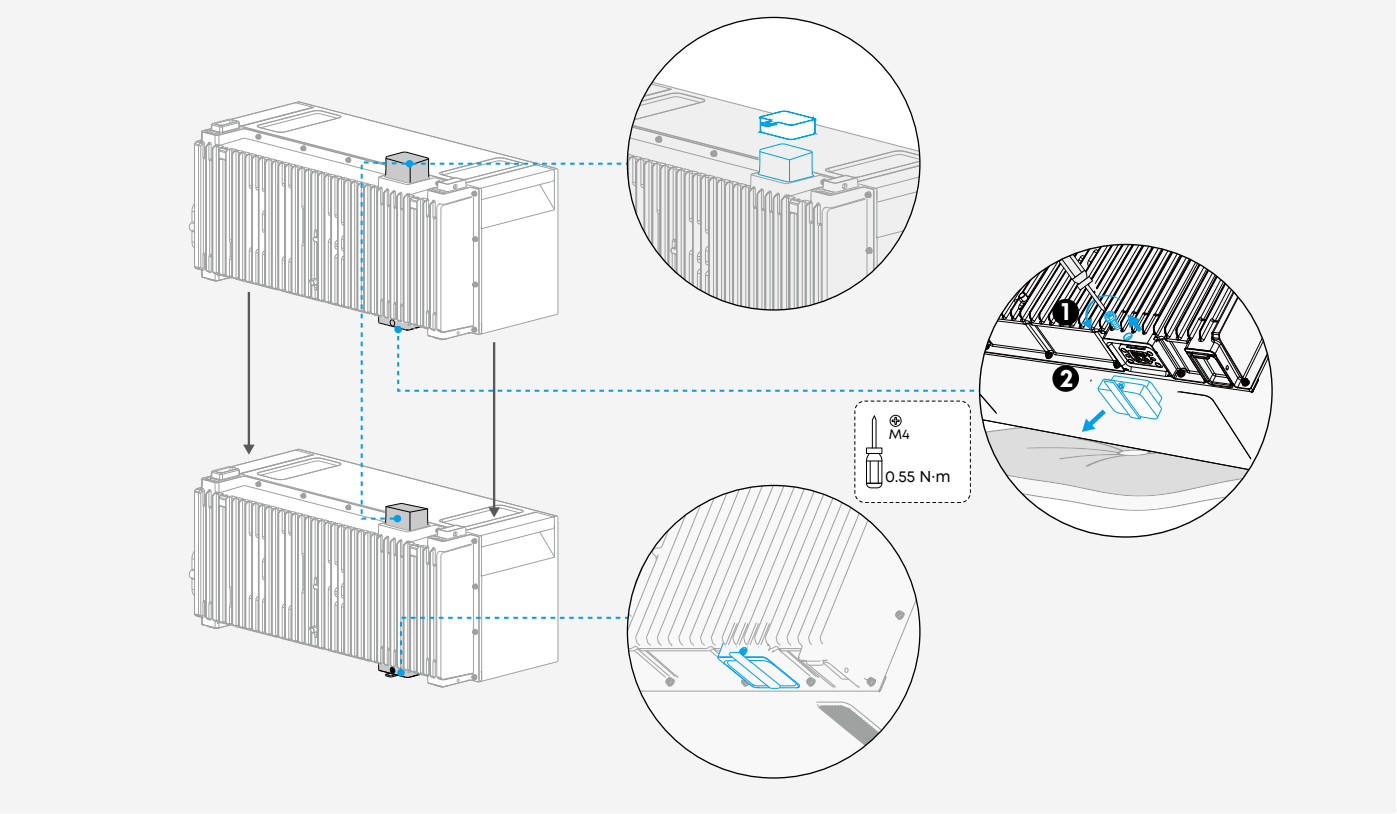
· Position the main module 30 to 45 mm from the wall.

· Skip steps 2 to 5.

Step 2. Stack Battery Modules

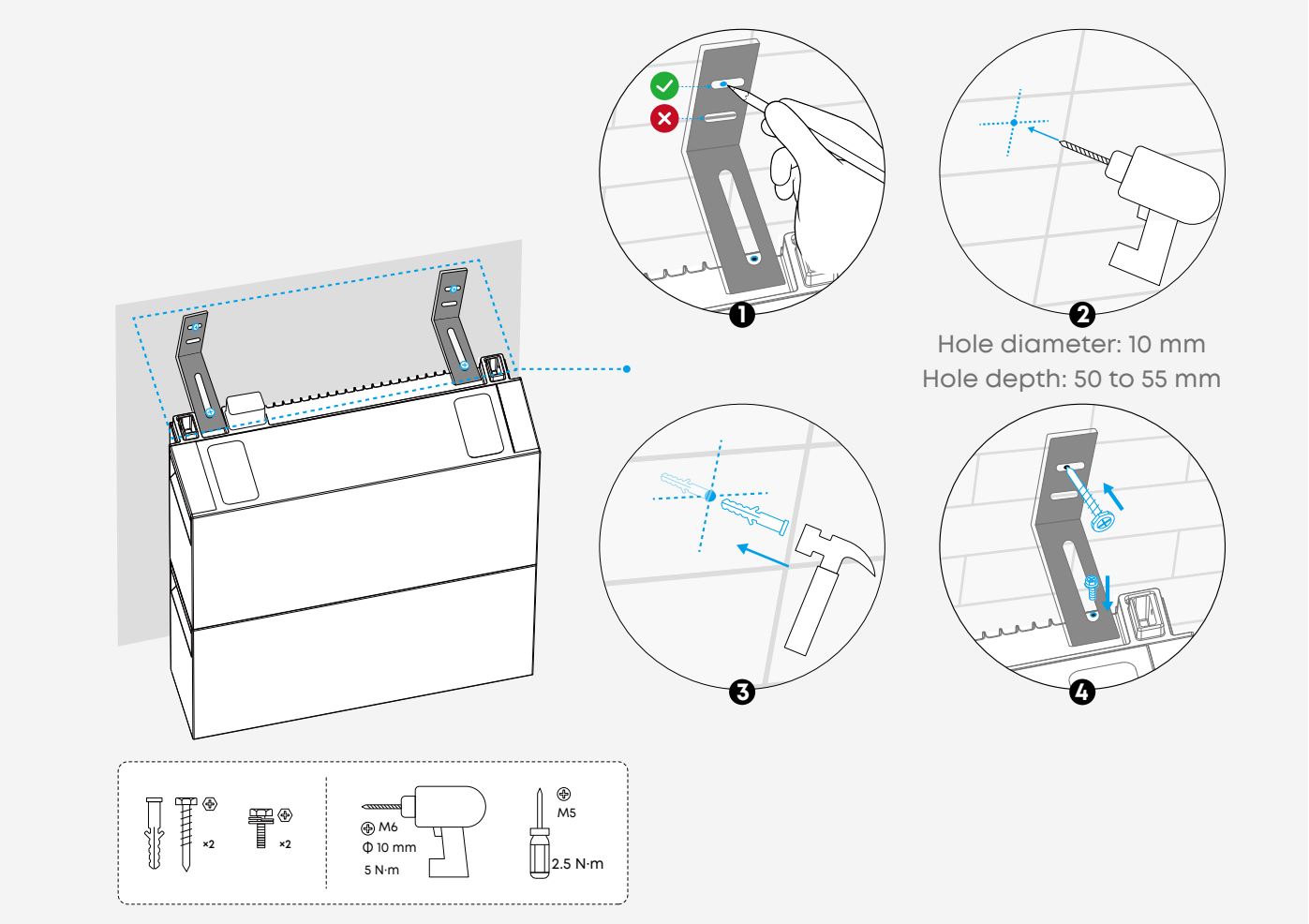
· Before stacking, remove the rubber plugs from the battery ports. Place the module on a soft pad to prevent scratches.

· To prevent water ingress, keep the lower rubber plug installed on the bottom module.



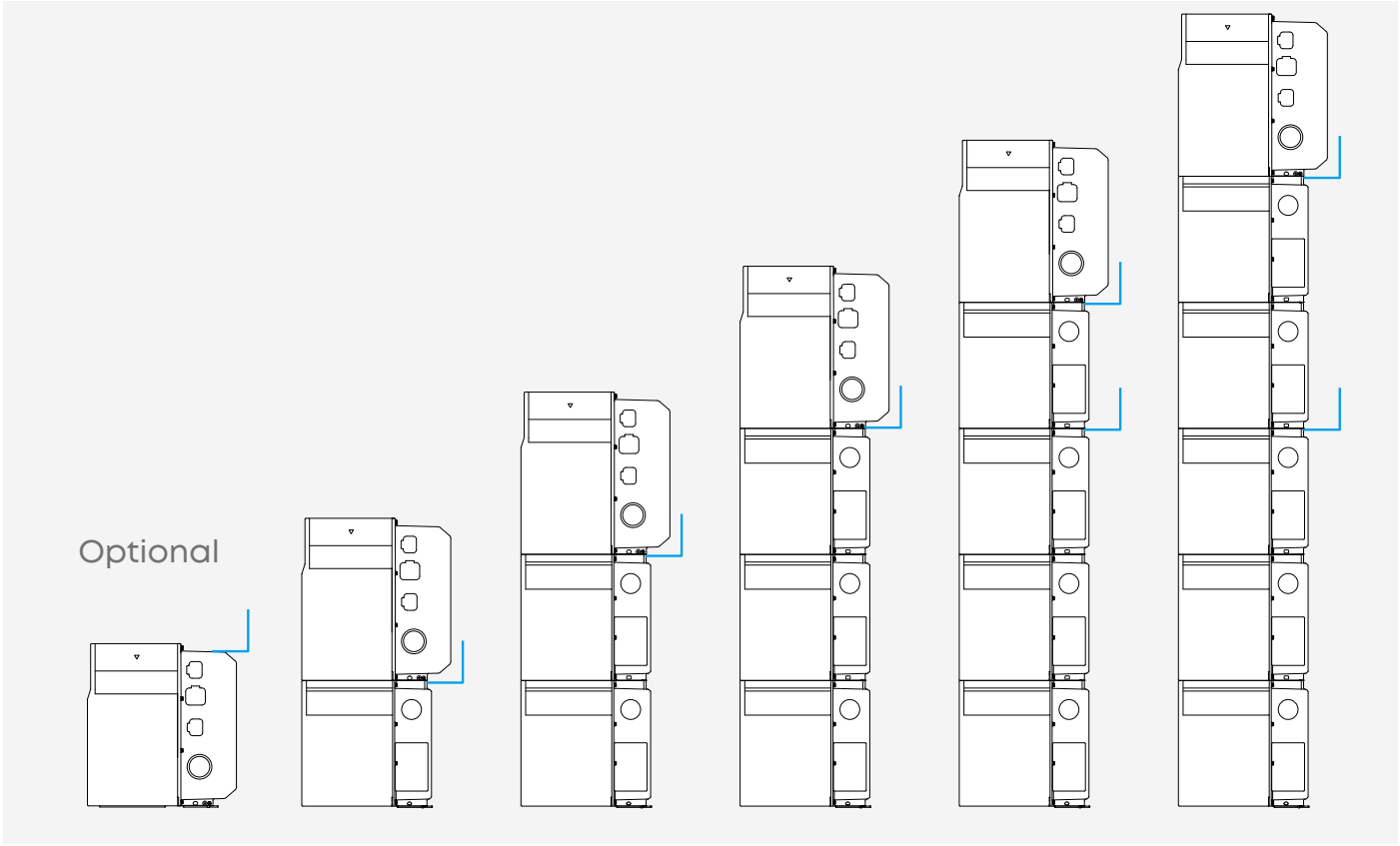
Step 3. Install Wall Mount Brackets

Mark one upper hole. Choose a position that avoids brick joints.



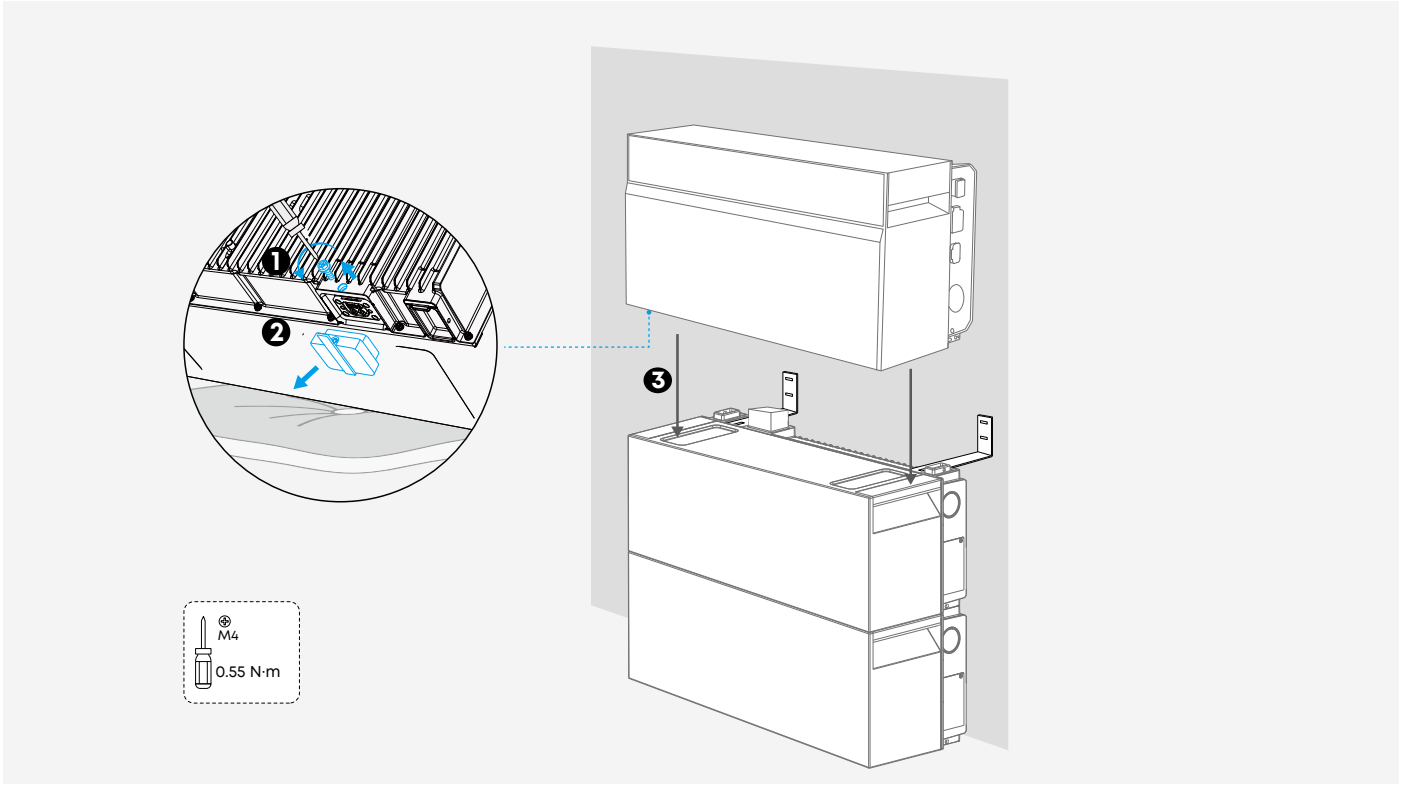
Determine the required quantity and installation positions of the wall mount brackets.

Configuration	Bracket Requirement
Main module only	Optional
1 to 3 battery modules	Install one pair on the top battery module.
4 to 5 battery modules	Install one pair on the top battery module, and one pair on the third battery module from bottom.

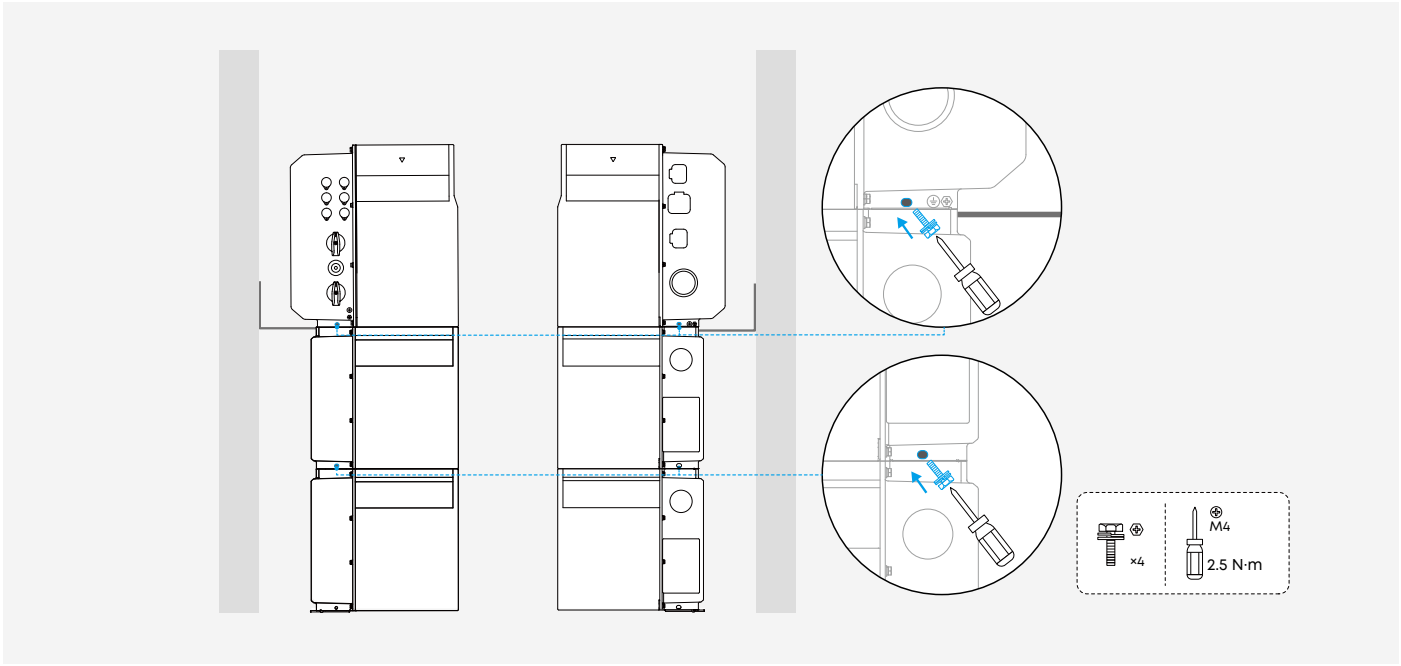


Step 4. Mount the Main Module

Remove the lower rubber plug from the main module.



Step 5. Lock Modules

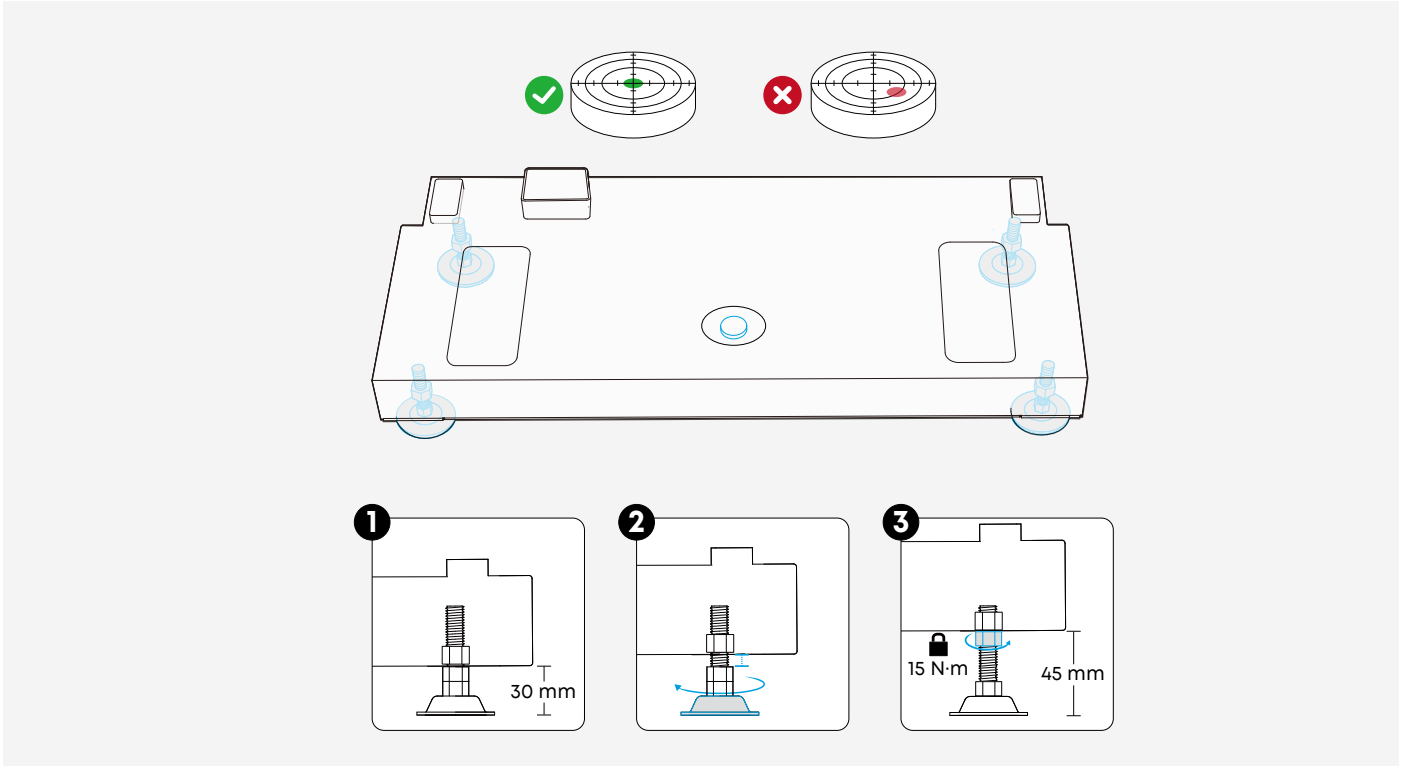


5.3 Floor-Mounted Base Installation

This method supports installation of one main module and up to five battery modules. The following procedure uses one main module and two battery modules as an example.

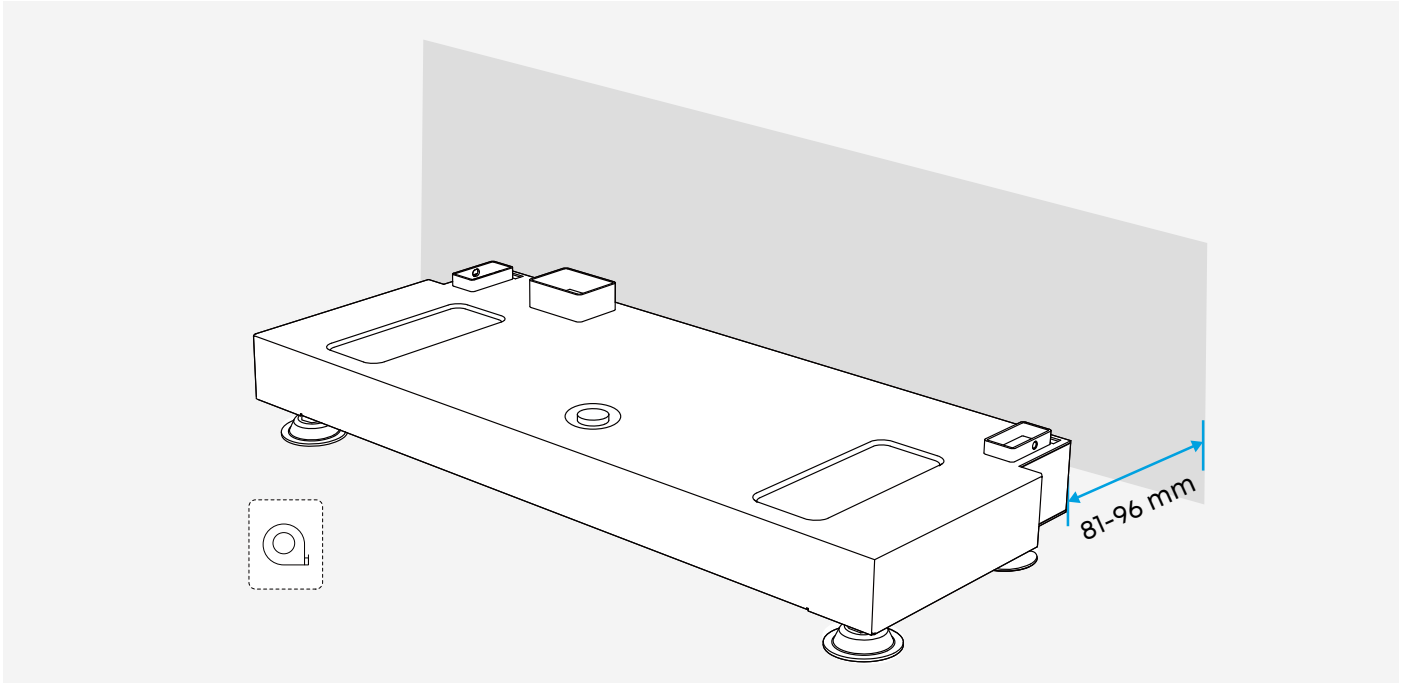
Step 1. Adjust the Leveling Feet if Needed

Adjust the leveling feet on the floor-mounted base to create a level surface.



Step 2. Place the Floor-Mounted Base

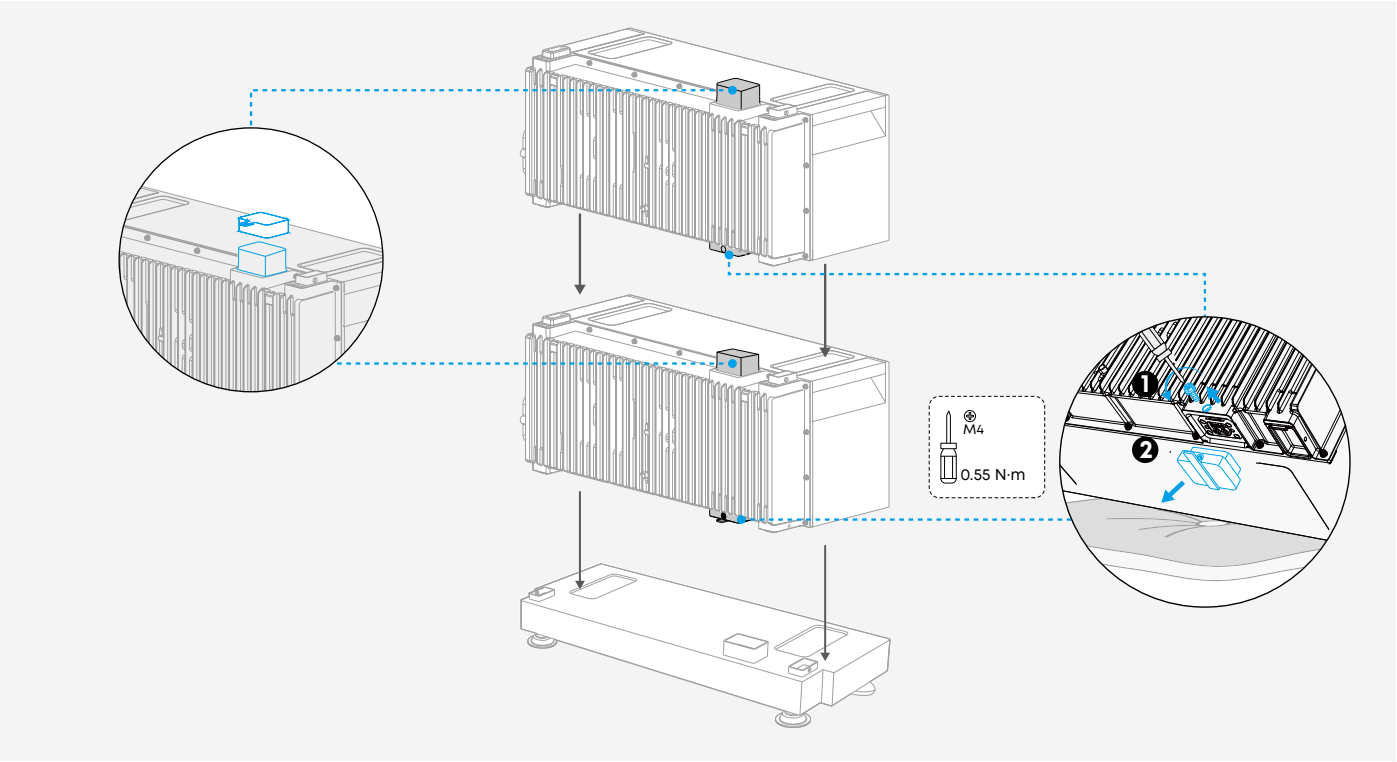
Place the floor-mounted base on a solid surface within Wi-Fi range.



For standalone installation with main module only, position the floor-mounted base 81 to 96 mm from the wall.

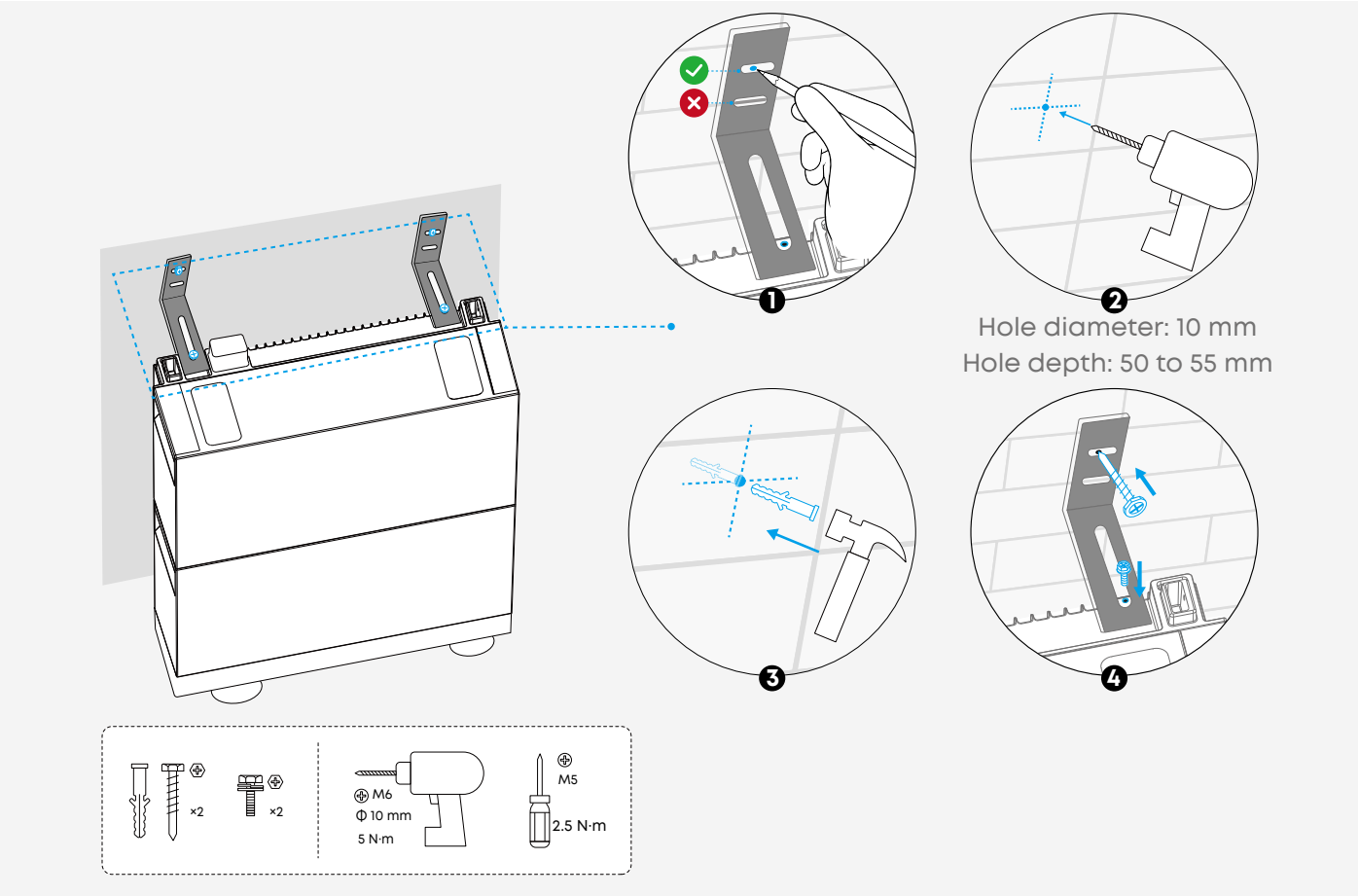
Step 3. Stack Battery Modules

Before stacking, remove the rubber plugs from the battery ports to be connected. Place the module on a soft pad to prevent scratches.



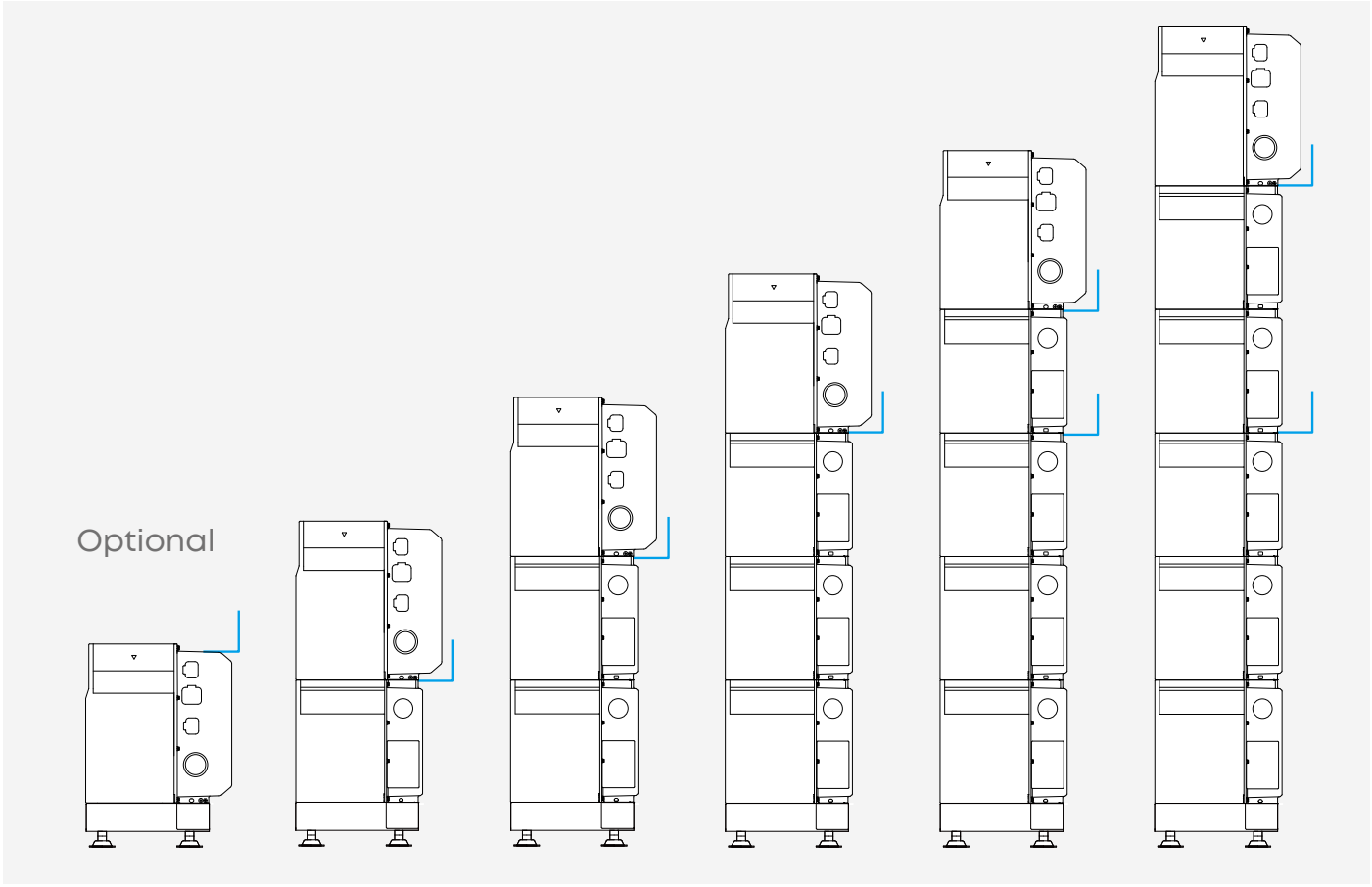
Step 4. Install Wall Mount Brackets

Mark one upper hole. Choose a position that avoids brick joints.



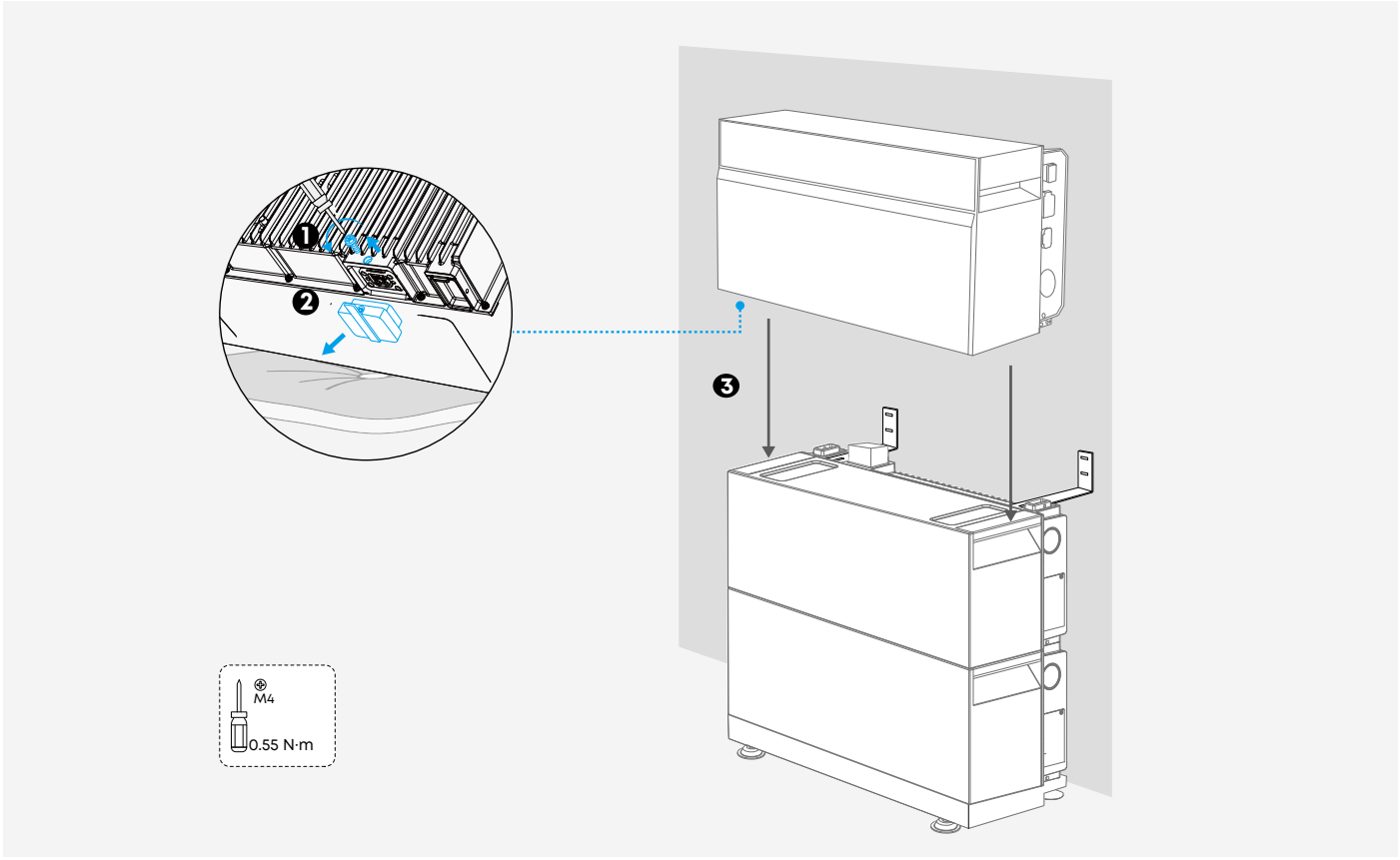
Determine the required quantity and installation positions of the wall mount brackets.

Configuration	Bracket Requirement
Main module only	Optional
1 to 3 battery modules	Install one pair on the top battery module.
4 to 5 battery modules	Install one pair on the top battery module, and one pair on the third battery module from bottom.

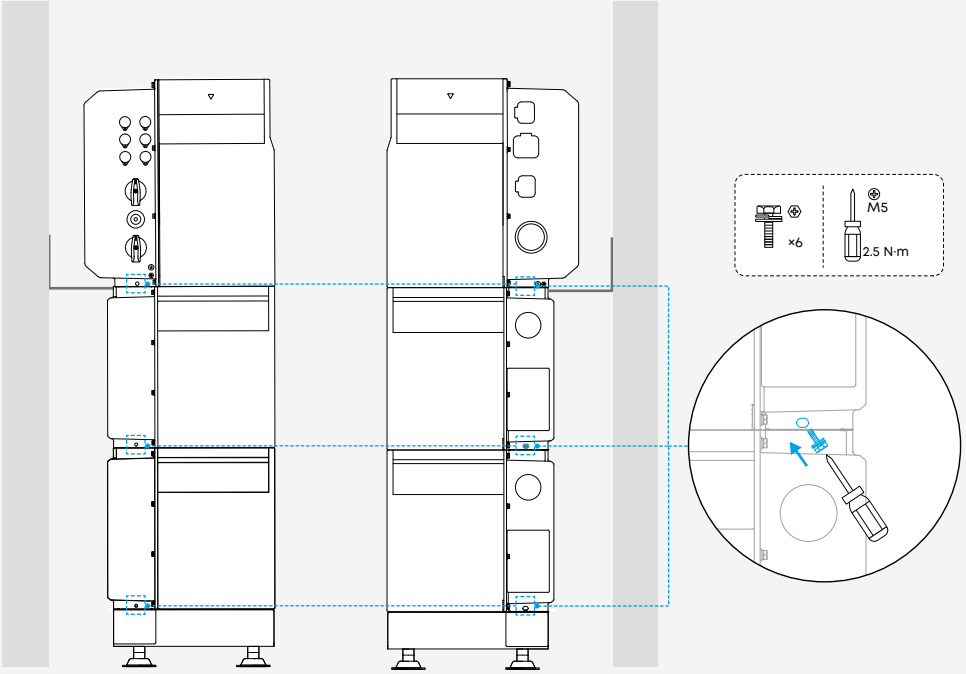


Step 5. Mount the Main Module

Remove the lower rubber plug from the main module.



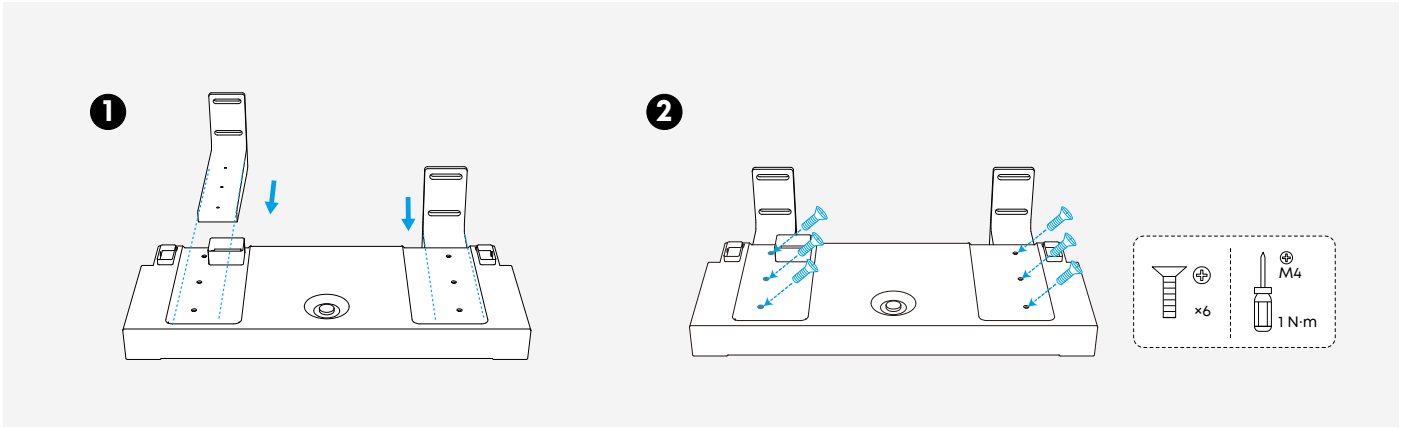
Step 6. Lock Modules



5.4 Wall-Mounted Base Installation

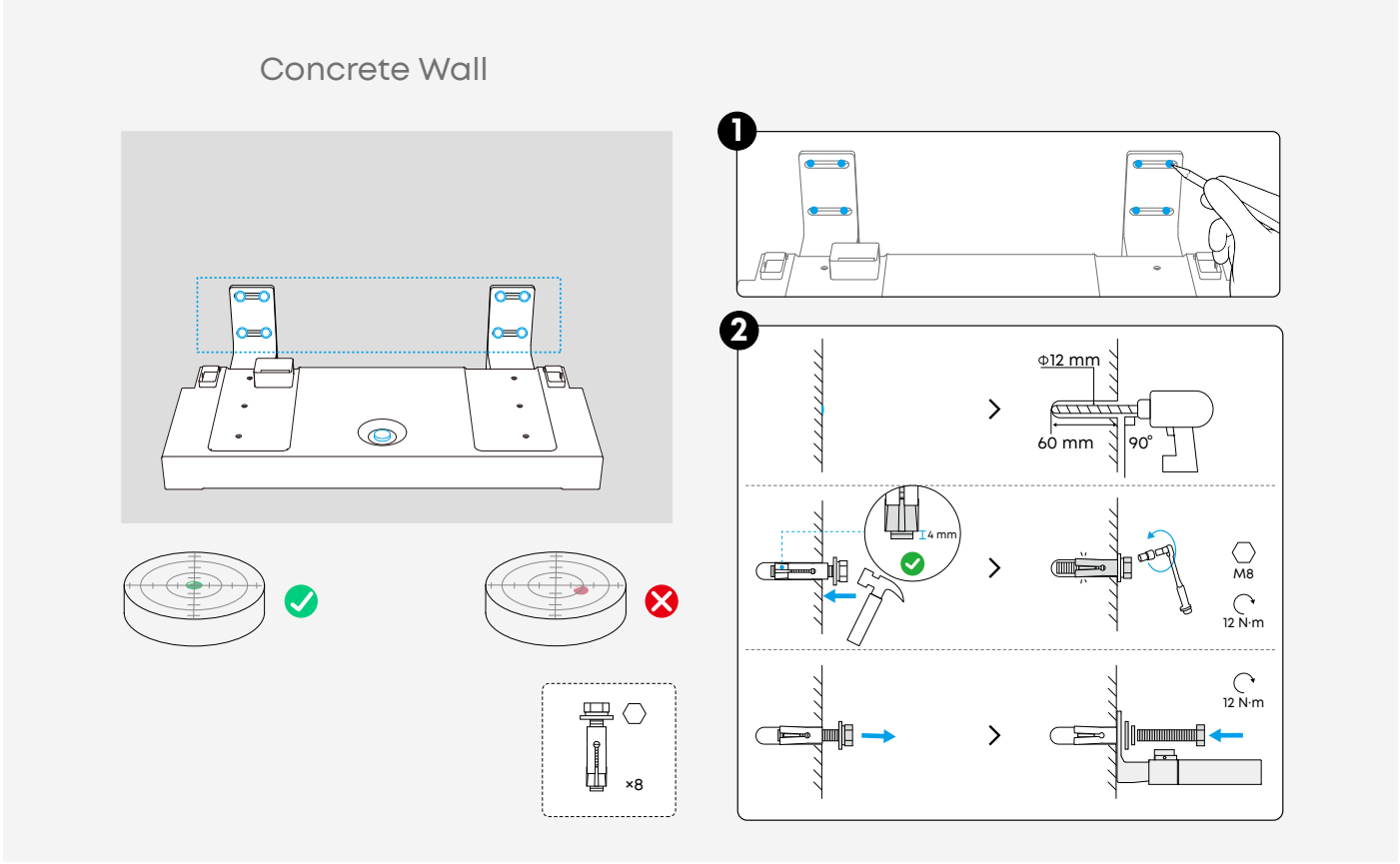
The wall-mounted base can support one main module and up to three battery modules. The following procedure uses one main module and two battery modules as an example.

Step 1. Attach the Base Holders to the Base

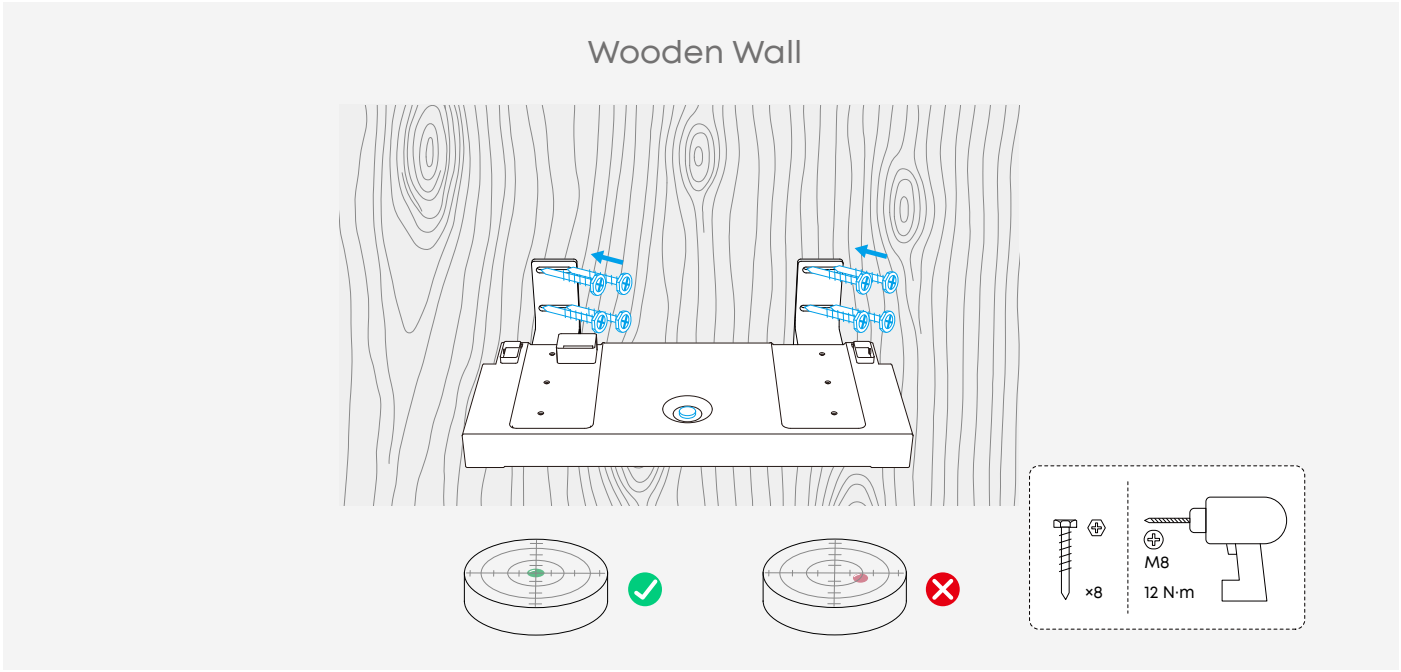


Step 2. Secure the Base to the Wall

Position the base within Wi-Fi coverage.

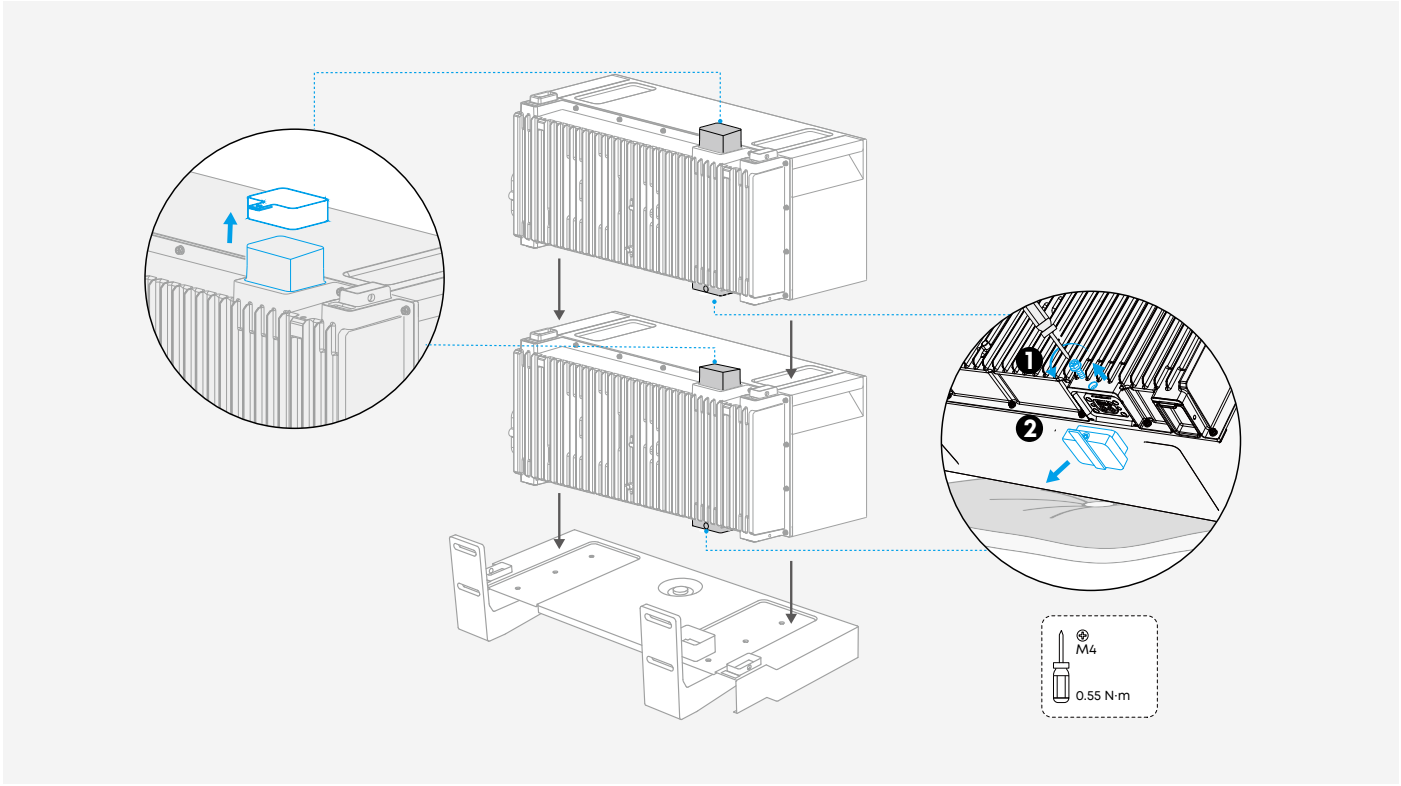


The base must be secured to the wood studs.



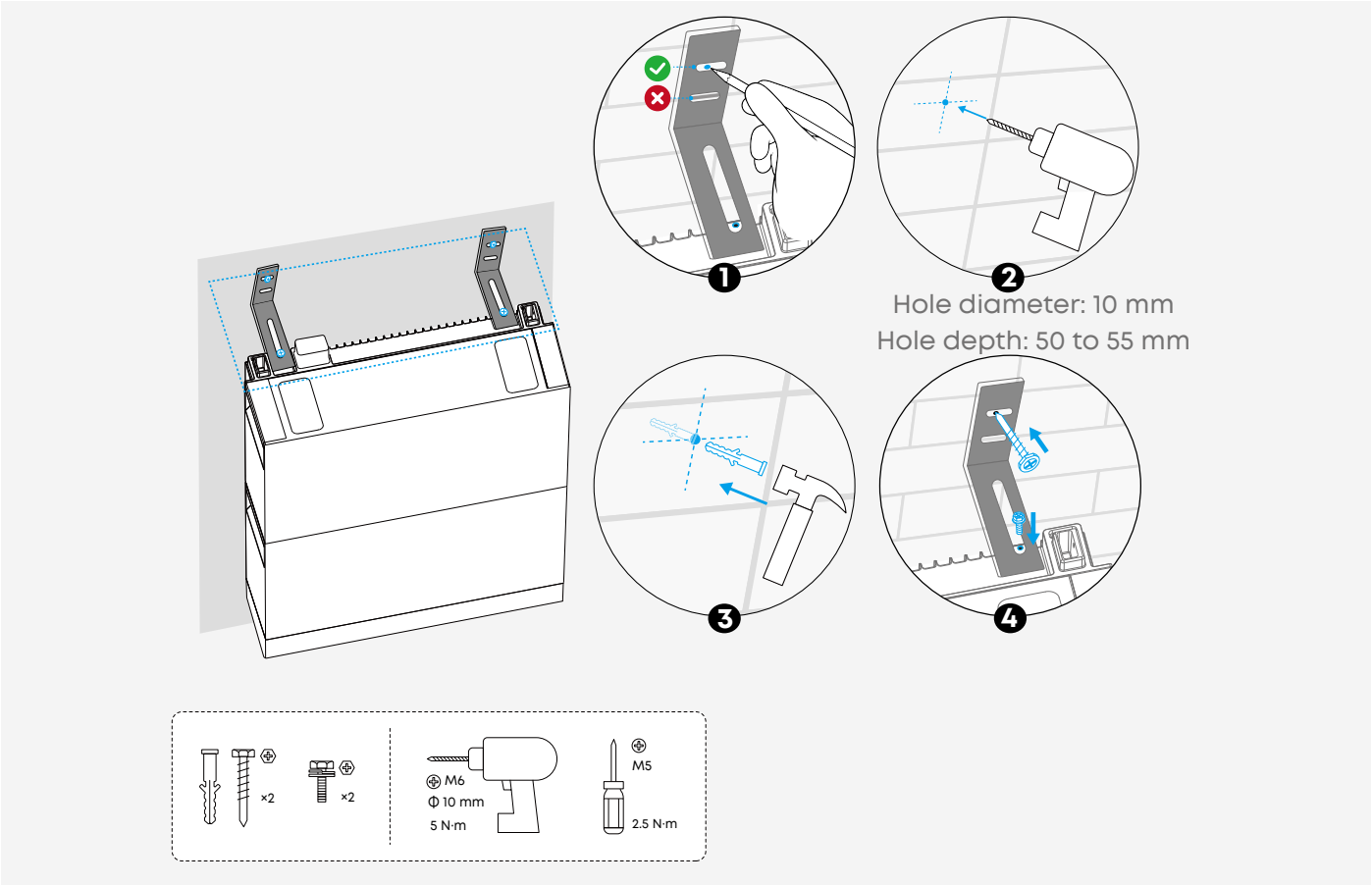
Step 3. Stack Battery Modules

Before stacking, remove the rubber plugs from the battery ports. Place the module on a soft pad to prevent scratches.



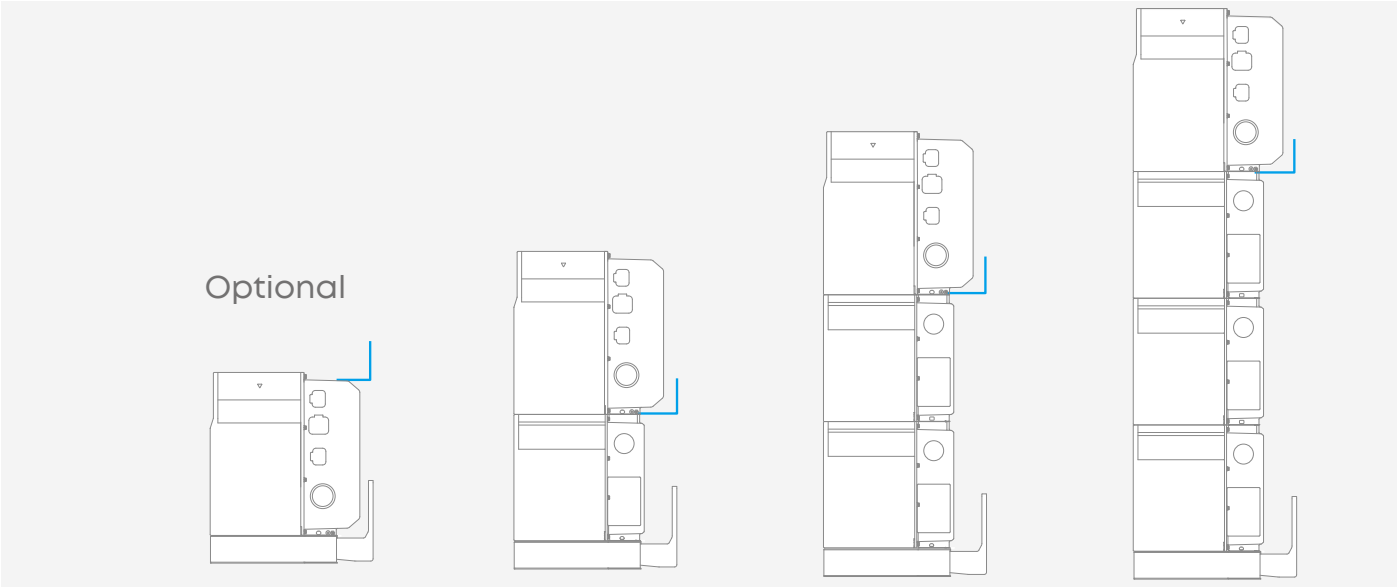
Step 4. Install Wall Mount Brackets

Mark one upper hole. Choose a position that avoids brick joints.



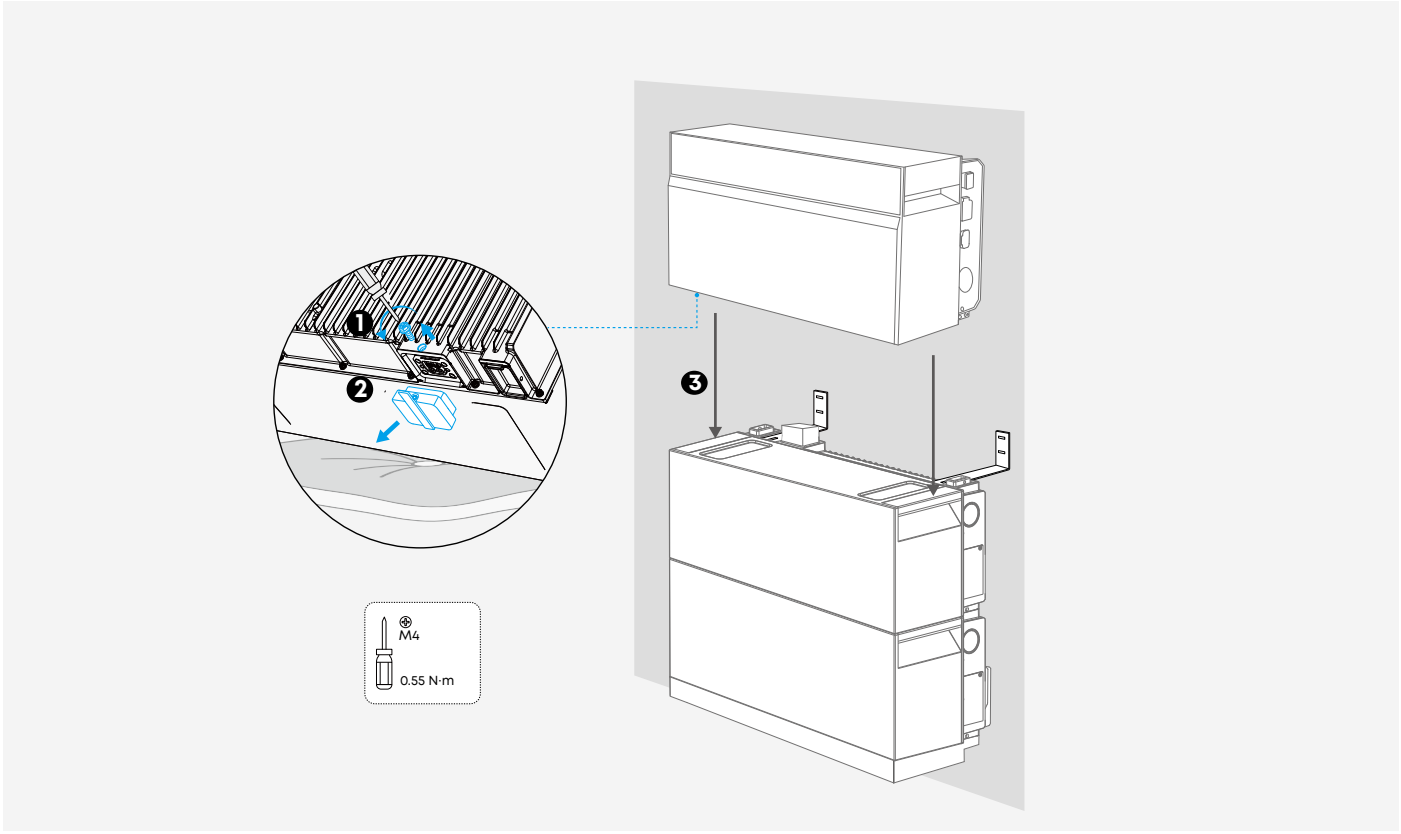
Determine the required quantity and installation positions of the wall mount brackets.

Configuration	Bracket Requirement
Main module only	Optional
1 to 3 battery modules	Install one pair on the top battery module.

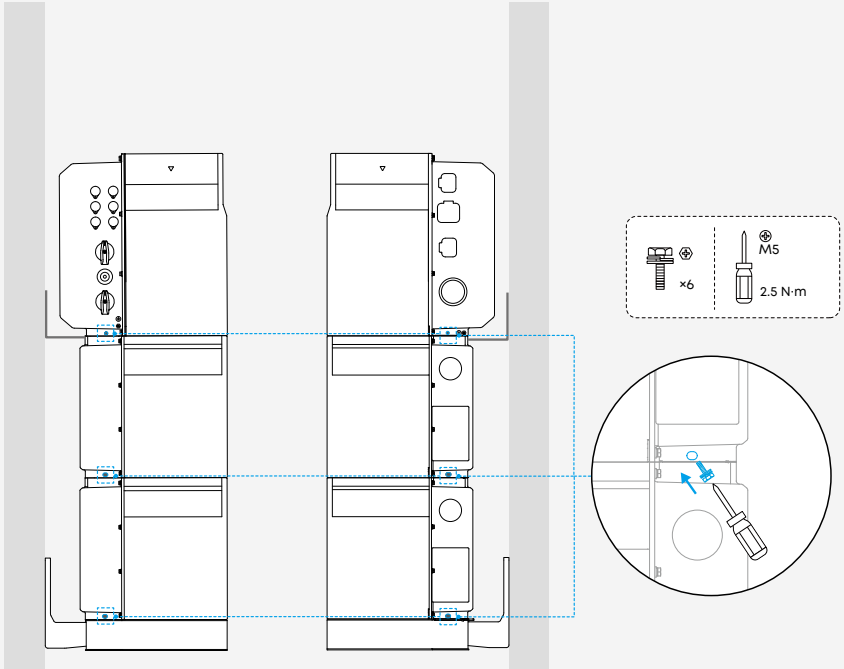


Step 5. Mount the Main Module

Remove the lower rubber plug from the main module.



Step 6. Lock Modules



6. Electrical Connections

6.1 Precautions

· Read all safety instructions in Section 11. Safety Information.

· Seal all unused ports with waterproof caps.

· Before making any connections, ensure that the main module is powered off and that the PV switch and battery switch are in the OFF position.

6.2 Wiring Diagram

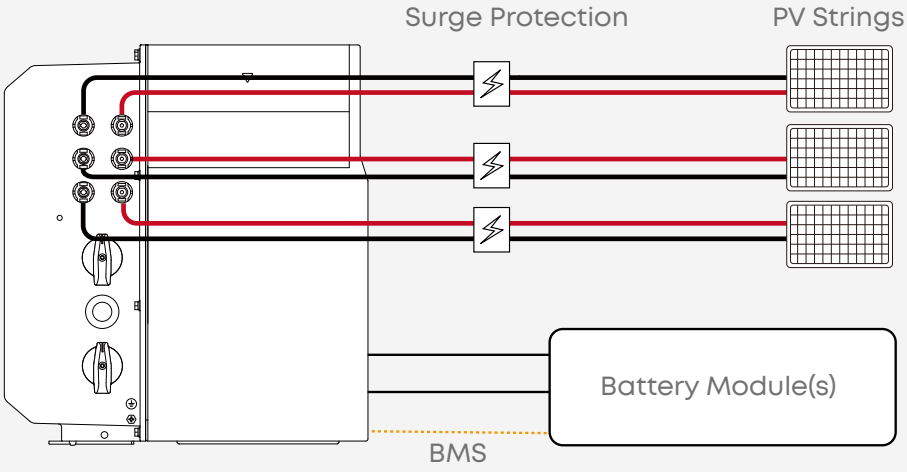
This section shows the main wiring methods for these scenarios:

· Connect the main module to the PV panels.

· Connect the main module to the smart meter, grid, and backup loads.

DC Wiring

The following diagram shows the DC wiring method for connecting the main module to the PV panels.



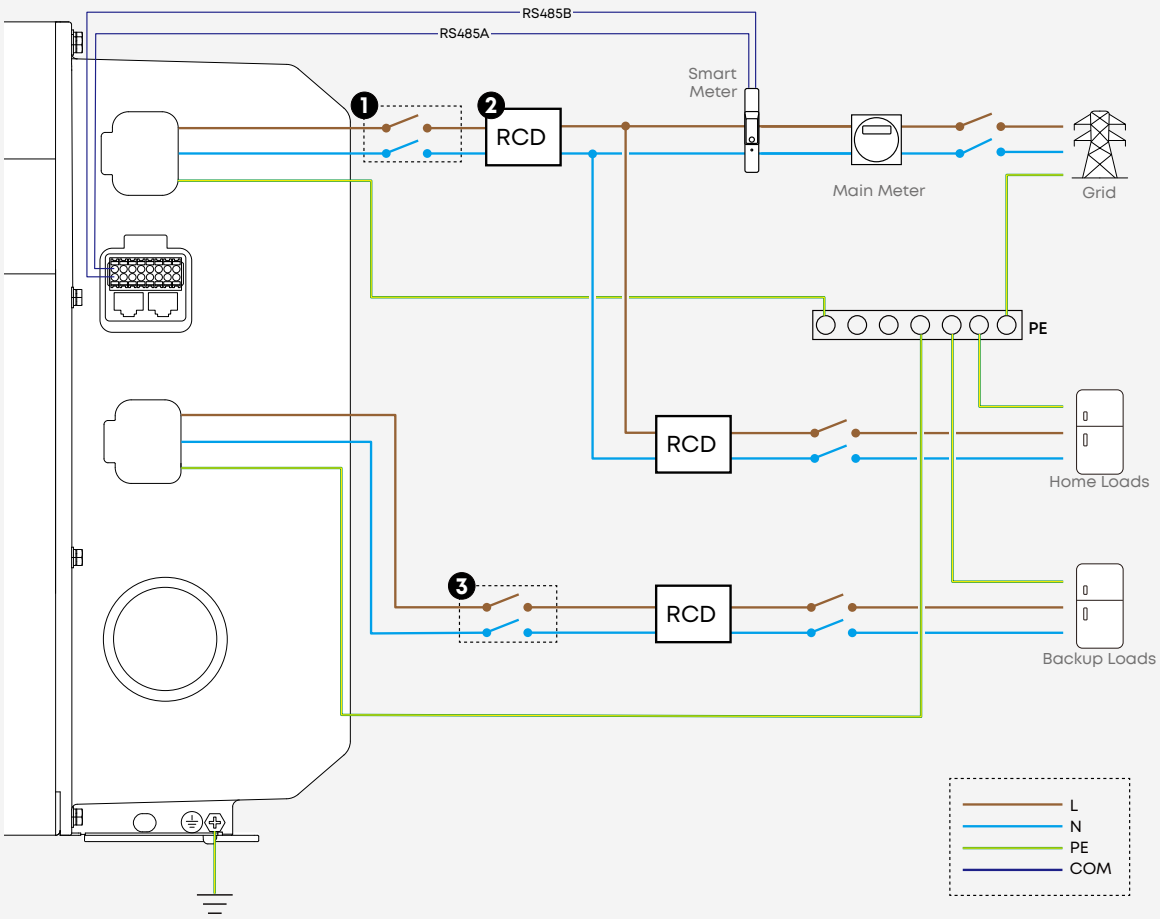
AC Wiring

The following diagrams show the AC wiring methods for connecting the main module to the grid, backup loads, and the smart meter.

- The main module includes an integrated universal current-sensitive residual current monitoring unit. This unit disconnects the main module from the mains immediately if a fault current with a value exceeding the limit is detected.
- If an external Residual Current Device (RCD) is required, use a Type A RCD with a residual current of 100 mA. Local standards may permit RCDs with other specifications.
- If two main modules are connected in parallel, connect both main modules to the same Type A RCD with a recommended residual operating current of 300 mA.

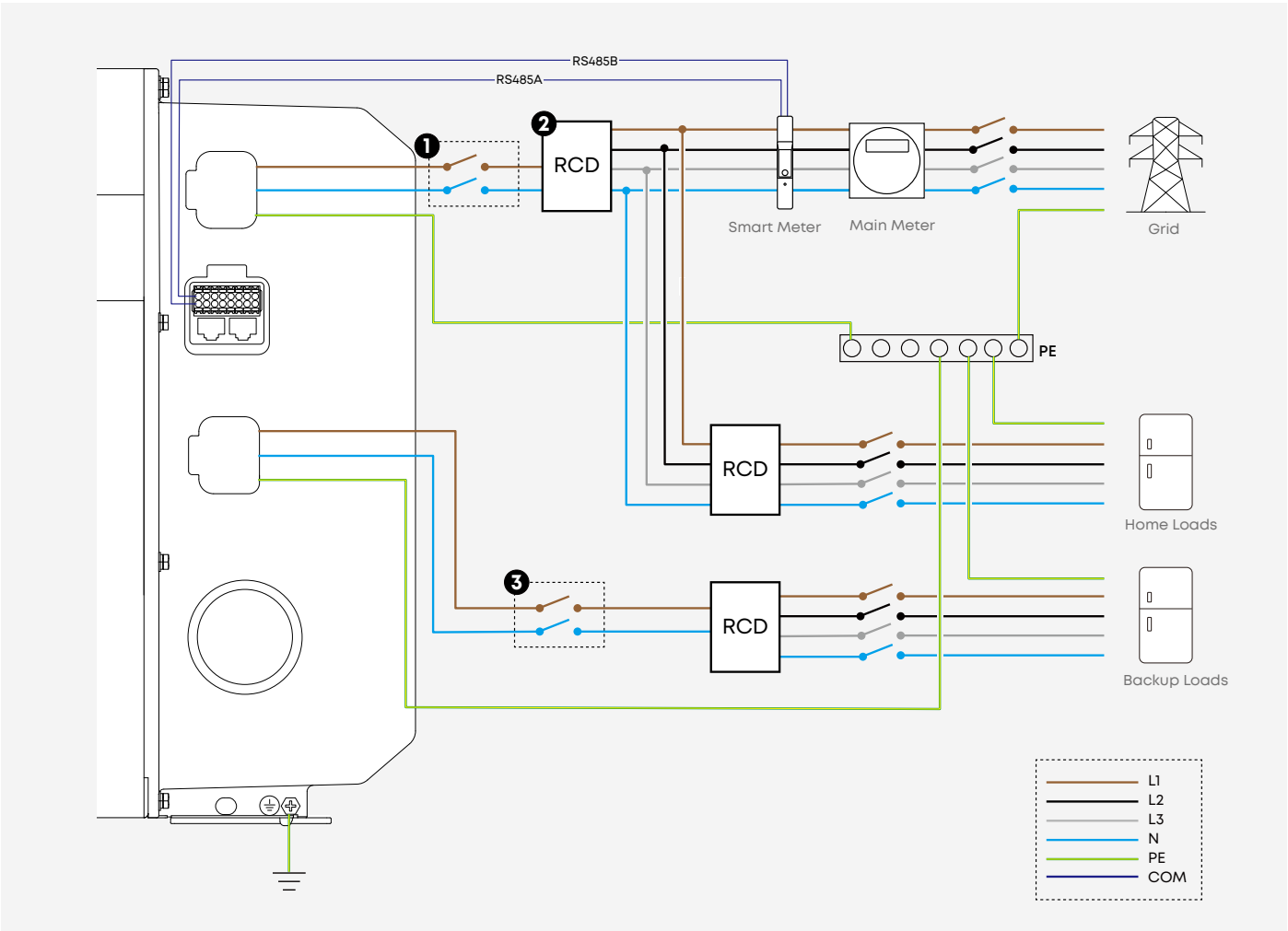
Connect the main module to the smart meter through RS485 cables or Wi-Fi.

Single-Phase



No.	Device	Specifications
1	AC Breaker	32 A, 230 V, Type B
2	RCD	100 mA, Type A
3	AC Breaker	32 A, 230 V, Type B

Three-Phase

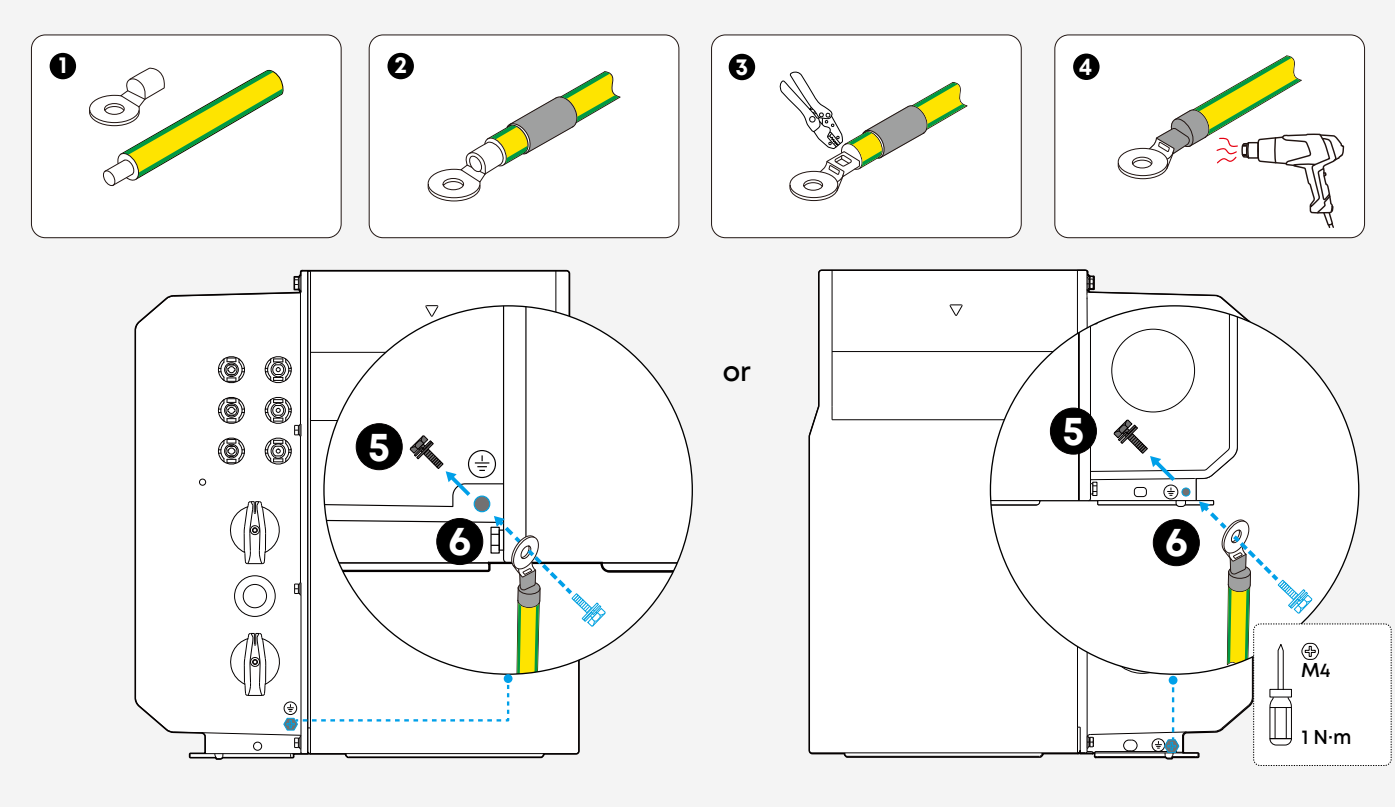


No.	Device	Specifications
1	AC Breaker	32 A, 230 V, Type B
2	RCD	100 mA, Type A
3	AC Breaker	32 A, 230 V, Type B

6.3 Connect to the Ground

Connect the main module to the building's main earthing terminal.

1. Strip the insulation layer of the ground cable.
2. Slide the heat shrink tubing onto the ground cable, and then insert the cable into the ring terminal.
3. Crimp the ring terminal onto the ground cable.
4. Wrap the wire crimping area with heat shrink tubing using a heat gun.
5. Loosen the pre-installed screw from either side of the main module.
6. Use the screw to secure the ground cable.



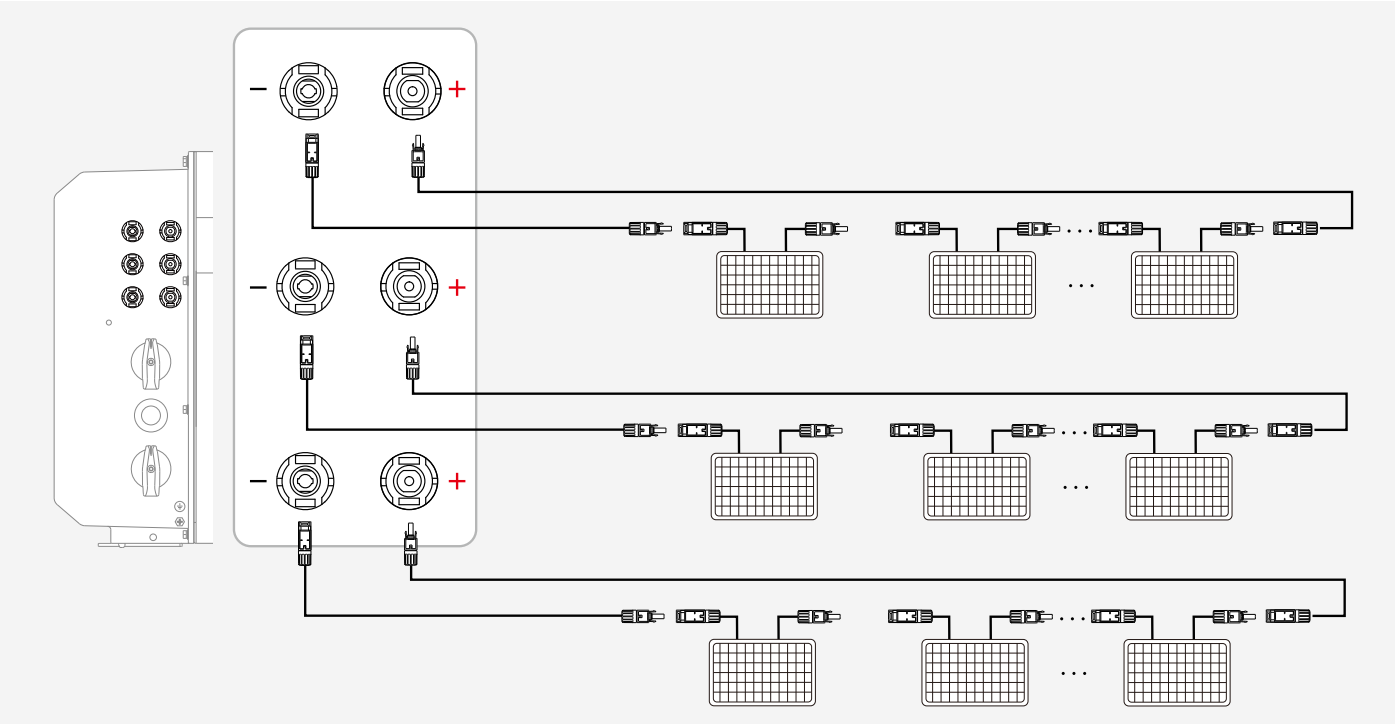
6.4 Connect to PV Panels

The main module supports series connection of PV panels. See the wiring diagram below. Ensure that the connected PV string meets the input limits for each set of PV input ports.

· Maximum input voltage: 600 V DC

· Maximum input current: 18 A

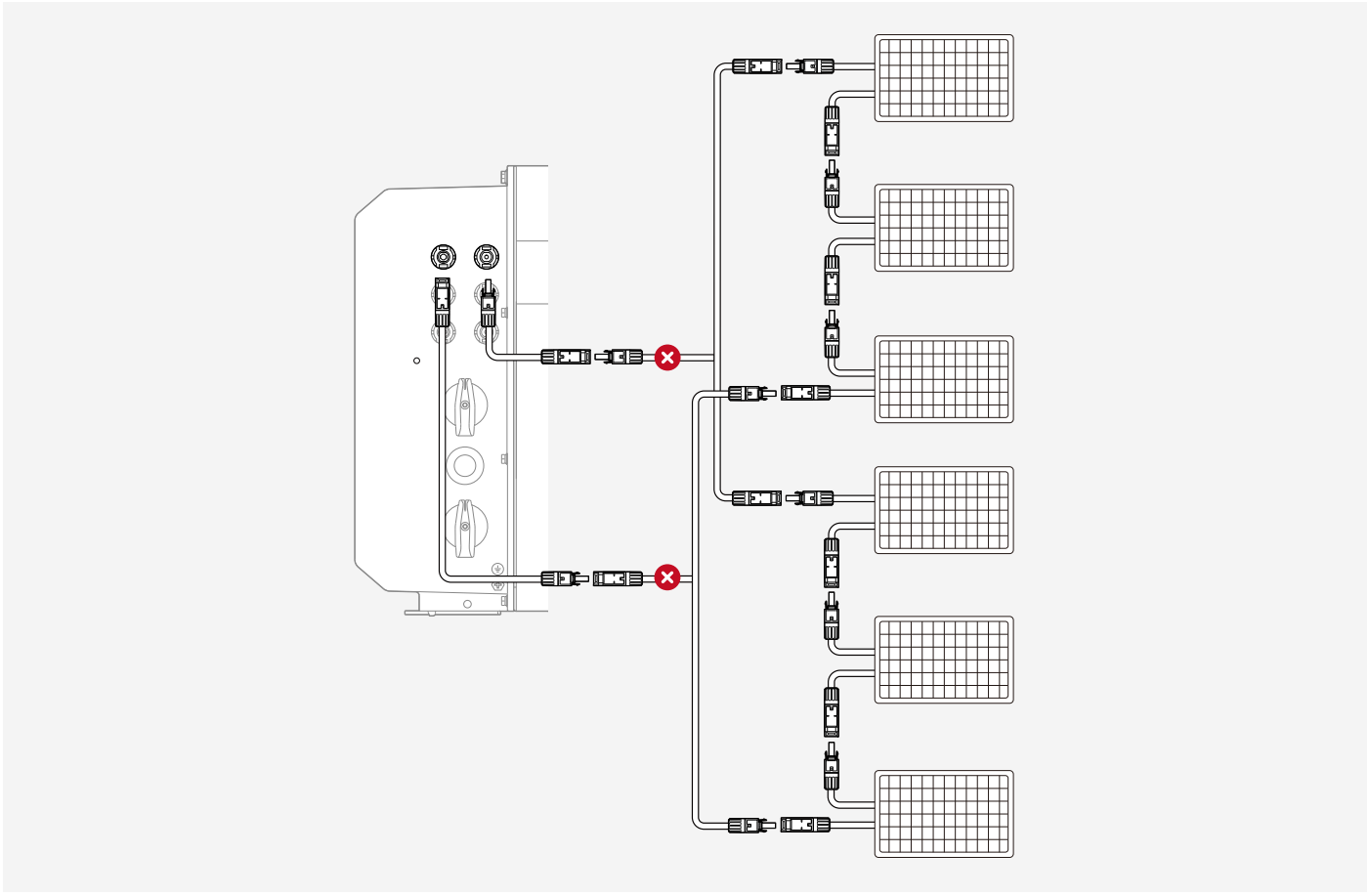
· Maximum input power: 5 kW



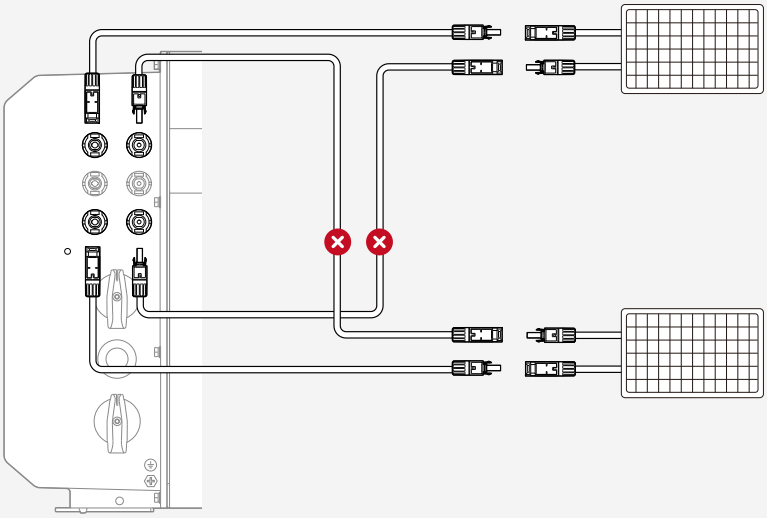
Precautions

- Use only the PV connector kit included in the package. Using incompatible PV terminals and connectors may burn the cables or damage the equipment. The resulting equipment damage will not be covered under warranty.
- Always switch off the battery switch and the PV switch before connecting or reconnecting the PV panels.
- Seal unused PV input ports on the main module with waterproof caps to prevent moisture ingress.

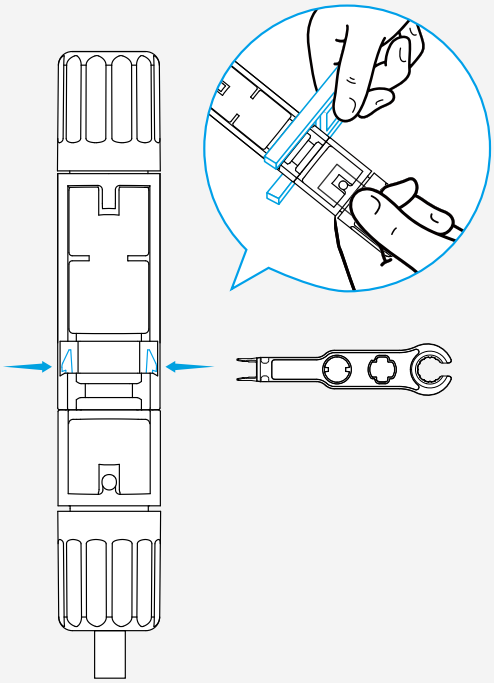
Connect only one PV string to each set of PV input ports. Never connect multiple PV strings in parallel to the same set of PV input ports.



Never connect the same set of PV connectors to different sets of PV input ports.

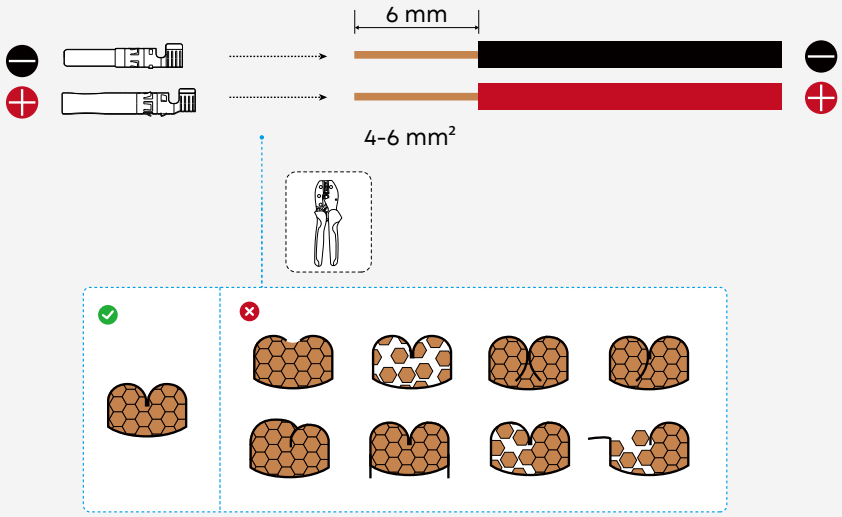


To disconnect the PV connectors, use the included wrench.



Prepare PV Cables

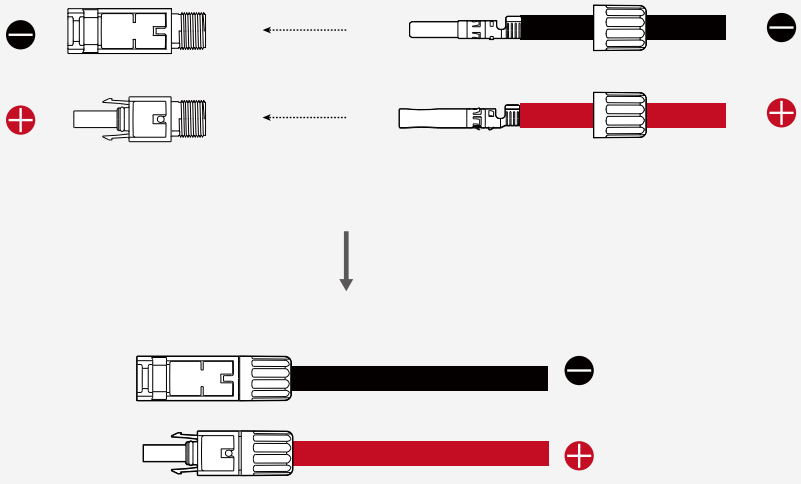
1. Strip the PV cables and crimp the PV terminals.



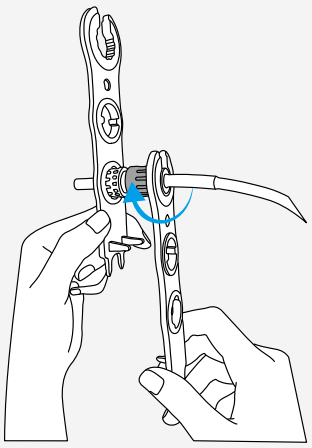
- Do not cut or damage the conductor strands under the insulation.
- Fully crimp the conductor into the terminal. Keep the conductor 1 to 2 mm beyond the crimping area.
- Do not crimp the cable insulation into the terminal.
- Keep the terminal and conductor centered during crimping. A proper crimp is tight and symmetrical on both sides.
- After crimping, ensure the cable is securely retained in the terminal. The minimum pullout force is 310 N for 4 mm^2 cables and 350 N for 6 mm^2 cables.

2. Insert the PV terminals into the PV connectors.

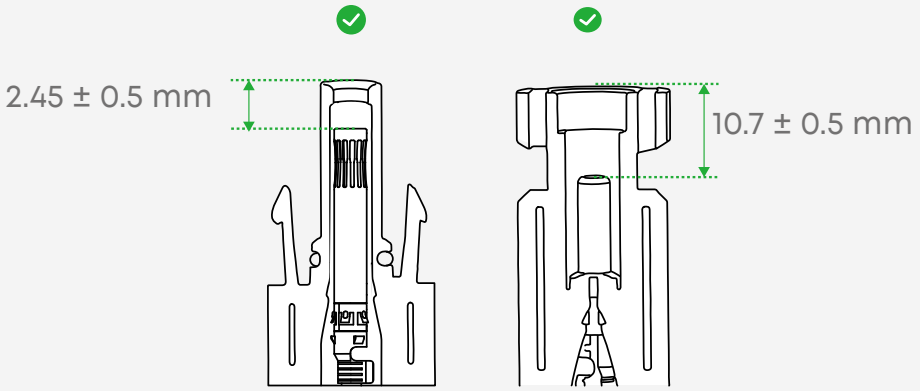
Gently pull the cable to check that each terminal is fully engaged.



3. Install the connector nuts by hand first, then tighten them using PV wrenches.
   Keep the cables straight and centered in the connector nuts during tightening.



4. Check the terminal position after tightening.



Determine the Number of PV Panels

Calculate the maximum number of PV panels per string by following the steps below. It is recommended to use the same number of PV panels in each PV string.

1. Confirm the key parameters before connection.

Parameters	Example (Rigid Solar Panel)
Maximum Output Power	500 W
Open-Circuit Voltage (Voc)*	41 V
Short-Circuit Current (Isc)	14 A

*Refers to the open-circuit voltage of the PV panel at its minimum operating temperature.

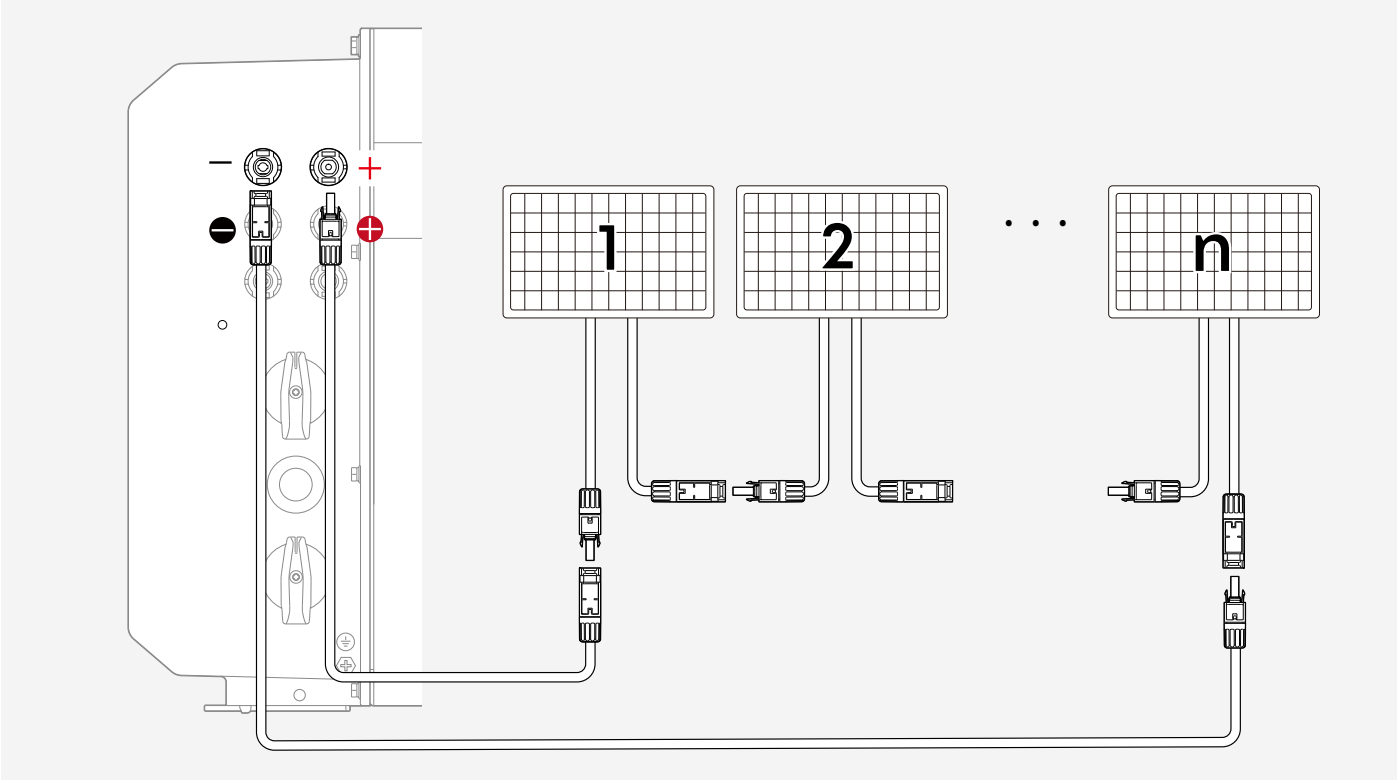
Parameters (Per MPPT)	Anker SOLIX XE
Maximum PV Input Power	5 kW
Maximum PV Input Voltage	600 V DC
Maximum PV Input Current	18 A

2. Calculate how many panels can be safely connected in series.

Step	Description
1. Apply Formula	Number of Panels = Maximum PV Input Voltage ÷ Voc of Single Panel
2. Perform Calculation	600 V ÷ 41 V ≈ 14 Panels
3. Verify Output Limits	Voltage: 41 V × 14 = 574 V **(< 600 V limit)** Current: 14 A **(< 18 A limit)**
4. Confirm Result	Up to 14 solar panels can be connected in series without exceeding the main module's PV input limit.

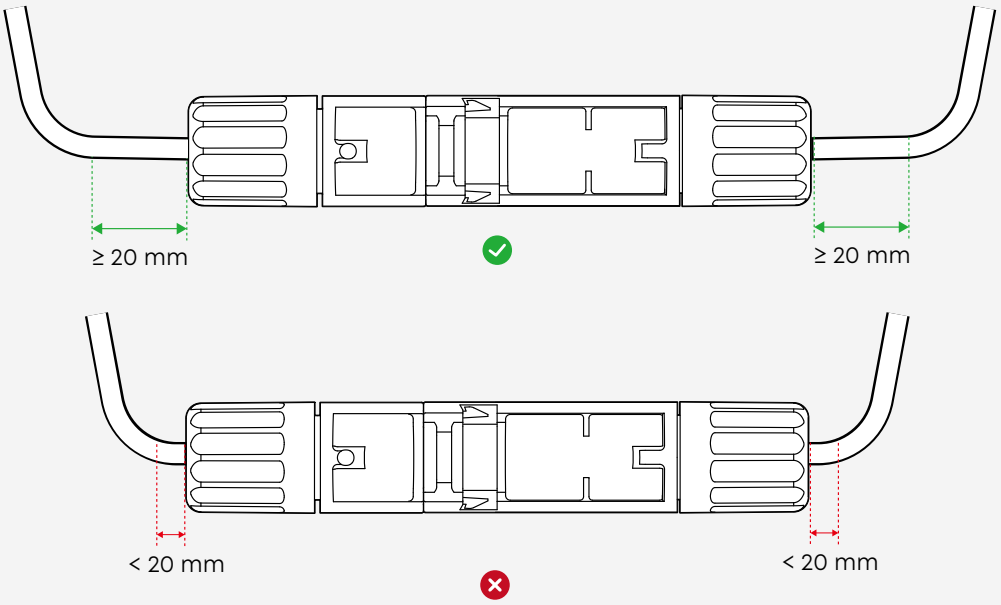
Connect PV Cables

1. Connect each PV string to the same set of PV input ports on the main module.
   Gently pull the connector to check that it is fully engaged.

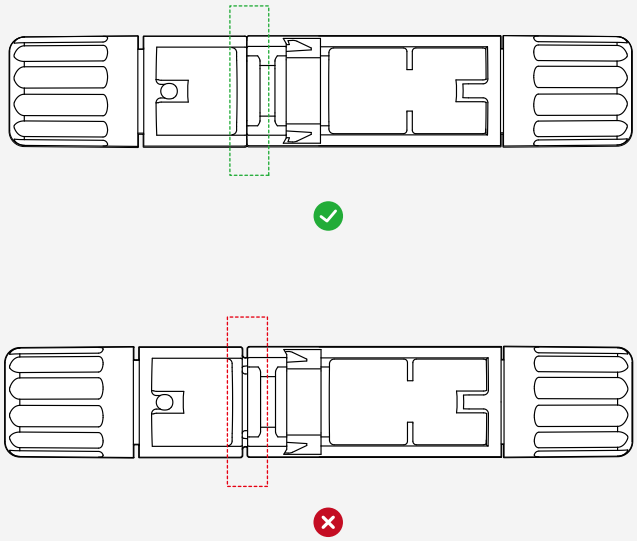


2. Route and secure the PV cables.

Leave at least 20 mm of the straight cable at each connector end. This protects the connector seal and reduces the risk of connection failure.



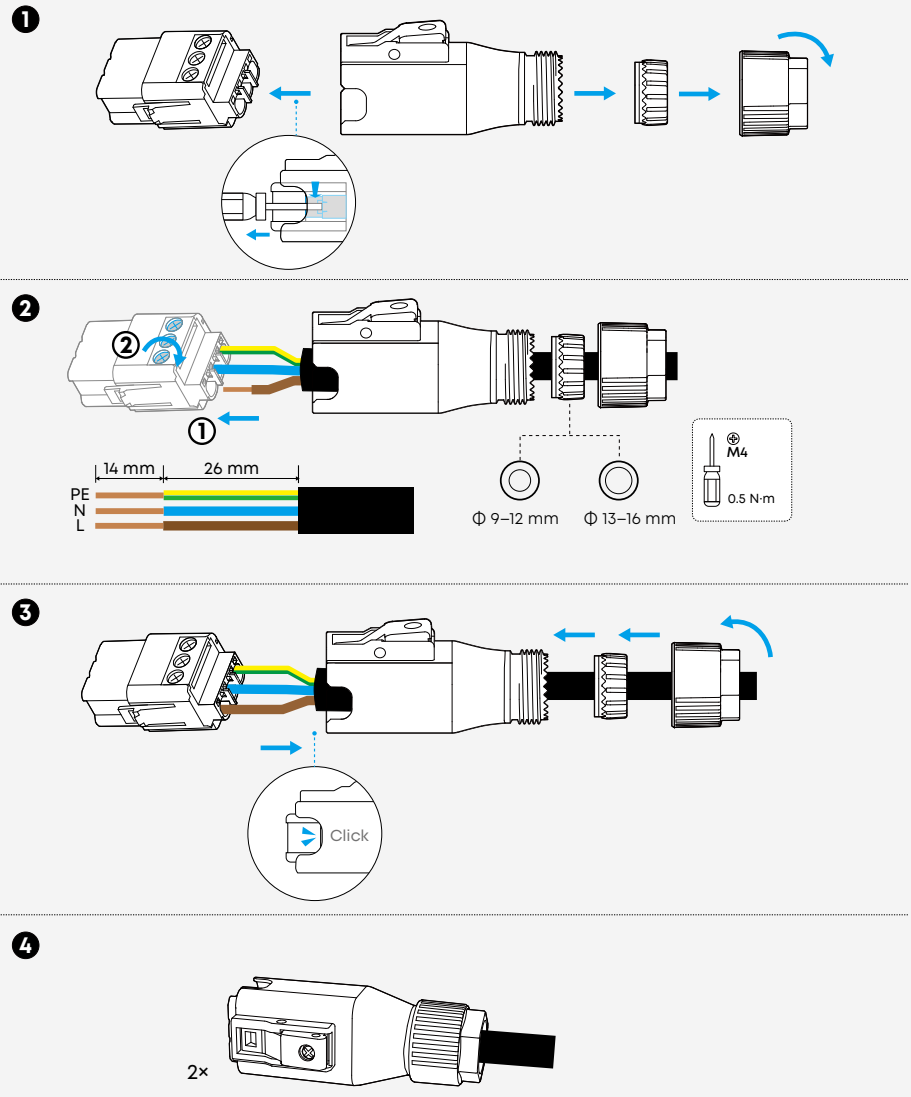
3. Check that all PV connectors are fully engaged and securely locked.



6.5 Connect to the Grid and Backup Loads

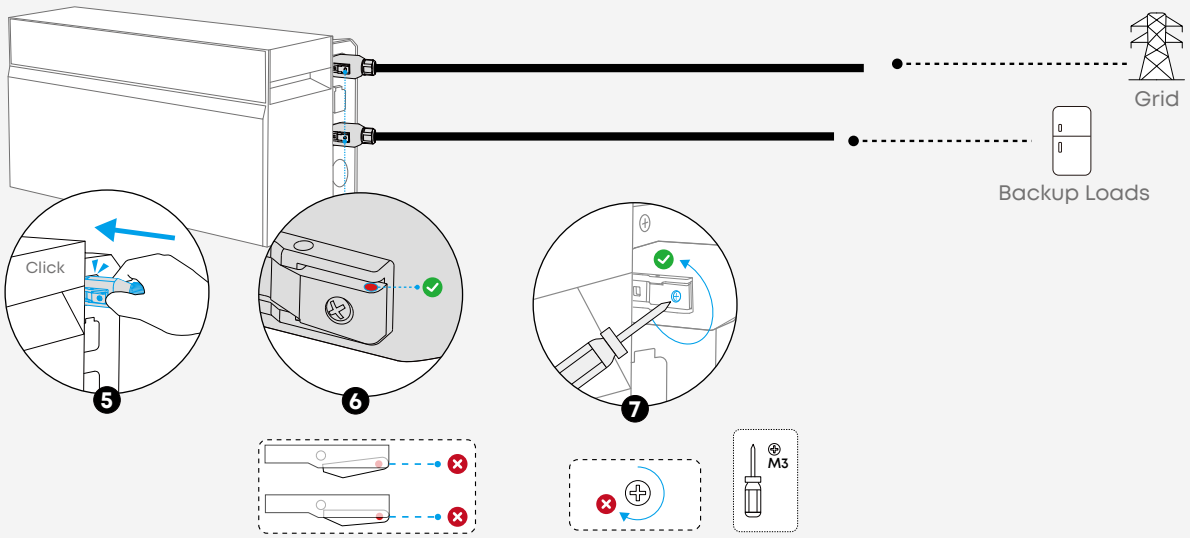
- Ensure that the total power of all loads connected to the backup port does not exceed the rated output power of the main module.
- Pay special attention to inductive loads, such as air conditioners and refrigerator motors. Their starting power must remain within the main module's power capacity.
- Wire colors may vary by country or region.

1. Disassemble an AC connector.
2. Connect power cables to the corresponding terminals.
3. Assemble the AC connector.
4. Repeat steps 1–3 for the other AC connector.



5. Insert the AC connectors until they click into place.
6. Check that a complete red circle is visible on each connector.

7. Loosen the screw until the latch can no longer be pressed.



To disconnect the AC connector from the main module:

1. Ensure the main module is powered off. For details, see Section 9.1 Power Off.
2. Tighten the screw.
3. Press the latch.
4. Pull out the connector.

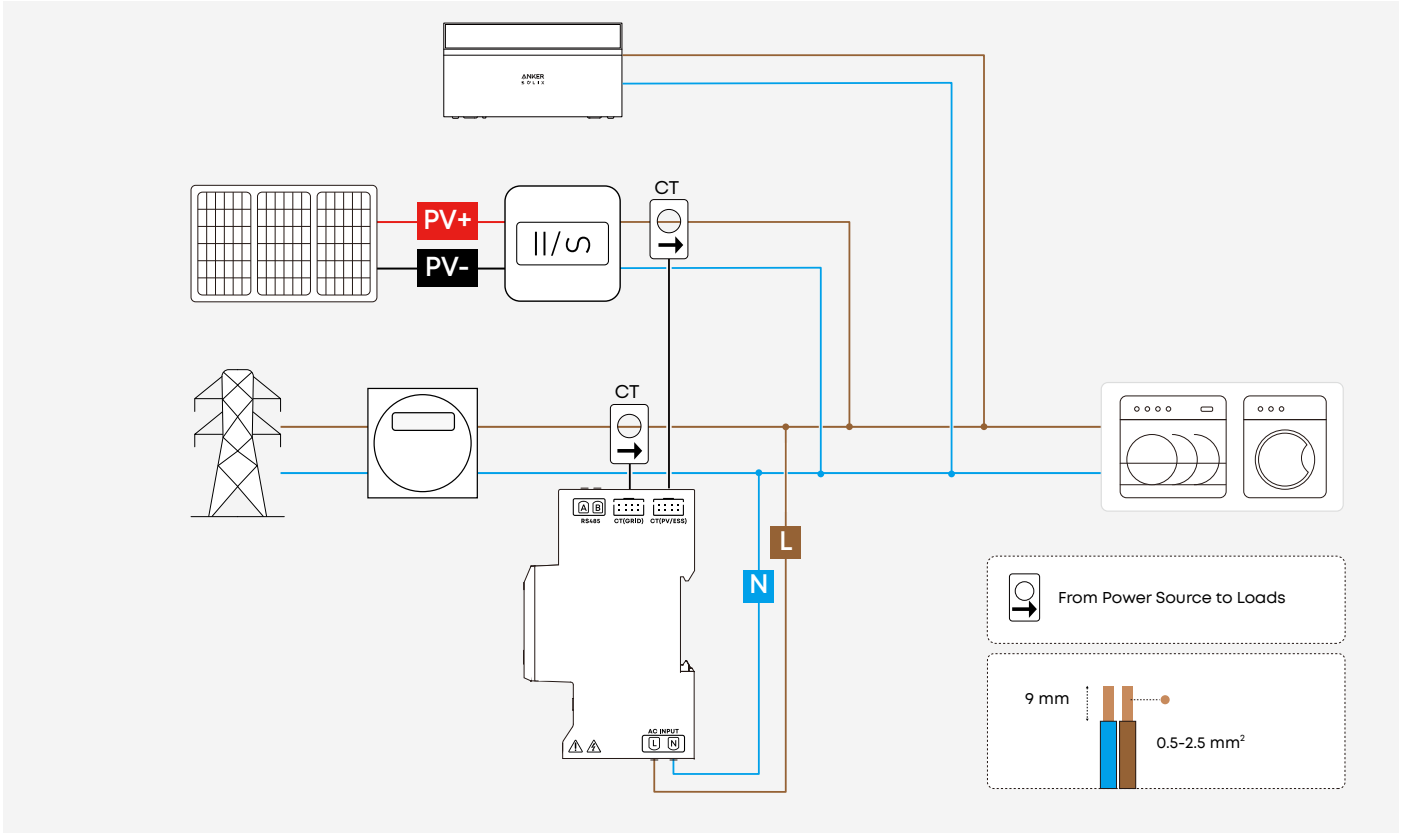
6.6 Connect to the Smart Meter

The main module can be used with Anker SOLIX Smart Meter Gen 2.

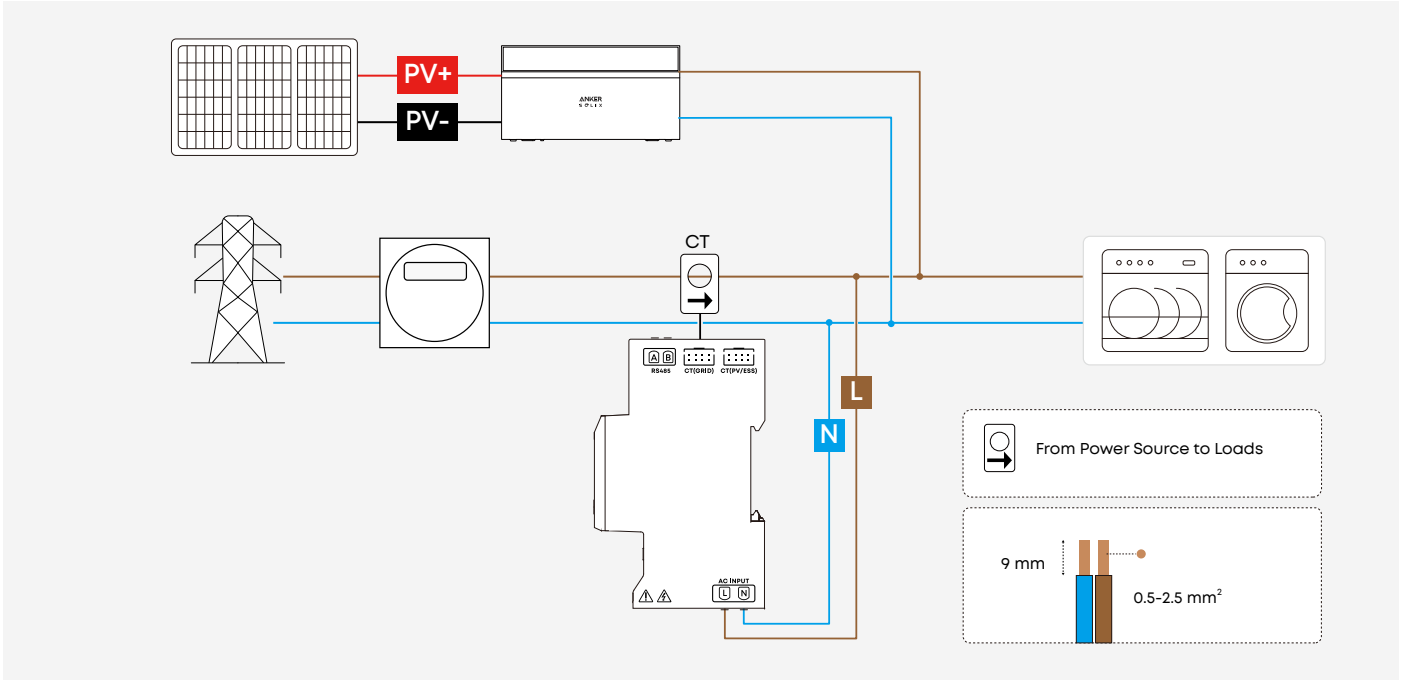
For complete instructions, please refer to Anker SOLIX Smart Meter Gen 2 User Guide (AE1X0).

1. Connect power cables and current transformers.

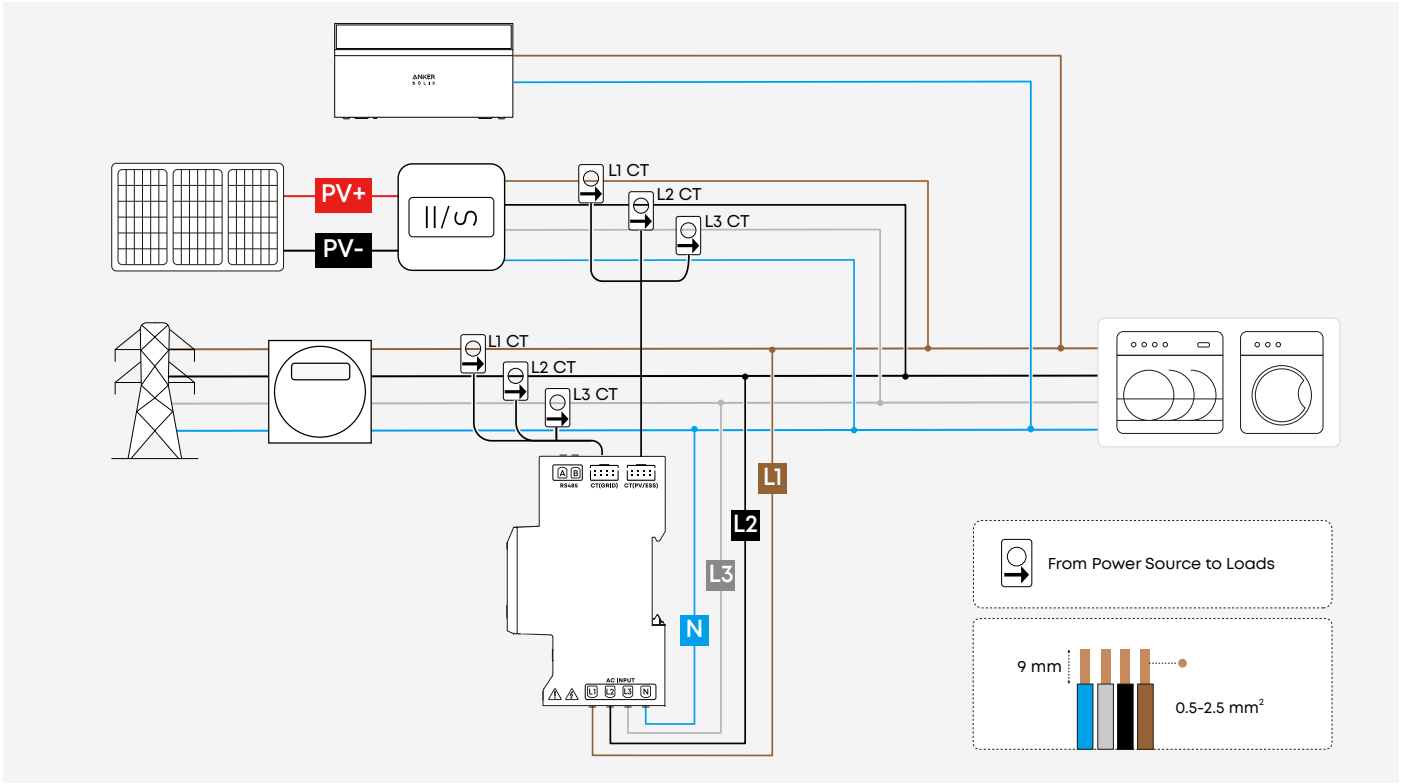
Single-Phase | PV System Installed to Distribution Board



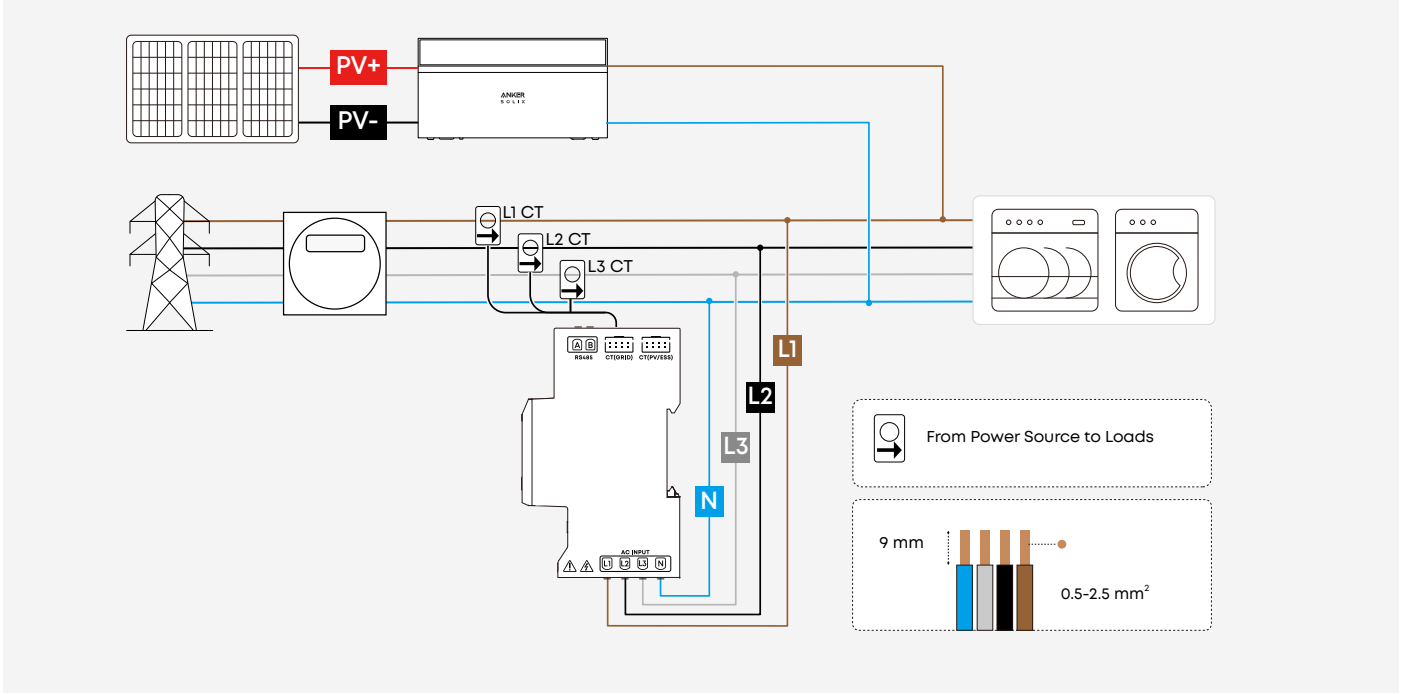
Single-Phase | PV System Installed to Main Module



Three-Phase | PV System Installed to Distribution Board

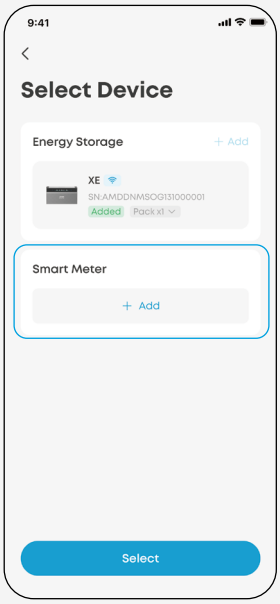


Three-Phase | PV System Installed to Main Module

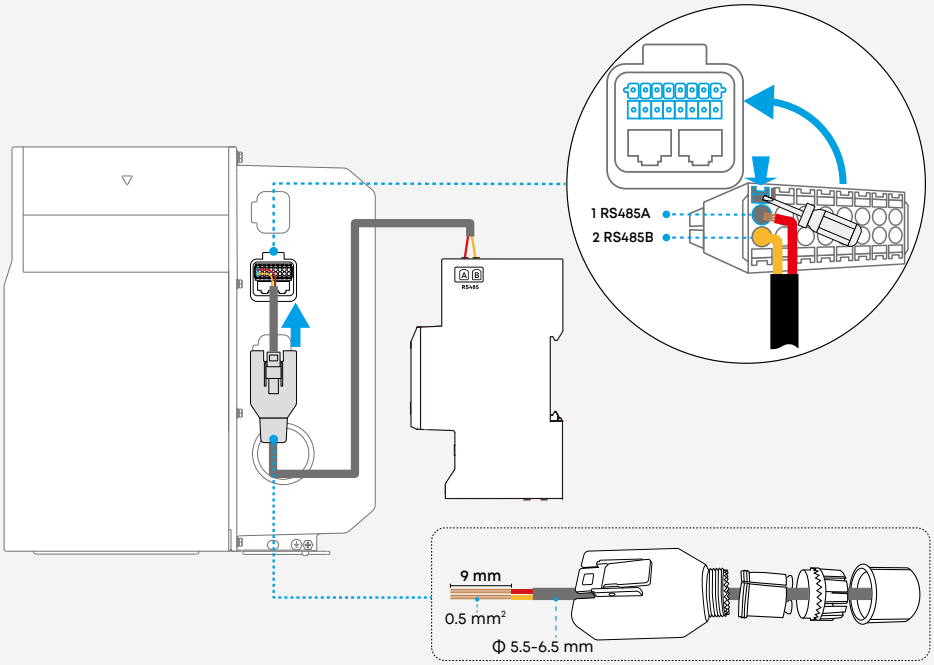


2. Establish communication.

Wireless Connection: Add the smart meter during app setup.



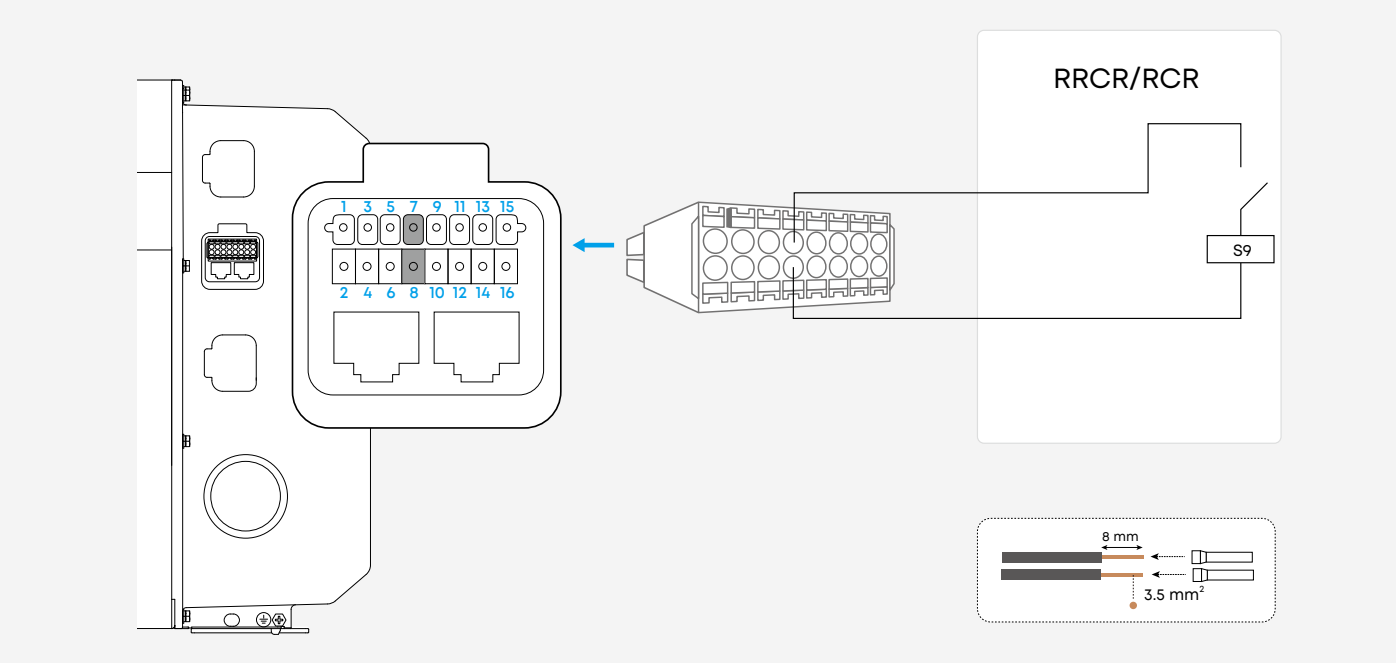
Wired Connection: Wire the 1 and 2 terminals on the main module to the smart meter.



6.7 Connect to the RCR / RRCR

Connect the main module to a Ripple Control Receiver (RCR) / Radio Ripple Control Receiver (RRCR) in accordance with local standards and requirements.

Wire the 7 and 8 terminals on the main module to the RCR or RRCR.



Port	Signal	Description	Connected to RCR or RRCR
7	DI_DRM_COM	Relay contact 1 input	S9 - Relay 1 output
8	DI_DRM_REF	GND	S9 - Relay 1 output

DRM_COM	Active Power	Power Drop Rate	Cos (ψ)
1 (close)	100%	/	1
0 (open)	0%	< 5s	1

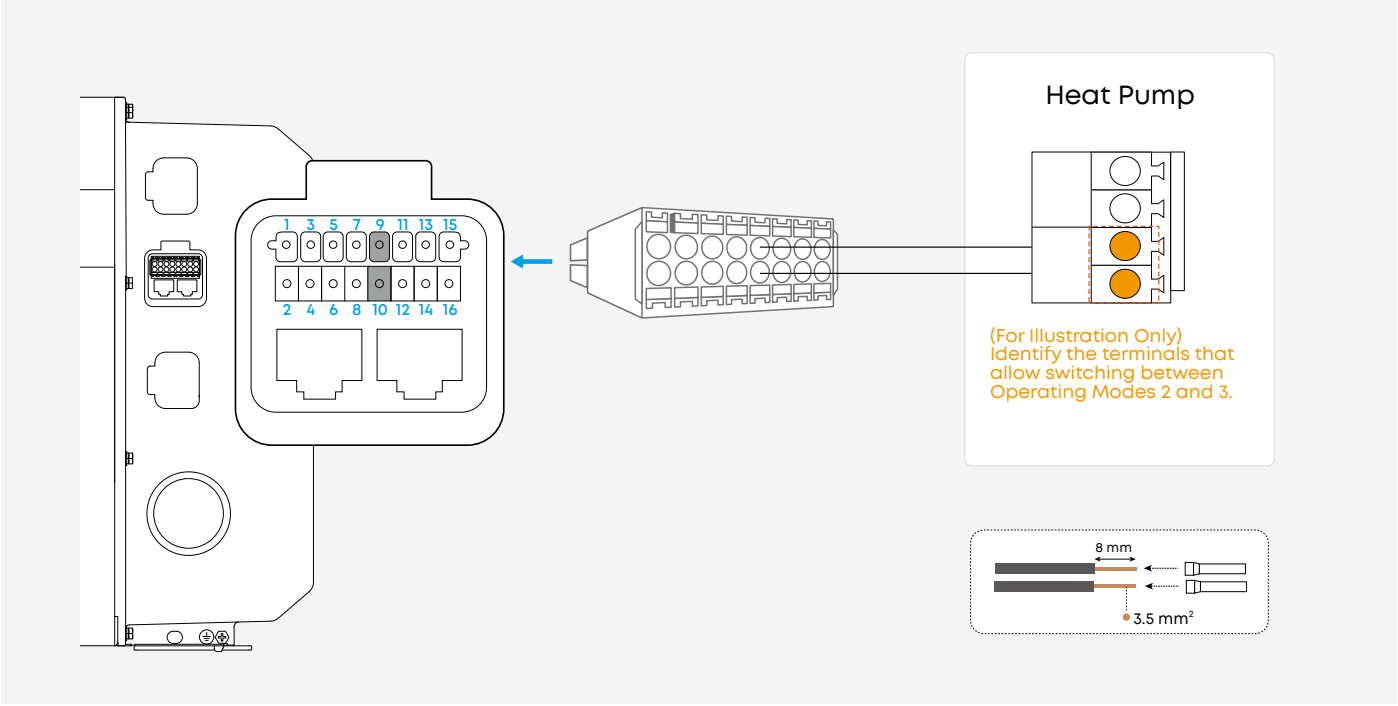
6.8 Connect to the Heat Pump

Connect the main module to an SG-ready heat pump to convert excess solar energy into thermal energy.

1. Check the heat pump manual to determine which terminals control mode switching. They should enable the heat pump to switch between Operating Modes 2 and 3.

SG-Ready Heat Pump	
Operating Mode 2	The heat pump operates in standard mode.
Operating Mode 3	The heat pump operates in a mode that boosts the heating temperature.

2. Wire the 9 and 10 terminals on the main module to the heat pump.



Once the electrical connections are completed, the heat pump must be configured by the user using the Anker Power app.

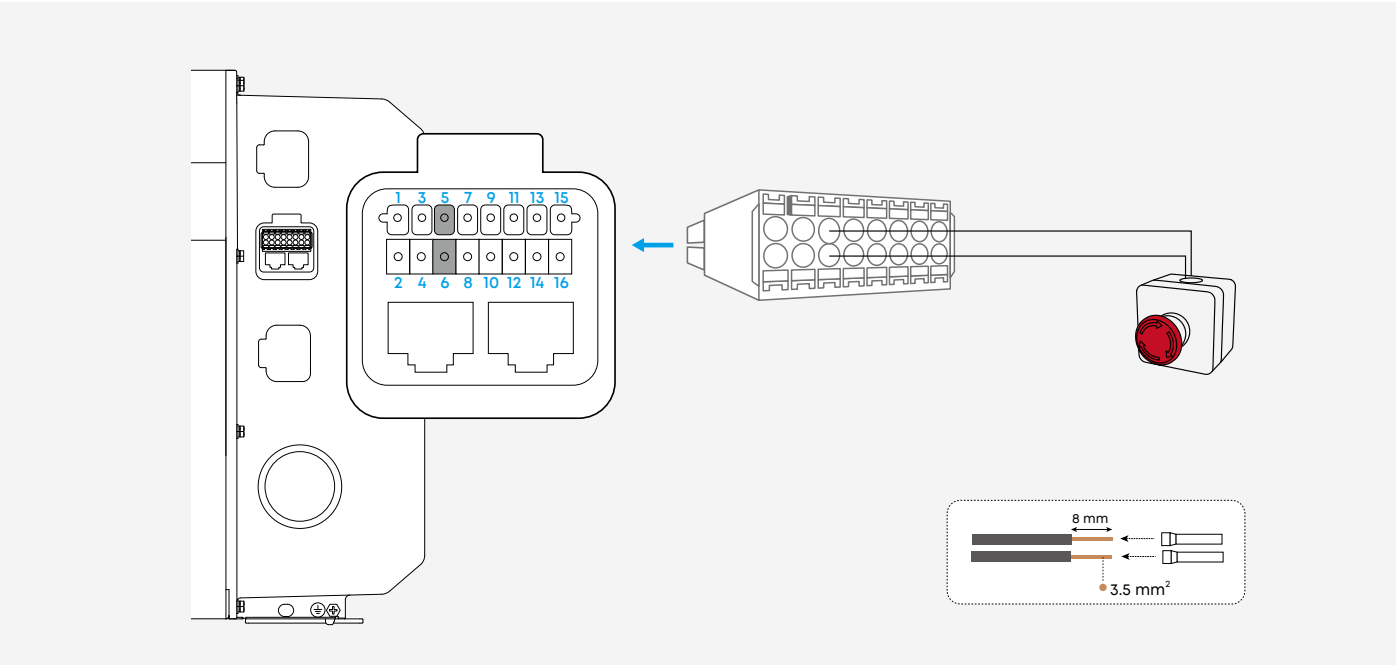
6.9 Connect to the Control Unit / EPO Device

Connect the main module to a control unit (Germany) or an Emergency Power Off (EPO) device in compliance with local codes.

Install the EPO device in a readily accessible external location. If the main module is installed in a garage, install the EPO device outside the garage. The EPO device should meet the following specifications:

Parameter	Requirement
Contact type	1 × NC contact
Rating	≥ 30 V DC / 1 A

Wire the 5 and 6 terminals on the main module to the control unit or the EPO device.

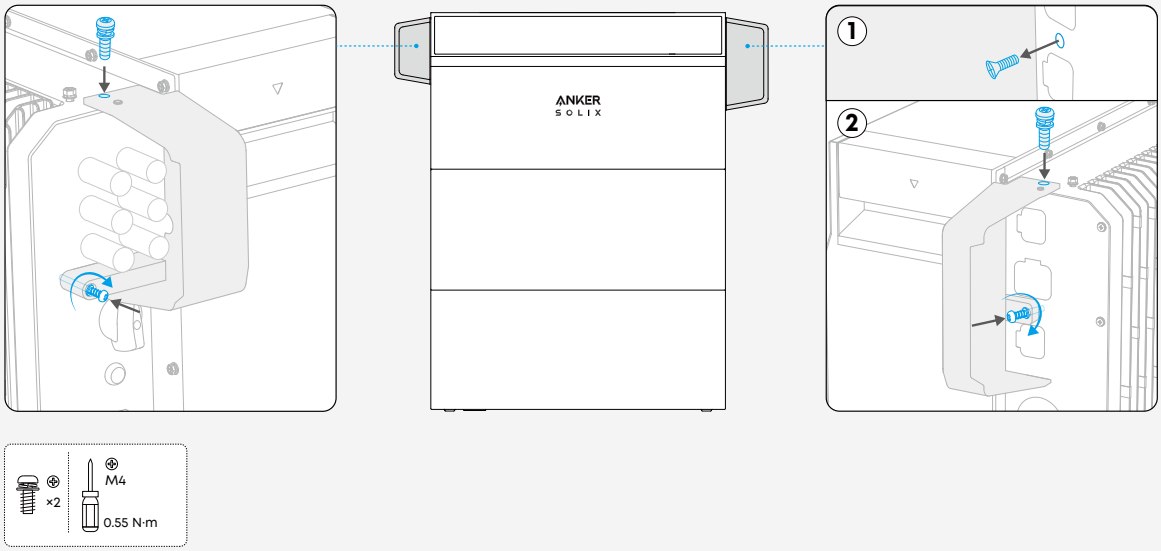


6.10 Verify Connections

Item	Acceptance Criteria
Installation	· The installation is correct and reliable. · The installation space is proper, and the installation environment is clean and tidy.
Cable routing	· The power cables, grounding cables, and signal cables are connected correctly, securely, and reliably. · Cables are routed properly.
Terminals and ports	· Unused terminals and ports are locked by waterproof or dustproof caps.
Switch	· The circuit breakers connected to the main module are switched off.

6.11 Install Cable Covers

Install the cable covers (sold separately) on both sides of the main module.



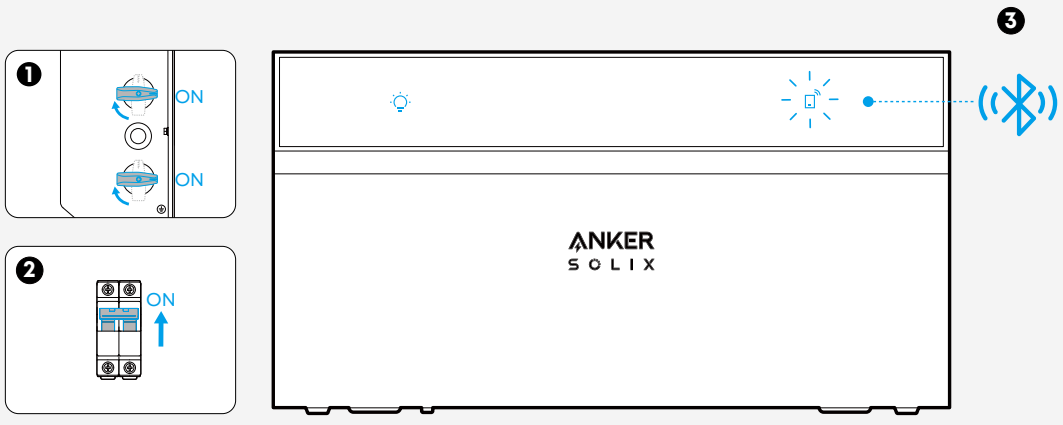
7. Commissioning

This section explains how to power on the system and commission it in the Anker SOLIX Professional app.

7.1 Power On

1. Set the battery switch and PV switch to the ON position.
2. Turn on the main breaker and the circuit breakers connected to the main module.
3. The main module powers on and the screen lights up automatically.

   Before Bluetooth connection is completed, the main module automatically enters networking mode when it powers on.



7.2 Use the Anker SOLIX Professional App

The app images in this section are for reference only. Actual screens may vary by software version.

Download the App

Download the Anker SOLIX Professional app from the App Store (iOS devices), from Google Play (Android devices), or by scanning the QR code.

Anker SOLIX Professional

GET IT ON Google Play

Google Play and the Google Play logo are trademarks of Google Inc.

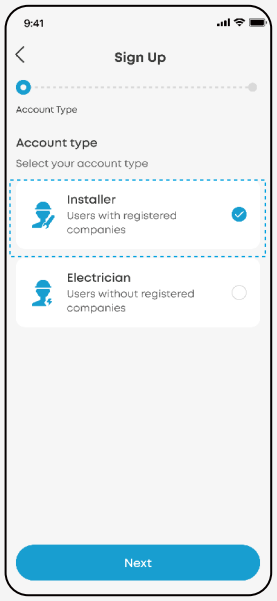
Download on the App Store

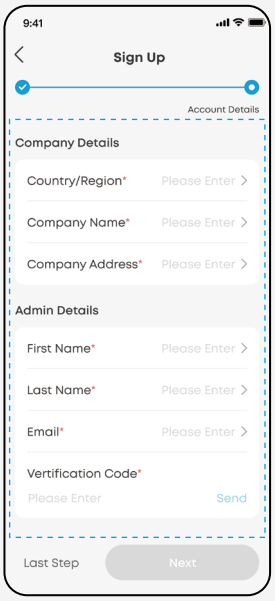
Apple and the Apple logo are trademarks of Apple Inc.

Sign Up / Sign In

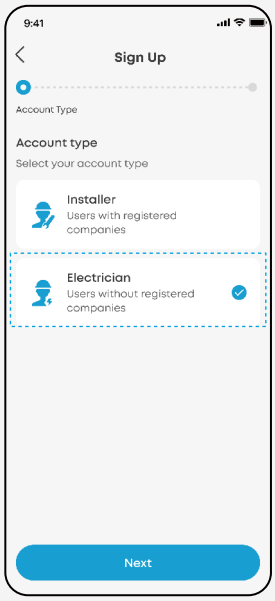
Sign in or create an account. To create an account, select an account type and enter the required information. Then check your email for your username and initial password.

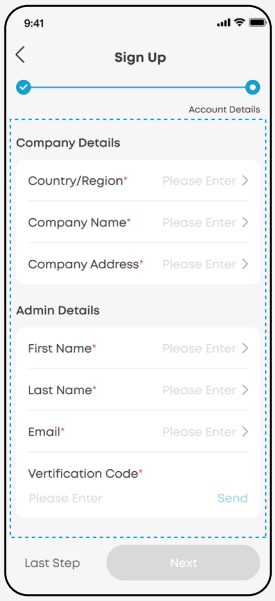
Retailer (Operations and Maintenance)





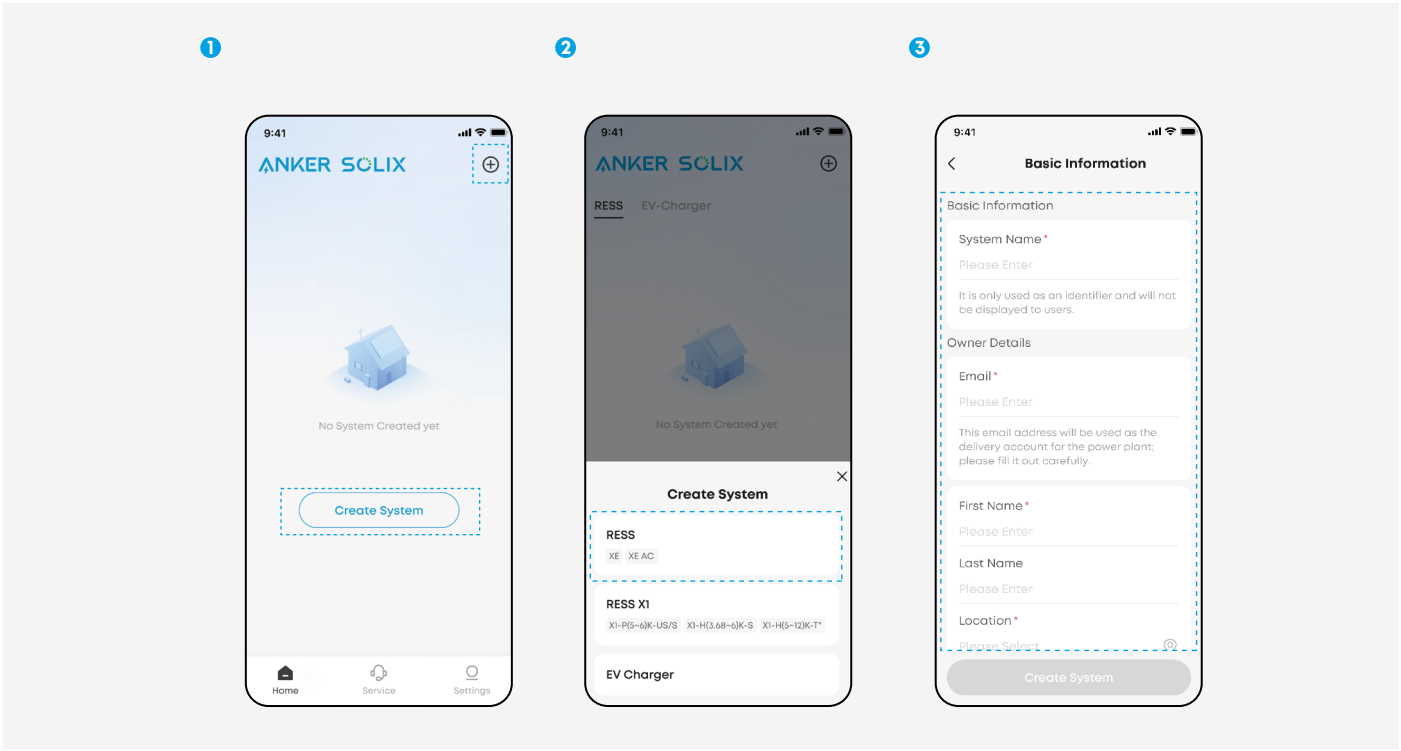
Installer / Subcontractor (Installation Only)

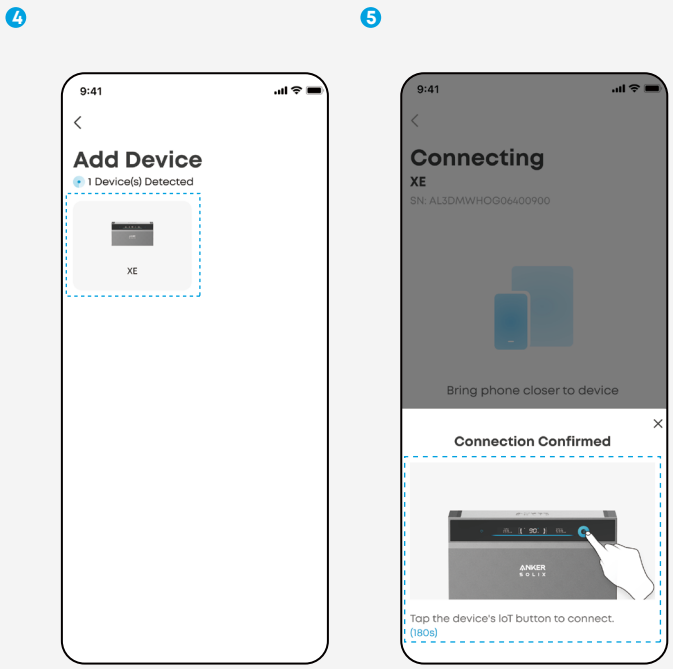




Add the Device

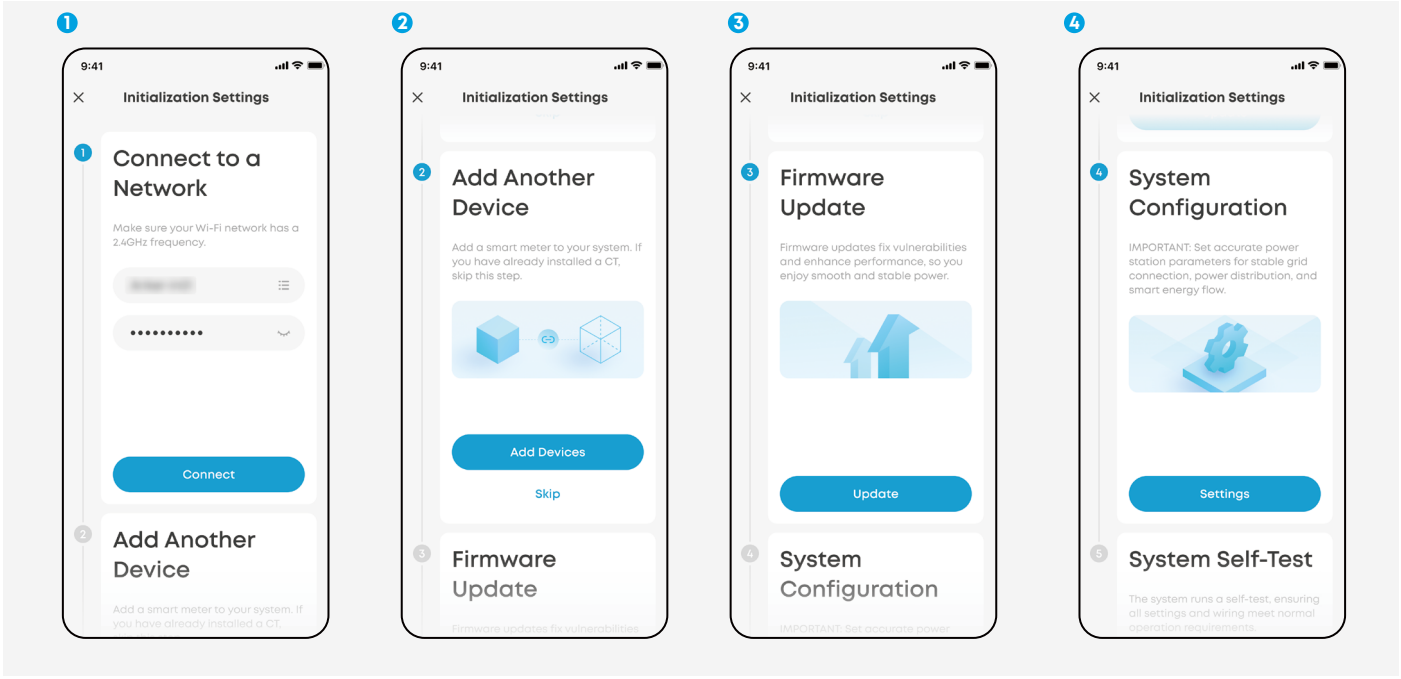
1. Tap **Create System** or the plus icon in the top-right corner.
2. Select **RESS** as the system type.
3. Enter the system name and owner information.
4. Select the main module from the device list.
5. Press the IoT button on the main module to confirm the Bluetooth connection.



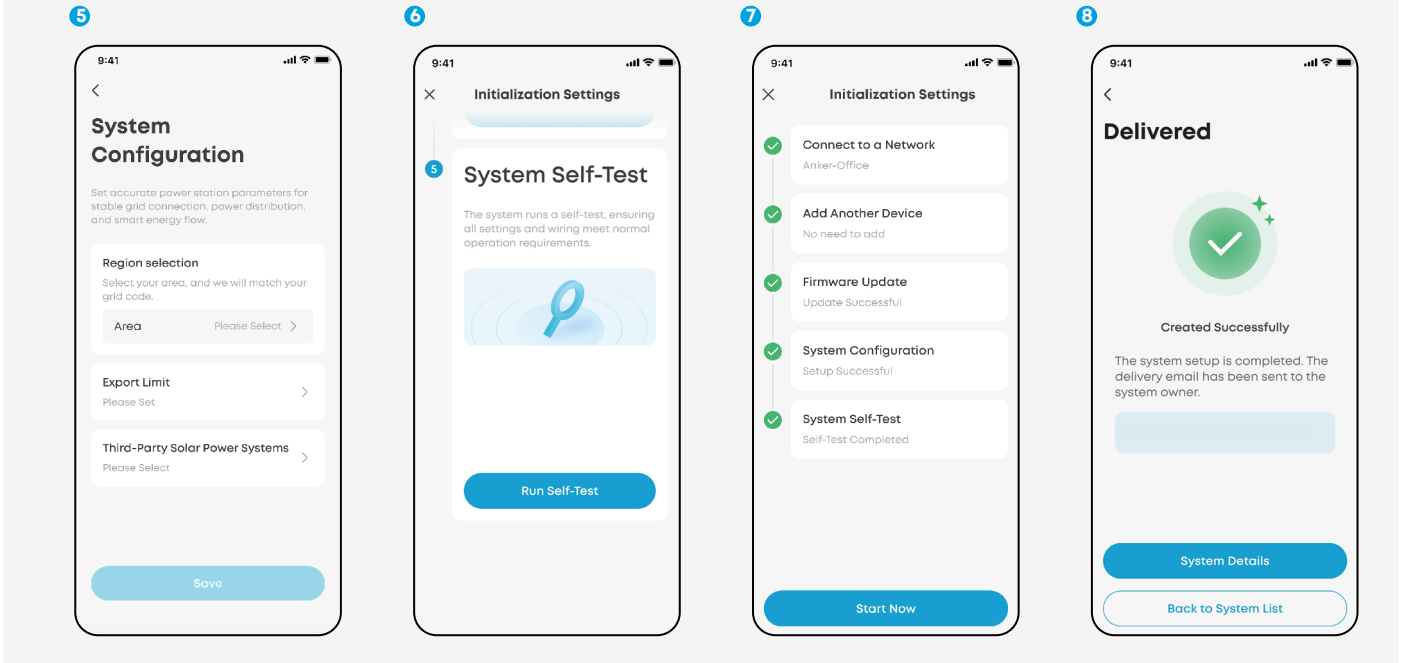


Complete Initialization

1. Connect the device to the network.
2. Add other devices, such as a smart meter.
3. Update the device firmware to the latest version.
4. Tap **Settings** to open the system configuration page.



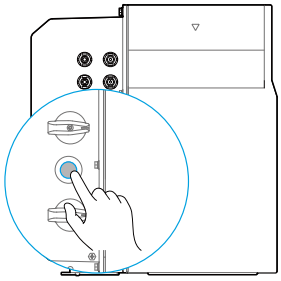
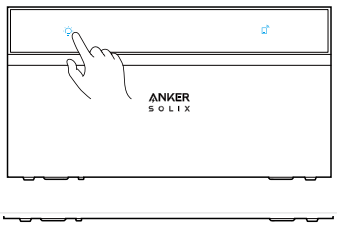
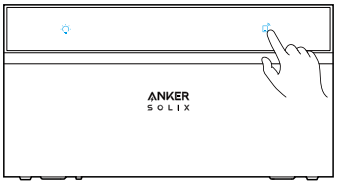
5. Configure the system. Refer to the table below for details.
6. Run the system self-test.
7. Tap **Start Now** to go to the delivery page.
8. When "Delivered" is displayed, the owner account has been created.
   Instruct the homeowner to download the Anker Power app and check their email for account information.



Item	Description
Region Selection	1. Select your location. The available grid codes are listed automatically. 2. Select the grid code for the country or region where the main module is used. After the grid code is selected, the default protection parameters and grid dispatch settings are applied automatically.
Export Limit	**Software Export Limit**: Controls grid export through internal logic in the main module. · **Unlimited**: No export limit. · **Customize**: Set a custom export limit. · **Zero Export**: Set the export power to 0 W. The system does not export power to the grid. · **Export Period Limit:** You can set up to 24 periods. If periods overlap, they will be merged automatically.
Third-Party PV System	This setting ensures optimal application of charging and discharging strategies. Select whether a third-party PV system is present. · If not, complete the setup. · If yes, follow the prompts to set the CT location or the third-party PV system location.

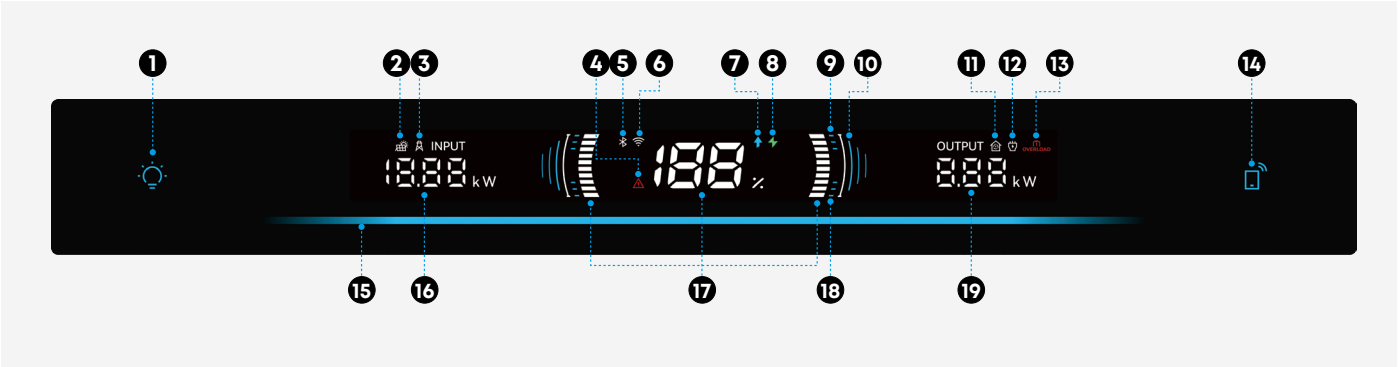
8. Controls and Indicators

8.1 Button Controls

Button	Action	Function
	Press and hold for 5 seconds.	Power the main module on or off.
	Tap once.	Wake or turn off the display.
	Tap once.	Confirm Bluetooth connection.
	Touch and hold for 2 seconds.	Enable or disable network connection. · Enabled: The Bluetooth / Wi-Fi icon on the screen flashes white. · Disabled: The Bluetooth / Wi-Fi icon is not displayed on the screen.
	Touch and hold for 7 seconds.	Reset Bluetooth and Wi-Fi settings. · Successful: The Bluetooth / Wi-Fi icon on the screen flashes white.

8.2 Screen Guide

The display may vary by firmware version.



Indicator	Description
1	**Screen On/Off Button** Controls the screen display. For details, see Section 8.1 Button Controls.
2	**Input from the PV Panels** Indicates power input from the PV panels.
3	**Input from the Grid** Indicates power input from the grid.
4	**General Fault Alert** Indicates a fault. Check the app for details.
5	**Bluetooth Status** Flashing white: Connecting to Bluetooth. Solid white: Connected to Bluetooth. Not displayed: Bluetooth is disabled.
6	**Wi-Fi Status** Flashing white: Connecting to Wi-Fi. Solid white: Connected to Wi-Fi. Not displayed: Wi-Fi is disabled.
7	**Discharging Status** Indicates that the battery is discharging.
8	**Charging Status** Indicates that the battery is charging.
9	**Charge Upper Limit** Displays the configured upper limit for charging.

10	**Smart Mode** Indicates that smart mode is enabled.
11	**Output to Grid** Indicates power export to the grid.
12	**Output to Loads** Indicates power supply to home loads.
13	**Overload Alert** Indicates that the port output exceeds the allowable range.
14	**IoT Button** Controls network connectivity. For details, see Section 8.1 Button Controls.
15	**Light Bar** Indicates system status. For details, see Section 8.3 LED Guide.
16	**Total Input Power** Displays the total power currently flowing into the system.
17	**Battery SOC** Displays the battery state of charge.
18	**Discharge Lower Limit** Displays the configured lower limit for discharging.
19	**Total Output Power** Displays the total power delivered to connected loads.

8.3 LED Guide

Unless otherwise specified, the LED is blue-to-green in smart mode and blue in non-smart modes.

LED	Status
	**Powered On** The blue LED illuminates from both ends toward the center.
	**Powered Off** LED fades from both ends toward the center.

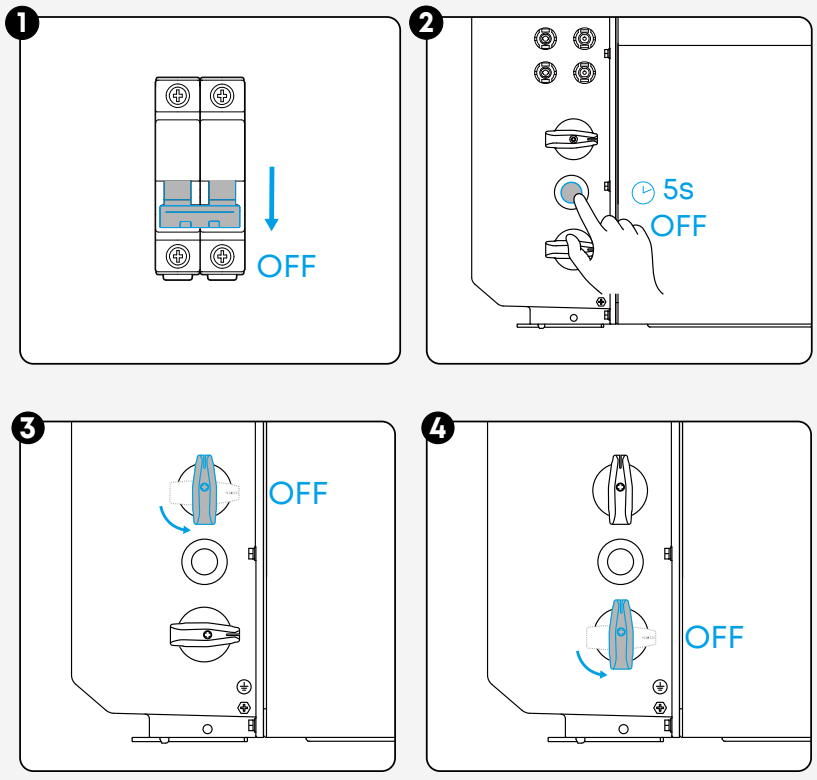
	**Connecting to the Network** LED flashes.
	**Connected to the Network** LED turns solid.
	**Charging** LED spreads outward from the center.
	**Discharging** LED turns solid.
	**Switching to Smart Mode** Blue LED changes to a blue-to-green gradient.
	**Switching to Non-Smart Mode** The blue-to-green gradient LED turns blue.
	**Firmware Updating or Self-Testing** LED runs from one end to the other.
	**Malfunction** LED flashes red. Check the app for details.

9. Maintenance

9.1 Power Off

- After the system powers off, residual electricity and heat may still cause electric shocks and burns. Wait for at least 2 minutes before performing any operations.
- To force a startup of the main module, turn on the battery switch and PV switch, then press and hold the power button for 5 seconds. For example, use this method before commissioning in off-grid mode.
- To force a shutdown of the main module, press and hold the power button for 5 seconds.

1. Turn off the circuit breakers connected to the main module.
2. Press and hold the power button for 5 seconds.
3. Set the PV switch to the OFF position.
4. For transport or long-term storage, set the battery switch to the OFF position.



9.2 Routine Maintenance



Power off the system before cleaning it, connecting cables, and checking grounding reliability.

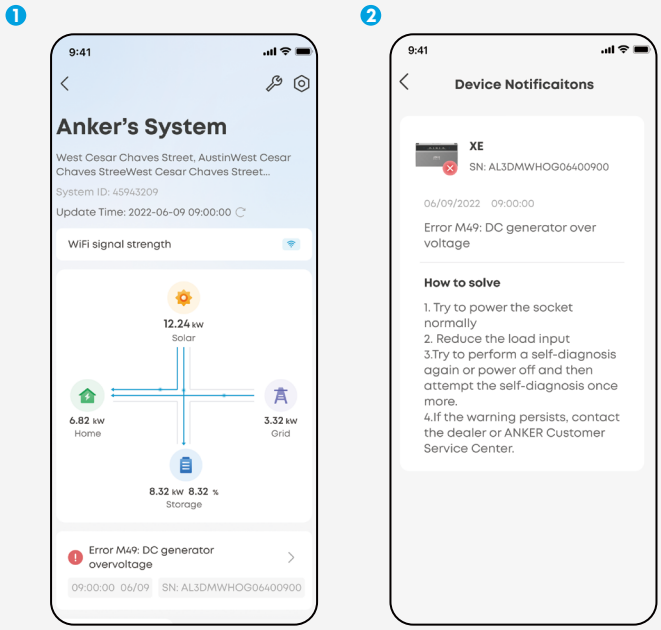
Perform routine maintenance to keep the system operating properly over time.

Check Item	Check Method	Maintenance Interval
System cleanliness	Check that the heat sinks are free of dust and obstructions.	Every 6 to 12 months
System operating status	· Check that the equipment is not damaged or deformed. · Check that the equipment does not produce abnormal sounds during operation. · Check that the equipment parameters are correctly set while the equipment is running.	Every 6 months
Electrical connection	· Check that cables are securely fastened. · Check that cables are intact, and that in particular, the parts touching the metallic surface are not scratched. · Check that unused terminals and ports are sealed with waterproof or dustproof caps.	First inspection: 6 months after commissioning Thereafter: every 6 to 12 months
Grounding reliability	Check that the ground cables are securely connected.	First inspection: 6 months after commissioning Thereafter: every 6 to 12 months
Firmware version	Check in the app that the firmware is updated to the latest version.	Every 6 months

9.3 Troubleshooting

When a system fault is detected, the installer receives a notification through the Anker SOLIX Professional app, Anker SOLIX Professional (O&M Portal), or email.

Refer to the notification for troubleshooting instructions. If further assistance is needed, contact Anker Customer Service.



10. Specifications

Specifications are subject to change without notice.

10.1 Main Module

The following specifications apply to the main module.

Model	AE111GZ1
PV Input	
Maximum Input Voltage	600 V
Maximum PV Input Power	10 kW
Voltage Range per MPPT	30 to 550 V
Maximum Input Current per MPPT	18 A
Maximum Short-Circuit Current per MPPT	25 A
Number of MPPTs	3
Integrated Battery System[1]	
Battery Type	Rechargeable Li-ion Battery (LFP)

Cell Capacity	314 Ah
Battery Lifespan	10,000 Cycles
Depth of Discharge	100%
Rated Terminal Voltage	400 V DC
Battery Voltage Range	360 to 600 V DC
Nominal Battery Module Voltage	22.4 V DC
Maximum Charging / Discharging Power	3.5 kW
Maximum Continuous Charging / Discharging Current	9.7 A DC
AC Input/Output (On-Grid)	
Rated Input / Output Voltage	220 / 230 / 240 V AC, L + N + PE
Rated Frequency	50 / 60 Hz
Rated Input / Output Current	21.7 A AC
Maximum Continuous Input / Output Current	22.7 A AC
Rated Output Active Power	5 kW
Maximum Output Apparent Power	5 kVA
Power Factor	0.8 Lagging to 0.8 Leading
AC Output (Backup)	
Rated Output Voltage	220 / 230 / 240 V AC, L + N + PE
Rated Output Frequency	50 / 60 Hz
Rated Output Current	21.7 A AC
Rated Output Apparent Power	5 kVA
Maximum Continuous Output Current	22.7 A AC
Maximum Continuous Output Apparent Power	5 kVA
Power Factor	0.8 Lagging to 0.8 Leading
Backup Switch Disruption Time[2]	0 ms
General Specifications	
Dimensions (W × H × D)	670 × 356 × 325 mm
Weight	76.5 kg
Inverter Topology Type	Non-Isolated
Operating Temperature Range	-20 to 55 °C
Relative Humidity Range	0 to 95%
Protective Class	I

Ingress Protection Rating	IP66
Anti-Corrosion Rating	C5-M
Cooling	Natural Convection
Noise	< 30 dB
Operating Altitude Range	≤ 4,000 m
Overvoltage Category	III (AC), II (PV, BAT)
Installation Location	Indoor / Outdoor
Warranty	10 Years
Communication	WLAN / RS485 / CAN / DI / DO
Maximum Parallel Units	2 (Single-Phase) / 3 (Three-Phase)[3]
Safety Protection Features	PV Reverse Polarity, PV Overvoltage / Overcurrent, Insulation Monitoring, Residual Current Monitoring (RCMU), AC Over/Under Voltage and Frequency, AC Overcurrent / Short-Circuit, Over-Temperature, Anti-Islanding, DC / AC Type II SPD
Standards	IEC/EN 62109-1, IEC/EN 62109-2, VDE-AR-E 2510-50, IEC 62619, IEC 63056, IEC 62040-1, IEC/EN 61000-6-1, IEC/EN 61000-6-3

Notes:

[1] Refers to one main module with one built-in set of battery modules.

[2] Refers to the load-side interruption time. Test condition: During a grid outage, the total backup load must not exceed the rated output power of the main module.

[3] For a single-phase grid system, up to two main modules can be connected in parallel. For a three-phase grid system, up to three main modules can be connected in parallel, with one main module connected to each phase.

10.2 Battery Module

The following specifications apply to the battery module.

Model	**A17E23Z1-81**
Performance Specifications	
Battery Type	Rechargeable Li-ion Battery (LFP)
Cell Capacity	314 Ah
Nominal Energy	7 kWh

Battery Voltage Range	360 to 600 V DC
Maximum Charging / Discharging Power	3.5 kW
Maximum Continuous Charging / Discharging Current	9.7 A DC
Battery Lifespan	10,000 Cycles
Depth of Discharge	100%
General Specifications	
Dimensions (W × H × D)	670 × 275 × 285 mm
Weight	63 kg
Ingress Protection	IP66
Operating Temperature Range	-20 to 55 ℃
Operating Altitude Range	≤ 4,000 m
Warranty	10 Years

10.3 Anker SOLIX XE System

The following specifications apply to system configurations with one main module and 0 to 5 battery modules.

Model	AE111GZ1	AE111GZ1-1	AE111GZ1-2	AE111GZ1-3	AE111GZ1-4	AE111GZ1-5
Number of Battery Modules	0	1	2	3	4	5
Rated Capacity	7 kWh	14 kWh	21 kWh	28 kWh	35 kWh	42 kWh
Nominal Voltage	22.4 V DC	22.4 V DC	22.4 V DC	22.4 V DC	22.4 V DC	22.4 V DC
Maximum Charging Power	3.5 kW	10 kW	10 kW	10 kW	10 kW	10 kW
Maximum Discharging Power	3.5 kW	5 kW	5 kW	5 kW	5 kW	5 kW
Weight	76.5 kg	139.5 kg	202.5 kg	265.5 kg	328.5 kg	391.5 kg
Dimensions (W × H × D)	670 × 356 × 325 mm	670 × 631 × 325 mm	670 × 906 × 325 mm	670 × 1,181 × 325 mm	670 × 1,456 × 325 mm	670 × 1,731 × 325 mm

11. Safety Information

11.1 Safety Symbols

Symbols	Description
⚠ DANGER	**Danger** Indicates a highly risky hazard. Failure to avoid this hazard could result in death or serious injury.
⚠ WARNING	**Warning** Indicates a moderately risky hazard. Failure to avoid this hazard could result in death or serious injury.
⚠ CAUTION	**Caution** Indicates a low-risk hazard. Failure to avoid this hazard could result in minor or moderate injury.

11.2 Environmental Safety

⚠ DANGER

- Do not expose the equipment to flammable or explosive gas or smoke. Do not operate the equipment in such environments.
- Do not store any flammable or explosive materials around the equipment.
- Do not place the equipment near heat sources or fire sources, such as smoke, candles, heaters, or other heating devices. Overheating may damage the equipment or cause a fire.

⚠ WARNING

- Install the equipment away from liquids. Do not install it under areas prone to condensation, such as under water pipes and air exhaust vents, or areas prone to water leakage, such as air conditioner vents, ventilation vents, or feeder windows of the equipment room. Ensure that no liquid enters the equipment to prevent faults or short circuits.
- To prevent damage or fire due to high temperature, ensure that the ventilation vents or heat dissipation systems are not obstructed or covered by other objects while the equipment is running.

General Instructions

- The installation and usage environment must meet relevant international, national, and local standards for lithium batteries, and be in accordance with the local laws

and regulations. Protect the equipment from fire and other hazards.

- Keep the equipment out of the reach of children and away from daily working or living areas.
- When installing the equipment in a garage, keep it clear of the drive path. It is recommended that the equipment be mounted on the wall higher than the bumper to prevent collision.
- Do not install the equipment in places that are enclosed, unventilated, without proper fire fighting facilities, or difficult for firefighters to access. Do not place flammable or explosive materials around the equipment. It is recommended that the equipment be mounted on a wall to avoid contact with water.
- It is recommended to install the equipment in a sheltered place or under an awning to avoid direct sunlight or rain.
- For areas prone to natural disasters such as floods, debris flows, earthquakes, and typhoons, take corresponding precautions for installation.
- Do not install the equipment in an easily accessible position because the temperature of the enclosure and heat sink is high when the equipment is running.
- Do not install the equipment on a moving object, such as ship, train, or car.
- Ensure that the equipment is stored in a clean, dry, and well-ventilated area with proper temperature and humidity and is protected from dust and condensation.
- Keep the installation and operating environments of the equipment within the allowed ranges. Otherwise, its performance and safety will be compromised.
- Do not install, use, or operate outdoor equipment and cables (including but not limited to moving equipment, operating equipment and cables, inserting connectors to or removing connectors from signal ports connected to outdoor facilities, working at heights, performing outdoor installation, and opening doors) in harsh weather conditions such as lightning, rain, snow, and level 6 or stronger wind.
- Do not install the equipment in an environment with dust, smoke, volatile or corrosive gases, infrared and other radiation, organic solvents, or salty air.
- Do not install the equipment in an environment with conductive metal or magnetic dust.
- Do not install the equipment in an area conducive to the growth of microorganisms such as fungus or mildew.
- Do not install the equipment in an area with strong vibration, noise, or electromagnetic interference.
- Ensure that the site complies with local laws, regulations, and related standards.
- Ensure the installation site has solid, stable ground that is not soft, spongy, or prone to settling. Select a location above the highest recorded water level and away from low-lying areas where water or snow may accumulate.
- Do not install the equipment in a position that may be submerged in water.
- In regions with dense vegetation, regularly remove weeds and reinforce the ground beneath the modules with cement or gravel.
- Before installation, operation, and maintenance, clean up any water, ice, snow, or other foreign objects on the top of the equipment.
- When installing the equipment, ensure that the installation surface is solid enough to

bear the weight of the equipment.

- After installing the equipment, remove the packing materials such as cartons, foam, plastics, and cable ties from the equipment area.

11.3 Operational Safety

⚠ DANGER

- When working at heights, wear a safety helmet and safety harness or waist belt and fasten it to a solid structure. Do not mount it on an insecure movable object or metal object with sharp edges. Make sure that the hooks will not slide off.

⚠ WARNING

- Ensure that all necessary tools are ready and inspected by a professional organization. Do not use tools that have signs of scratches or fail to pass the inspection or whose inspection validity period has expired. Ensure that the tools are secure and not overloaded.
- Do not drill holes into the equipment. Doing so may affect the sealing performance and electromagnetic containment of the equipment and damage components or cables inside. Metal shavings from drilling may short-circuit boards inside the equipment.

General Instructions

- Repaint any paint scratches caused during equipment transportation or installation in a timely manner. Equipment with scratches must not be exposed for an extended period of time.
- Do not perform operations such as arc welding and cutting on the equipment without evaluation by the Company.
- Do not install other devices on the top of the equipment without evaluation by the Company.
- When performing operations over the top of the equipment, take measures to protect the equipment against damage.
- Use the correct tools and operate them properly.
- Only qualified professionals or trained personnel are allowed to install and service the equipment.
- Disconnect all sources of supply before servicing.

Working at Heights

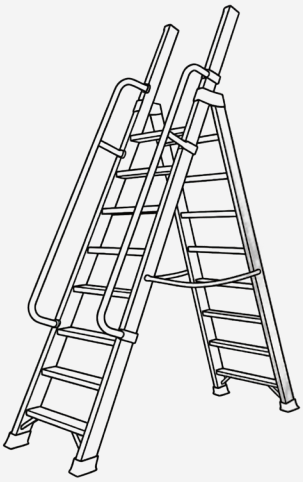
- Any operations performed 2 m or higher above the ground shall be supervised

properly.

- Only trained and qualified personnel are allowed to work at heights.
- Do not work at heights when steel pipes are wet or other risky situations exist. After the preceding conditions no longer exist, the safety owner and relevant technical personnel need to check the involved equipment. Operators can begin working only after safety is confirmed.
- Set a restricted area and prominent signs for working at heights to warn away irrelevant personnel.
- Set guard rails and warning signs at the edges and openings of the area involving working at heights to prevent falls.
- Do not pile up scaffolding, springboards, or other objects on the ground under the area involving working at heights. Do not allow people to stay or pass under the area involving working at heights.
- Carry operation machines and tools properly to prevent equipment damage or personal injury caused by falling objects.
- Personnel working at heights are not allowed to throw objects from the height to the ground, or vice versa. Objects shall be transported by slings, hanging baskets, aerial work platforms, or cranes.
- Do not perform operations on the upper and lower layers at the same time. If unavoidable, install a dedicated protective shelter between the upper and lower layers or take other protective measures. Do not pile up tools or materials on the upper layer.
- Dismantle the scaffolding from top down after finishing the job. Do not dismantle the upper and lower layers at the same time. When removing a part, ensure that other parts will not collapse.
- Ensure that personnel working at heights strictly comply with the safety regulations. The Company is not responsible for any accident caused by violation of the safety regulations on working at heights.
- Behave cautiously when working at heights. Do not rest at heights.

Using Ladders

- Use wooden or insulated ladders when you need to perform live-line working at heights.
- Platform ladders with protective rails are preferred. Single ladders are not recommended.
- Before using a ladder, check that it is intact and confirm its load bearing capacity. Do not overload it.
- Ensure that the ladder is securely positioned and held firm.



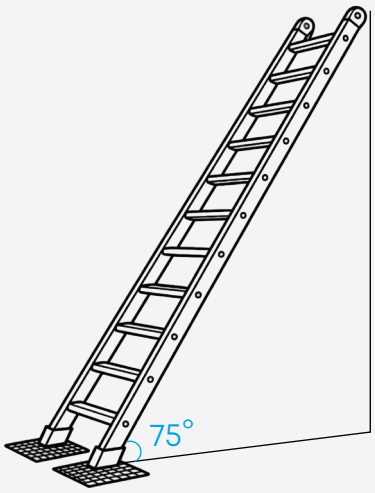
· When climbing up the ladder, keep your body stable and your center of gravity between the side rails, and do not overreach to the sides.

· When a step ladder is used, ensure that the pull ropes are secured.

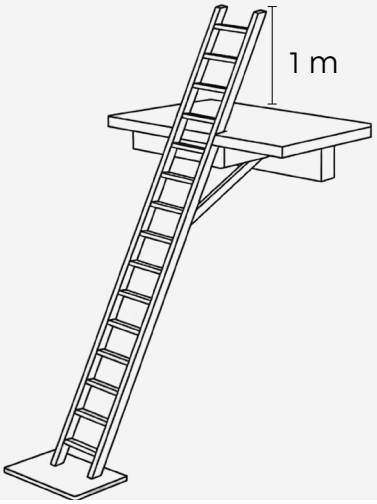
· If a single ladder is used, ensure that the wider end of the ladder is at the bottom, and take protective measures to prevent the ladder from sliding.

· If a single ladder is used, do not climb higher than the fourth rung of the ladder from the top.

· If a single ladder is used, the recommended angle for the ladder against the floor is 75°, as shown in the following figure. A square can be used to measure the angle.



· If you use a single ladder to climb up to a platform, ensure that the ladder is at least 1 m higher than the platform.



Drilling Holes

- Obtain consent from the customer and contractor before drilling holes.
- Wear protective equipment such as safety goggles and protective gloves when drilling holes.
- To avoid short circuits or other risks, do not drill holes into buried pipes or cables.
- When drilling holes, protect the equipment from shavings. After drilling, clean up any shavings.

11.4 Battery Safety

⚠ DANGER

- Do not connect the positive and negative poles of a battery together. Otherwise, the battery may be short-circuited.

⚠ WARNING

- Tighten the screws on copper bars or cables to the torque specified in this document. Periodically confirm whether the screws are tightened, check for rust, corrosion, or other foreign objects, and clean them up if any. Loose screw connections will result in excessive voltage drops and batteries may catch fire when the current is high.
- When installing batteries, do not place installation tools, metal parts, or sundries on the batteries. After the installation is complete, clean up the objects on the batteries and the surrounding area.
- After unpacking batteries, place them in the required direction. Do not place a battery upside down or vertically, lay it on one side, tilt it, or stack it. Ensure that the batteries do not fall or get damaged. Otherwise, they will need to be scrapped.

⚠ CAUTION

- Install the battery modules in sequence from bottom to top and from left to right. Lift the modules horizontally and evenly to prevent tipping caused by a high center of gravity.
- Secure the fixed bracket before installing the main module.
- Ensure the main module and main breaker are off before installation.
- The battery circuit must remain disconnected during installation or maintenance.

General Instructions

- Do not use a damaged battery (such as damage caused when a battery is dropped, bumped, bulged, or dented on the enclosure), because the damage may cause electrolyte leakage or flammable gas release. In the case of electrolyte leakage or structural deformation, contact the installer or customer support immediately to remove or replace the battery. Do not store the damaged battery near other devices or flammable materials and keep it away from non-professionals.
- Before installing a battery module, check that its enclosure is not deformed or damaged.

11.5 Transportation Safety

- Do not remove any protective components from the equipment terminals, such as protective covers or waterproof caps, during transportation.
- Handle the equipment with care. Avoid drops or impacts, and always ensure personal safety while moving the equipment.
- Move the equipment stably with balanced force at an even and low speed. Put down the equipment stably and slowly to prevent any collision or drop from scratching the surface of the equipment or damaging the components and cables.
- When transporting the equipment using a pallet truck or forklift, ensure that the tines are properly positioned so that the equipment does not topple. Before moving the equipment, secure it to the pallet truck or forklift using ropes. When moving the equipment, assign dedicated personnel to take care of it.
- Be cautious to prevent injury when moving heavy objects.
- If multiple persons need to move a heavy object together, determine the manpower and work division with consideration of height and other conditions to ensure that the weight is equally distributed.



< 18 kg



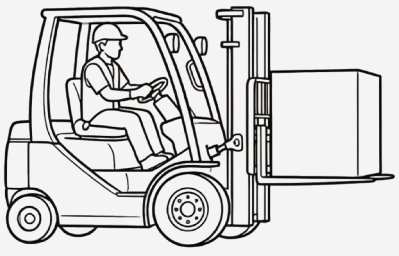
18-32 kg



32-55 kg



55-68 kg



> 68 kg

- If two persons or more move a heavy object together, ensure that the object is lifted and landed simultaneously and moved at a uniform pace under the supervision of one person.
- Wear personal protective equipment such as protective gloves and shoes when manually moving the equipment.
- To move an object by hand, approach the object, squat down, and then lift the object gently and stably by the force of the legs instead of your back. Do not lift it suddenly or turn your body around.
- Do not quickly lift a heavy object above your waist. Place the object on a workbench that is half-waist high or any other appropriate place, adjust the positions of your palms, and then lift it.
- When moving a heavy object, be aware of the workbench, slope, staircase, and slippery places. When moving a heavy object through a door, ensure that the door is wide enough to move the object and avoid bumping or injury.
- When transferring a heavy object, move your feet instead of turning your waist around. When lifting and transferring a heavy object, ensure that your feet point to the target direction of movement.
- Use sea or road transport routes with suitable conditions. Do not transport the equipment by railway or air. Avoid tilt or jolt during transportation.

11.6 Storage Requirements

⚠ WARNING

- Ensure that batteries are stored in a dry, clean, and ventilated indoor environment that is free from sources of strong infrared or other radiation, organic solvents, corrosive gases, and conductive metal dust. Do not expose batteries to direct sunlight or rain and keep them far away from sources of heat and ignition.
- If a battery is faulty (with scorch, leakage, bulge, or water intrusion), move it to a dangerous goods warehouse for separate storage. The distance between the battery and any combustible materials must be at least 3 m. The battery must be scrapped as soon as possible.
- Place batteries correctly according to the signs on the packing case during storage. Do not place batteries upside down, lay them on one side, or tilt them. Stack batteries in accordance with the stacking requirements on the packing cases.
- Store batteries in a separate place. Do not store batteries together with other devices. Do not stack batteries too high. If a large number of batteries are stored onsite, it is recommended that the site be equipped with qualified fire fighting facilities, such as fire sand and fire extinguishers.

⚠ CAUTION

- It is recommended that batteries be used soon after being deployed onsite. Batteries

that have been stored for an extended period shall be charged periodically. Otherwise, they may be damaged.

General Instructions

- Store the equipment according to the storage requirements. Equipment damage caused by unqualified storage conditions is not covered under the warranty.
- The storage environment must comply with local regulations and standards.
- The storage environment must be clean and dry. The equipment must be protected against rain and water.
- The air must not contain corrosive or flammable gases.
- The storage environment requirements are as follows:
  - Ambient temperature: -20 to 55 °C
  - Relative humidity: 0% to 70%
- If a battery has been stored for longer than the allowed period, it must be checked and tested by professionals before use.
- Proof that the equipment is stored according to the requirements must be available, such as temperature and humidity log data, storage environment photos, and inspection reports.
- Ensure that batteries are delivered based on the "first in, first out" rule.

11.7 Notice

Network Configuration Instructions

Bluetooth Low Energy (BLE) Status: When the equipment is not yet connected to a network, it will automatically enable BLE broadcasting and activate BLE services to provide Bluetooth network configuration capabilities.

Note: During the BLE configuration process, ensure your network environment is stable and follow the instructions to complete the setup.

Port 5353

The primary function of port 5353 (TCP/UDP 5353) in a network is to implement the mDNS protocol for mutual discovery between devices on the local area network (LAN).

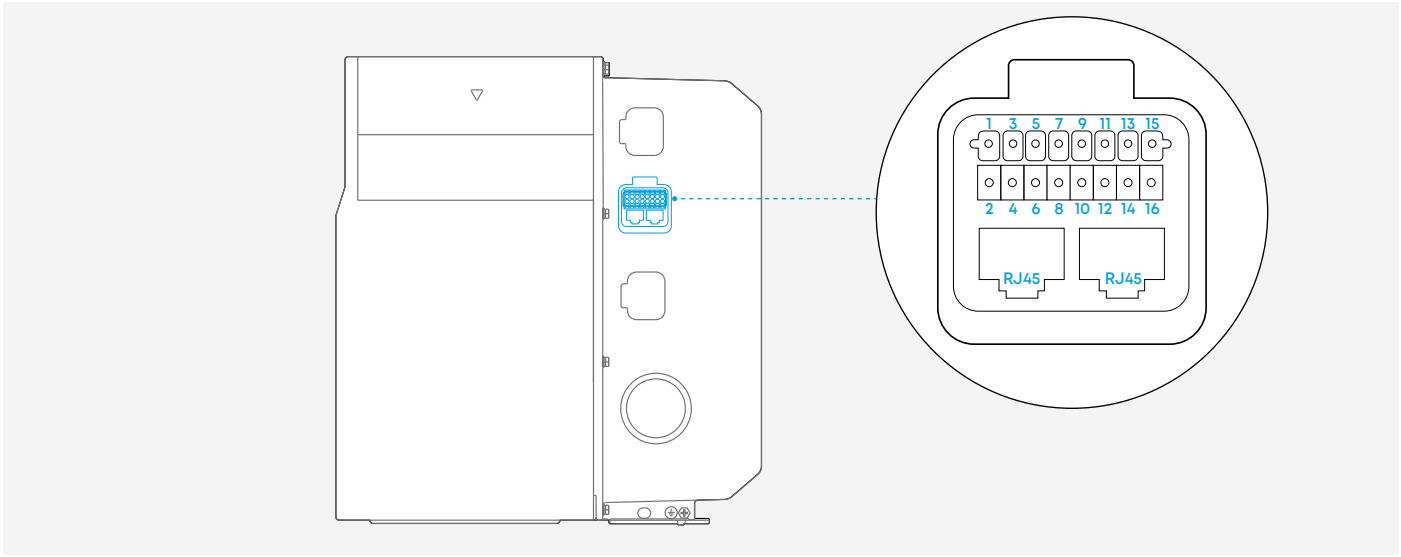
Application Scenarios: Multi-device linkage, self-consumption scenarios, and energy scheduling strategies in the LAN.

Access the device via hostname.local on the same local area network without traditional DNS configuration.

mDNS Protocol Characteristics: Using UDP protocol, port 5353 is its standard port, compatible with the standard DNS query format.

Appendix 1. Communication Ports

This appendix lists the communication ports on the main module.

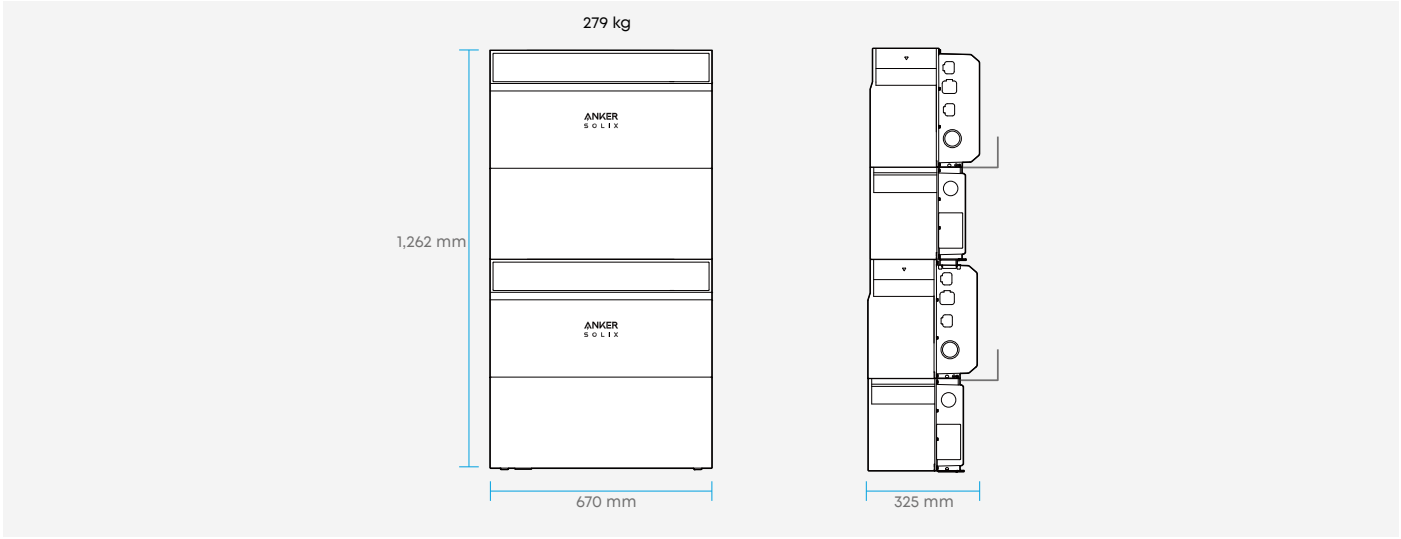


Port	Signal Name	Type	Function
1	RS485-1A	RS485 differential signal +	Connects to a smart meter.
2	RS485-1B	RS485 differential signal -	
3	RS485-2A	RS485 differential signal+	Connects to a third-party Energy Management System (EMS) controller.
4	RS485-2B	RS485 differential signal -	
5	DI_EPO	Digital input	Connects to an Emergency Power Off (EPO) device.
6	GND_S	Signal ground	/
7	DI_DRM_COM	Digital input common	Common terminal for the DRM digital input signal
8	DI_DRM_REF	Digital input reference	Reference terminal for the DRM digital input signal
9	DO_HP1+	Digital output signal 1 +	Connects to SG-ready heat pump 1.
10	DO_HP1-	Digital output signal 1 -	
11	DO_HP2+	Digital output signal 2 +	Connects to SG-ready heat pump 2.
12	DO_HP2-	Digital output signal 2 -	
13	/	/	Reserved for future use.
14	/	/	Reserved for future use.
15	+12V_VS_OUT	12V auxiliary power output	Provides an external 12 V auxiliary power output.
16	GND_S	Signal ground	/
RJ45	/	/	Connects two main modules.

Appendix 2. Parallel Connection

Overview

Use the Stack Parallel Connection Accessory Kit (sold separately) to connect two main modules in one column. This configuration supports two main modules and two battery modules.

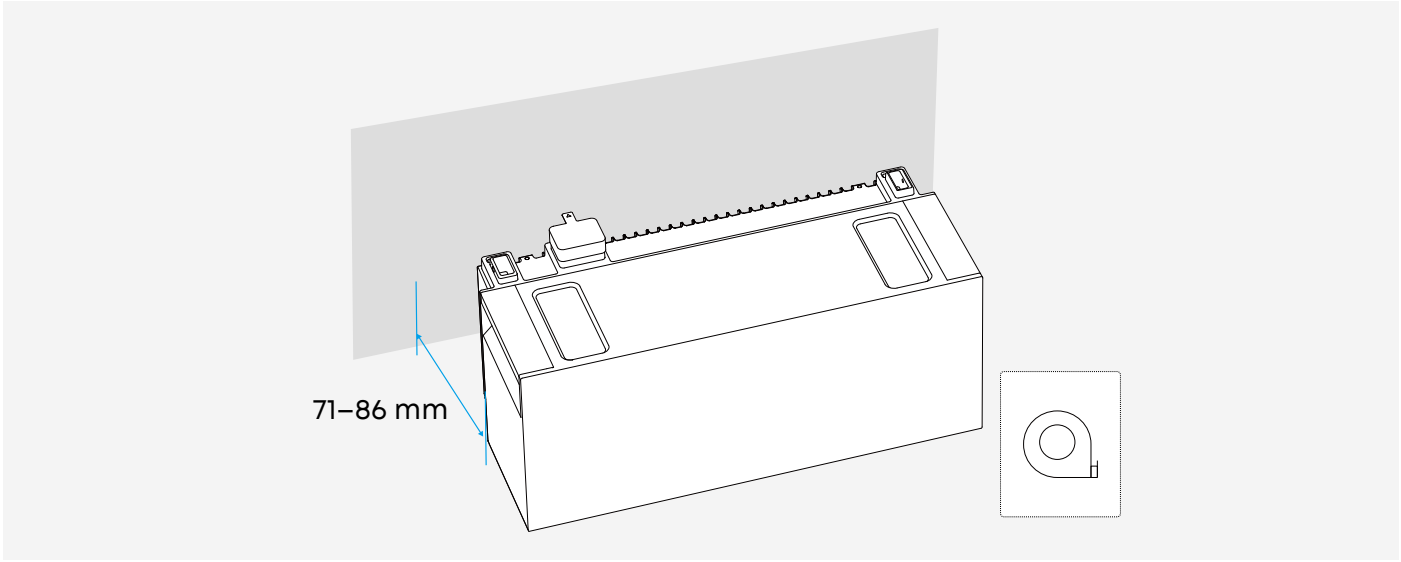


Installation

This section describes how to install the parallel system directly on the floor. For floor-mounted base installation or wall bracket installation, refer to Section 5. Installation.

Step 1. Place the Bottom Battery Module

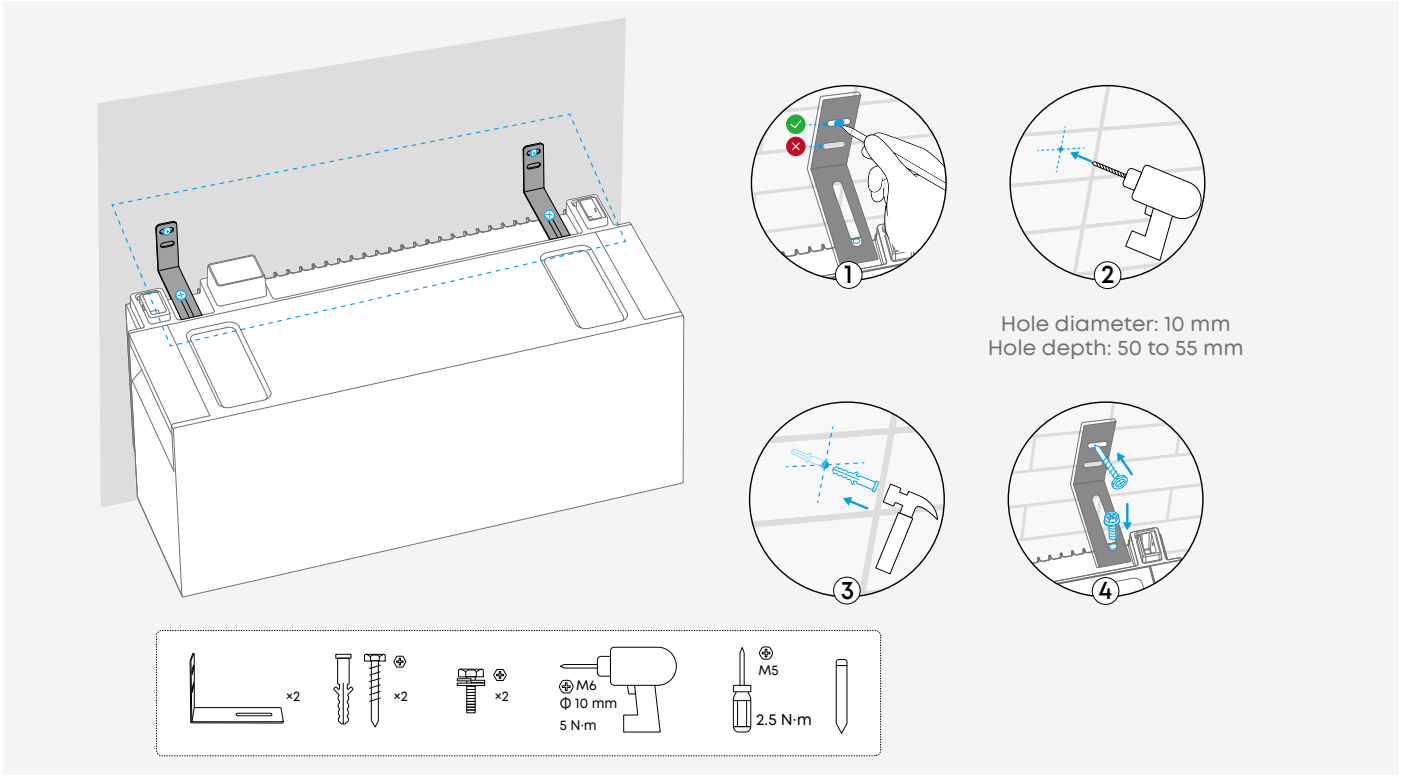
Place the battery module on a flat, solid surface within Wi-Fi range.



For floor-mounted base installation, position the floor-mounted base 81 to 96 mm from the wall.

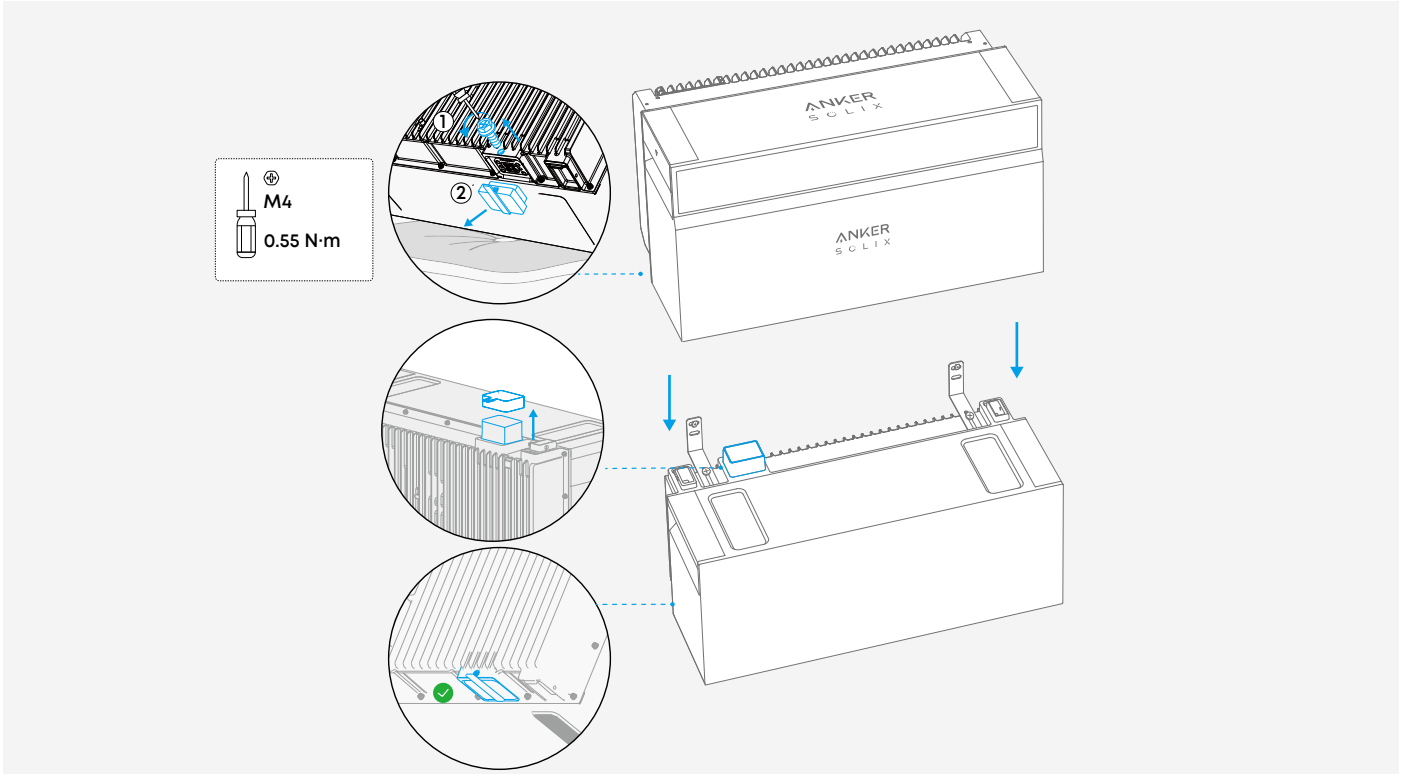
Step 2. Install the Wall Mount Brackets

Mark one upper hole. Choose a position that avoids brick joints.

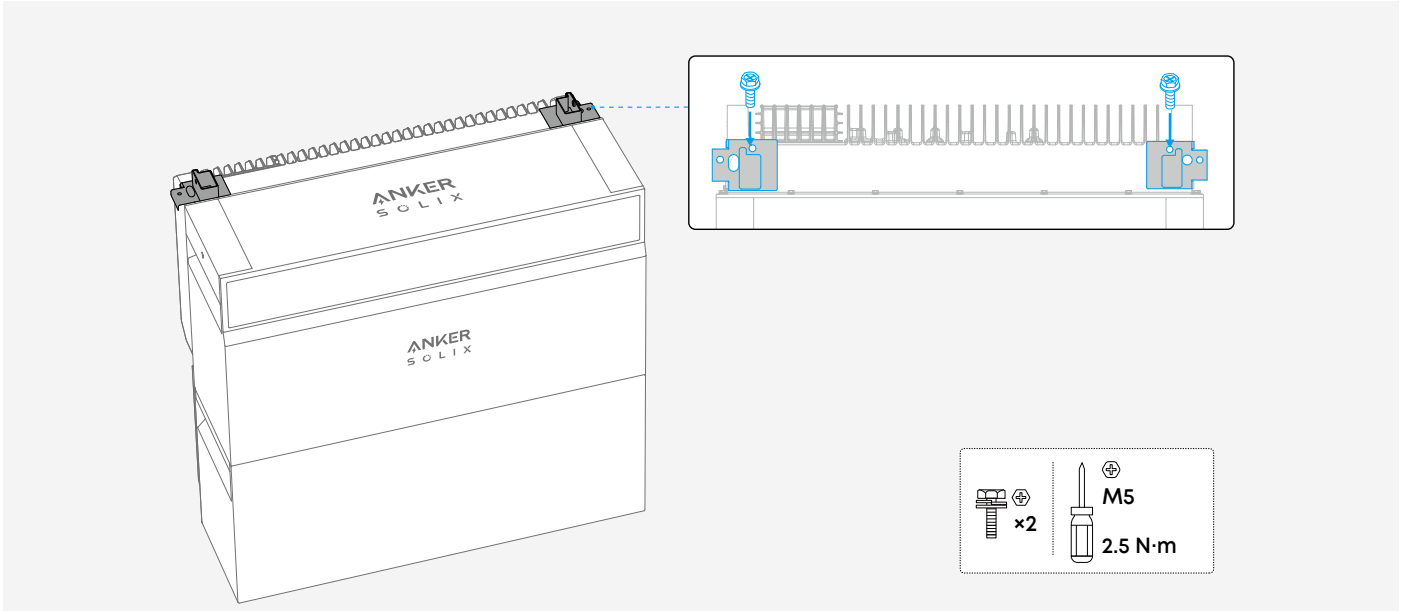


Step 3. Mount the Bottom Main Module

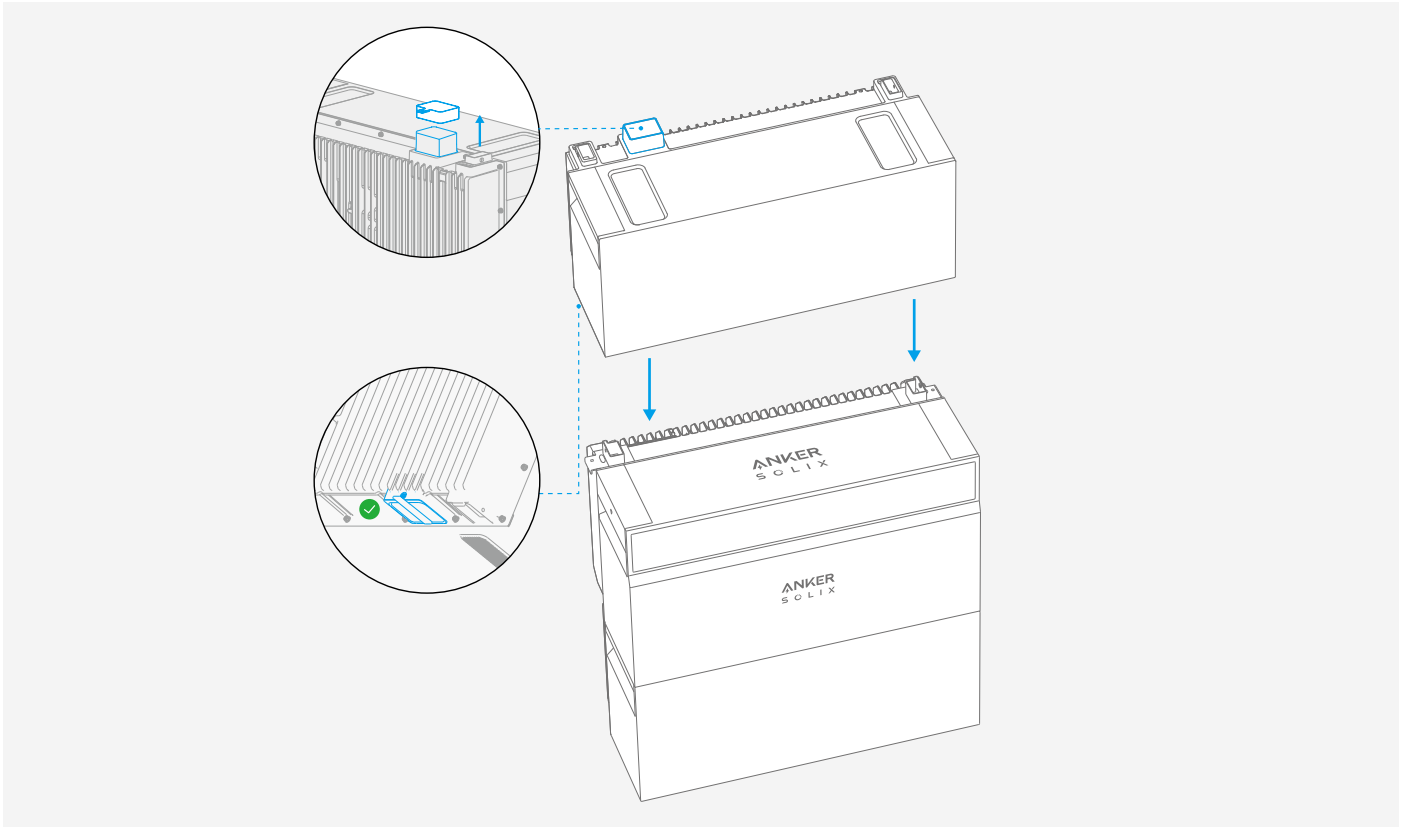
- Before stacking, remove the rubber plugs from the battery ports. Place the module on a soft pad to prevent scratches.
- To prevent water ingress, keep the lower rubber plug installed on the bottom module.



Step 4. Install the Parallel Connection Kit

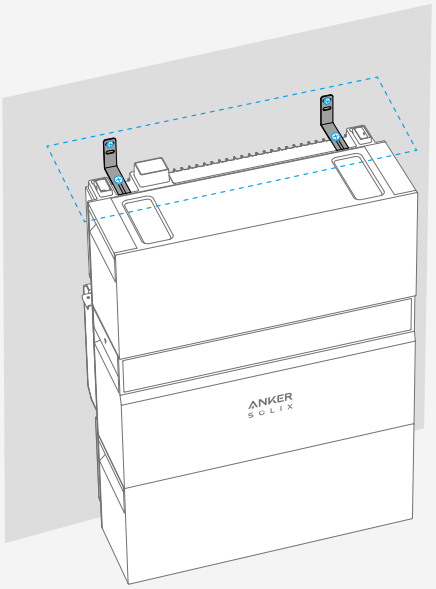


Step 5. Mount the Top Battery Module

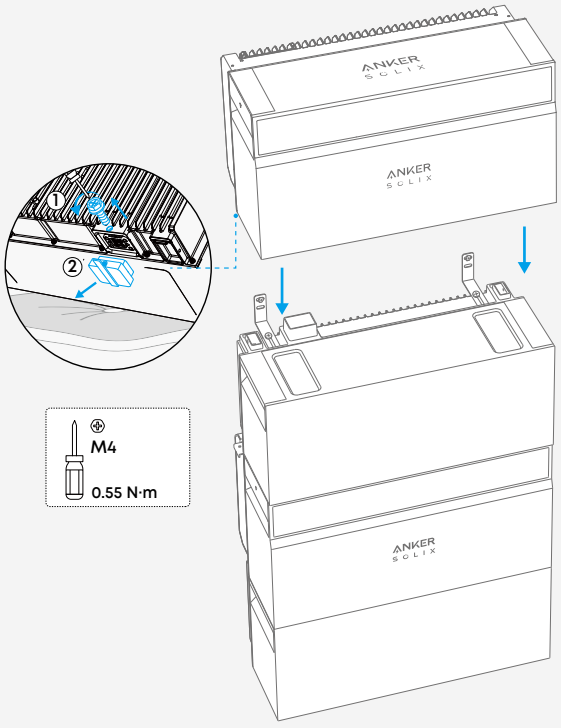


Step 6. Install the Wall Mount Brackets

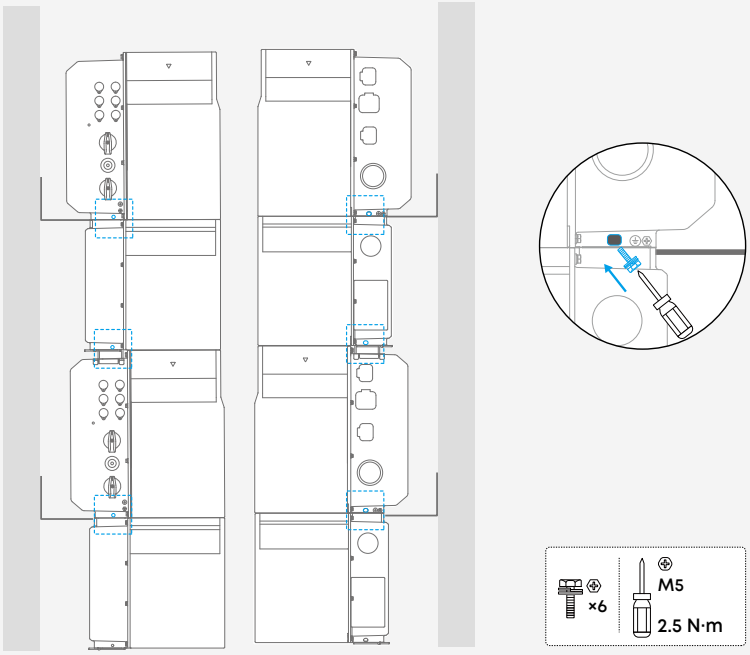
Follow the same method as Step 2.



Step 7. Mount the Top Main Module

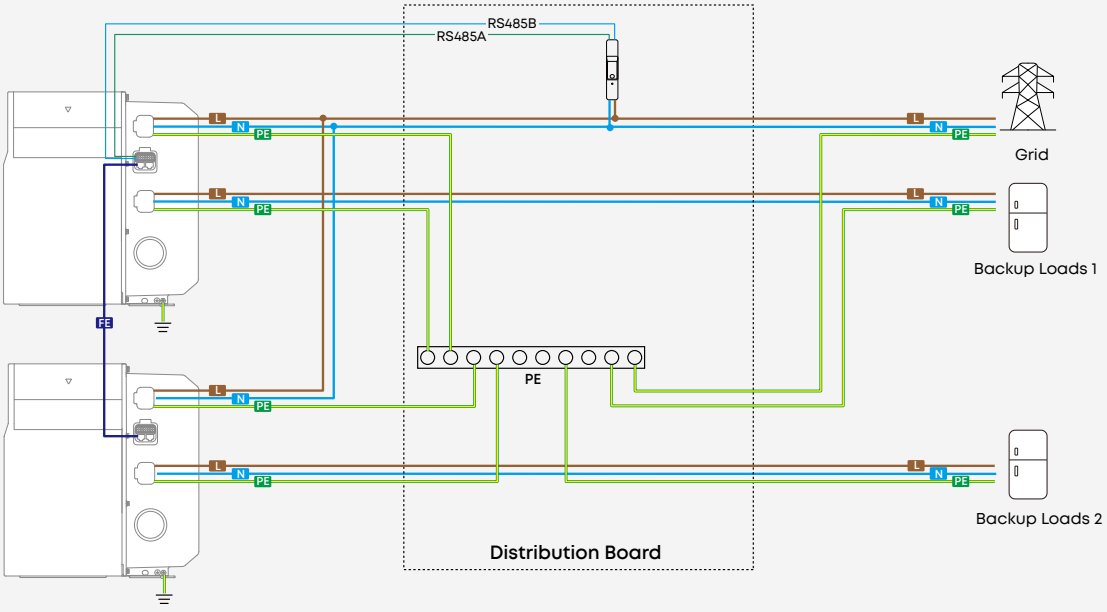


Step 8. Lock the Modules



Wiring

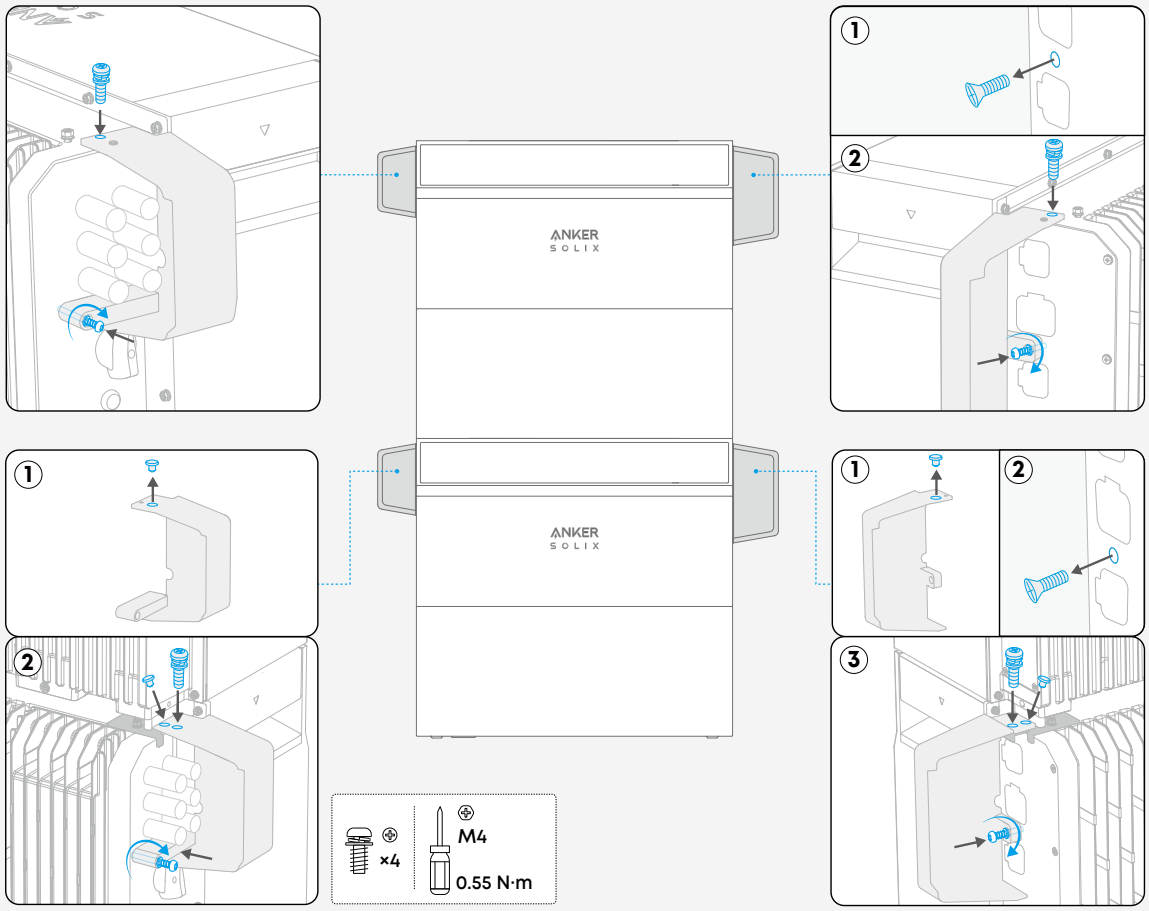
The following diagram shows the AC wiring for a parallel system. For detailed wiring instructions, refer to Section 6 Electrical Connections.



FE Connect the Ethernet cable only if the two main modules are not connected to the grid.

RS485B
RS485A
Connect the main module to the smart meter through RS485 cables or Wi-Fi.

Check the wiring using the checklist in Section 6.10 Verify Connections. Then install the cable covers as shown below.

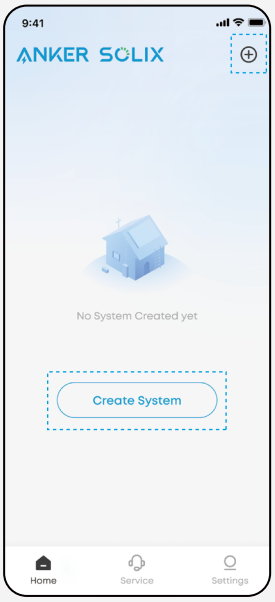


Commissioning

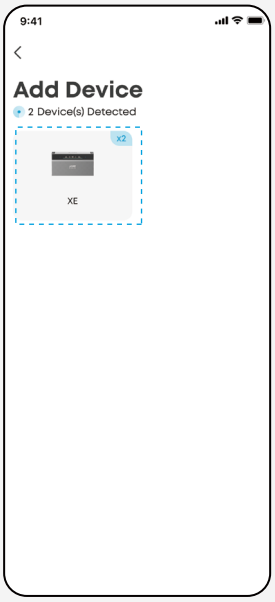
Create a New Parallel System

When commissioning a new parallel system for the first time, add one main module first. Then add the second main module when adding another device. Follow the on-screen instructions to complete setup.

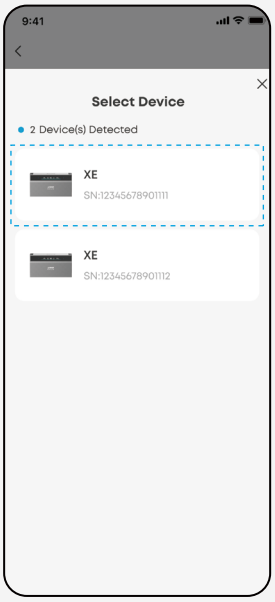
1



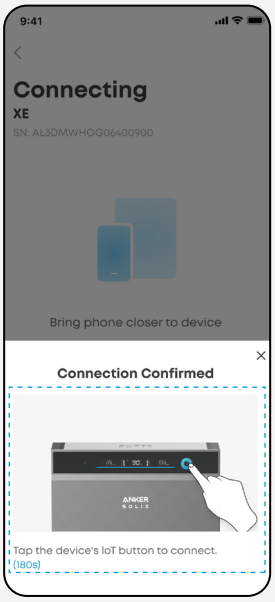
2



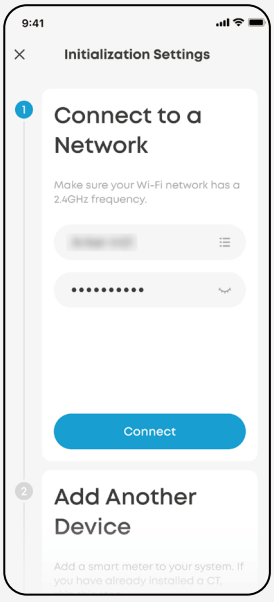
3



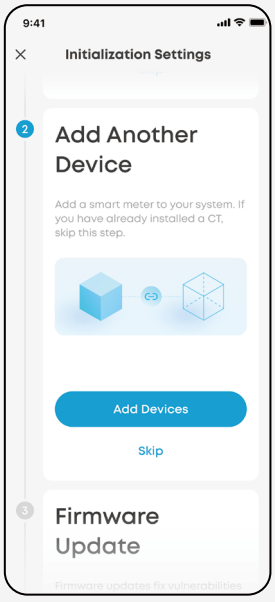
4



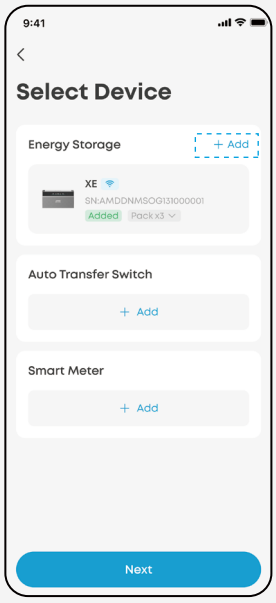
5



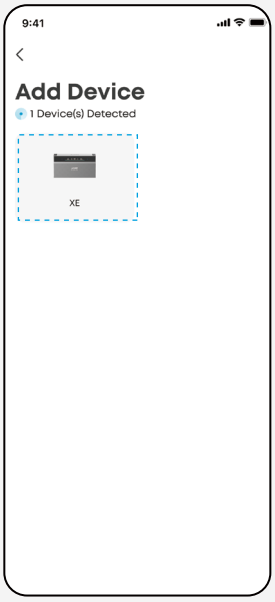
6



7

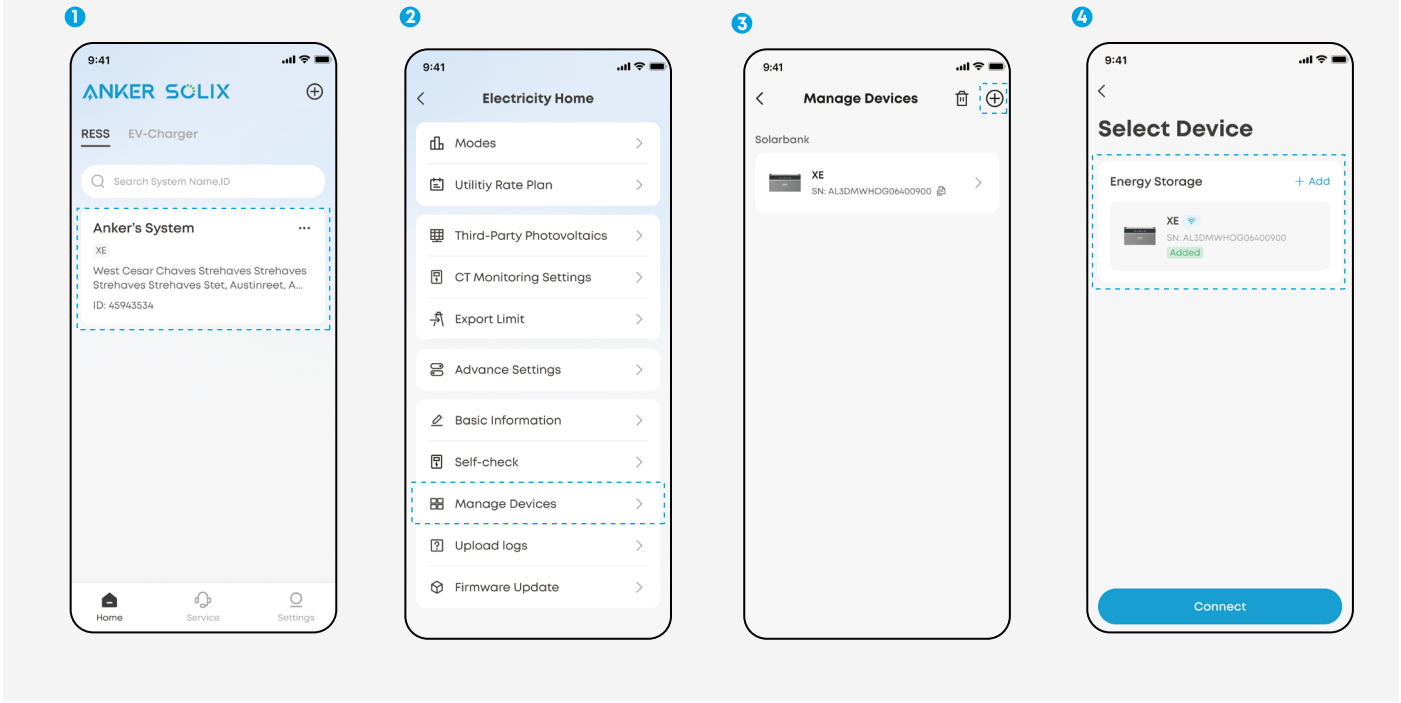


8



Add a Main Module to an Existing System

If a system with one main module has already been created, add the second main module to form a parallel system.



Appendix 3. Manage the System

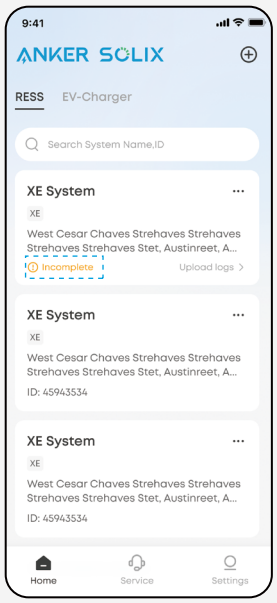
Use the Anker SOLIX Professional app to remotely check system status and manage the system.

The app images in this section are for reference only. Actual screens may vary by software version.

Commissioning Status

Check the commissioning status under the system name on the home screen.

If **Incomplete** is displayed, commissioning is not complete. Tap the corresponding system name to continue the commissioning process.

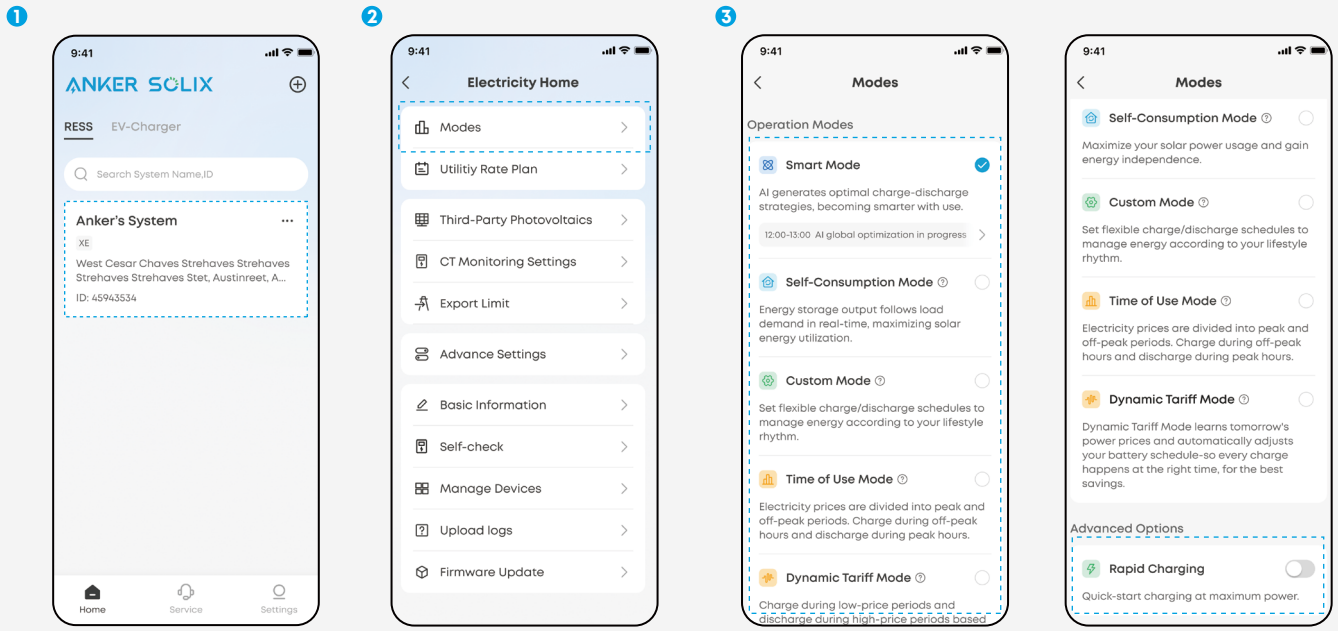


Modes

Use this feature to configure system operation for normal conditions and power outages. Select an operating mode to manage daily energy use, or select the backup mode to keep the battery fully charged for backup power.

How to Set Up

1. Tap the system name on the home screen.
2. Tap **Modes**.
3. Select an operating mode or a backup mode.



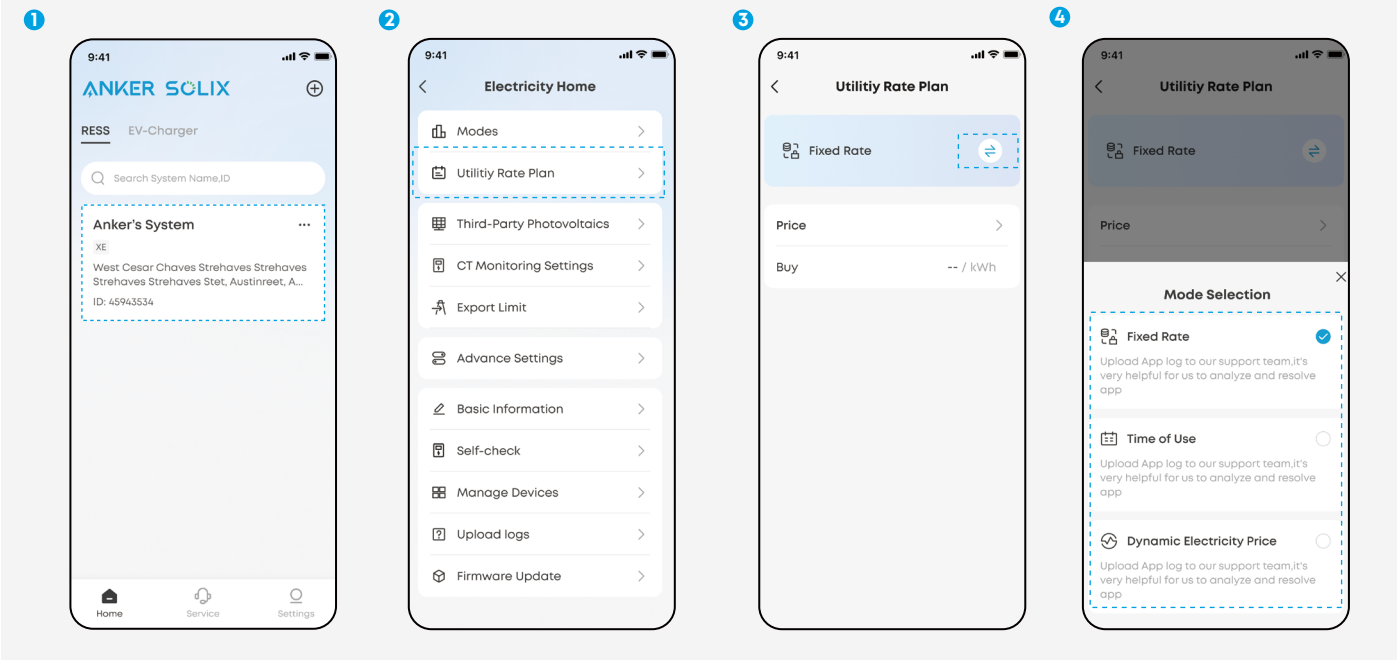
Operating Mode	
Smart Mode	Smart mode uses AI to create optimal charging and discharging strategies. The system learns local weather, electricity prices, and household energy usage to improve performance and maximize savings.
Self-Consumption Mode	Self-consumption mode maximizes solar power usage and minimizes reliance on the grid. In this mode, the system dynamically adjusts the power output or storage based on the power demand.
Custom Mode	Custom mode lets you define when the system charges and discharges. It also lets you apply self-consumption mode or standby mode at different times to match the daily routine.
Time of Use Mode	Time of Use (TOU) mode reduces electricity costs by automatically scheduling charging and discharging based on utility rates. The battery charges when electricity prices are low and discharges when rates are high.
Dynamic Tariff Mode	In dynamic tariff mode, the system automatically charges during low-price periods and discharges during high-price periods based on day-ahead electricity prices.
Backup Mode	
Rapid Charging	Fully charge the battery using the maximum available power.

Utility Rate Plan

Choose a tariff structure that matches the household electricity contract.

How to Set Up

1. Tap the system name on the home screen.
2. Tap **Utility Rate Plan**.
3. Tap the switch icon.
4. Select a tariff type and complete the setup.



Item	Description
Fixed Rate	Pay the same electricity price at all times. This tariff is common for households with constant rates throughout the day and year.
Time of Use	Pay different electricity prices at different times of day or year. Prices are higher during high-demand periods and lower during low-demand periods. Some utilities also apply seasonal rates.
Dynamic Electricity Price	Pay electricity prices that change frequently over time. Prices may be higher during high-demand periods and lower when demand is low.

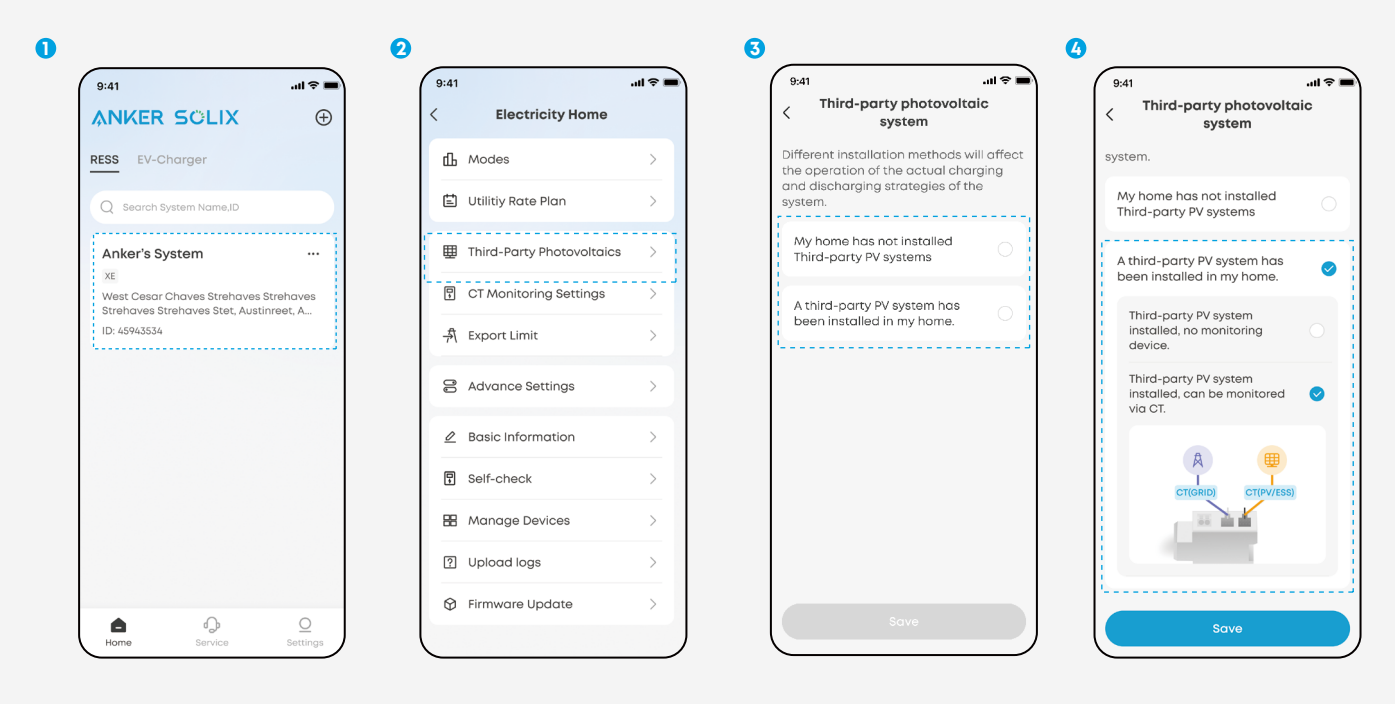
Third-Party PV System

Use this setting to indicate whether a third-party PV system is installed and whether it can be monitored through CT.

How to Set Up

1. Tap the system name on the home screen.
2. Tap **Third-Party Photovoltaics**.
3. Select whether a third-party PV system is installed.
4. If a third-party PV system is installed, select whether it can be monitored through CT.

   Once enabled, real-time PV data will be monitored via the meter's CT and can be viewed in the app.

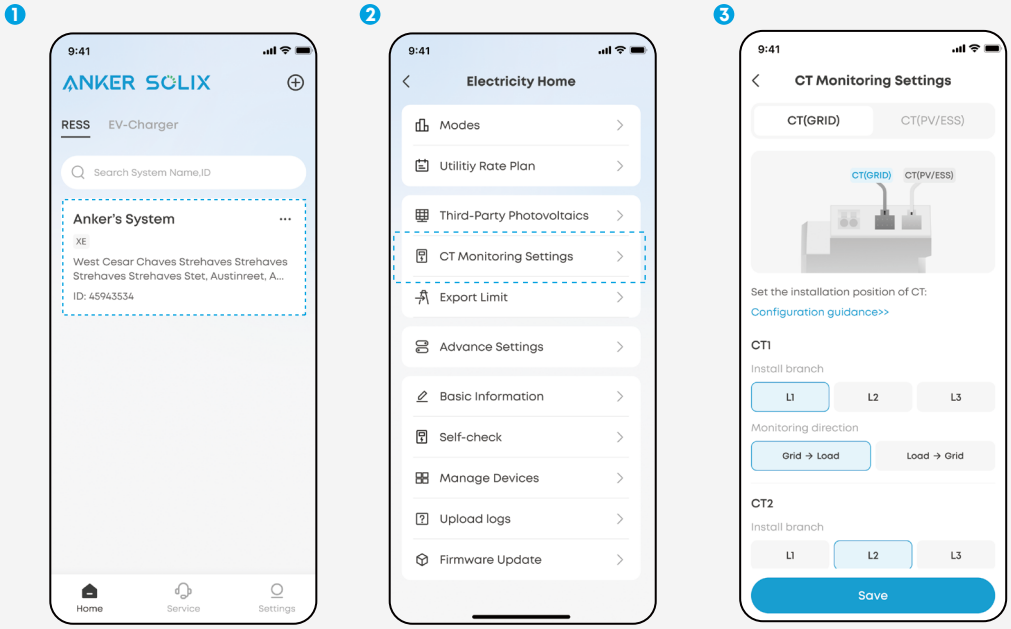


CT Monitoring

This feature is available when Anker SOLIX Smart Meter Gen 2 is installed.

How to Set Up

1. Tap the system name on the home screen.
2. Tap **CT Monitoring Settings**.
3. Confirm the installation position and orientation of each CT channel.

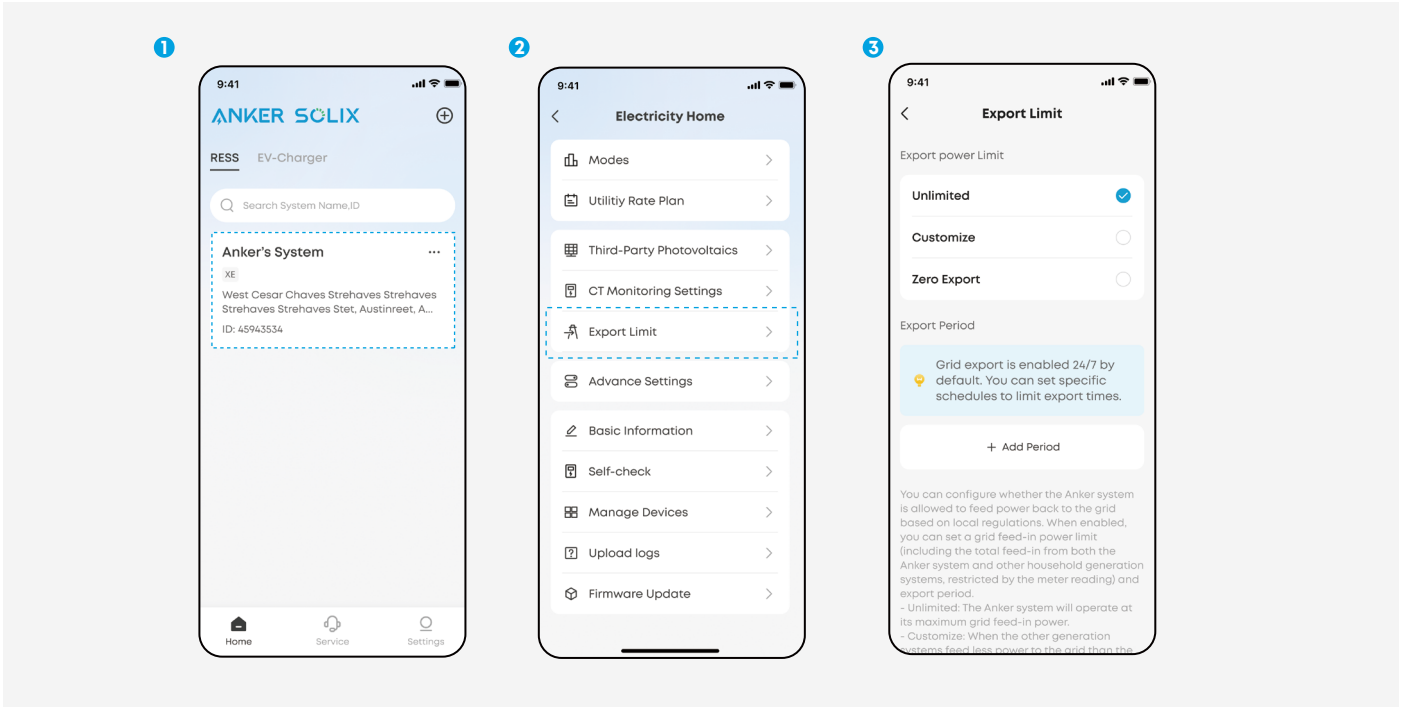


Export Limit

Use this feature to limit or disable power export to the grid.

How to Set Up

1. Tap the system name on the home screen.
2. Tap **Export Limit**.
3. Select an export power limit and complete the setup.



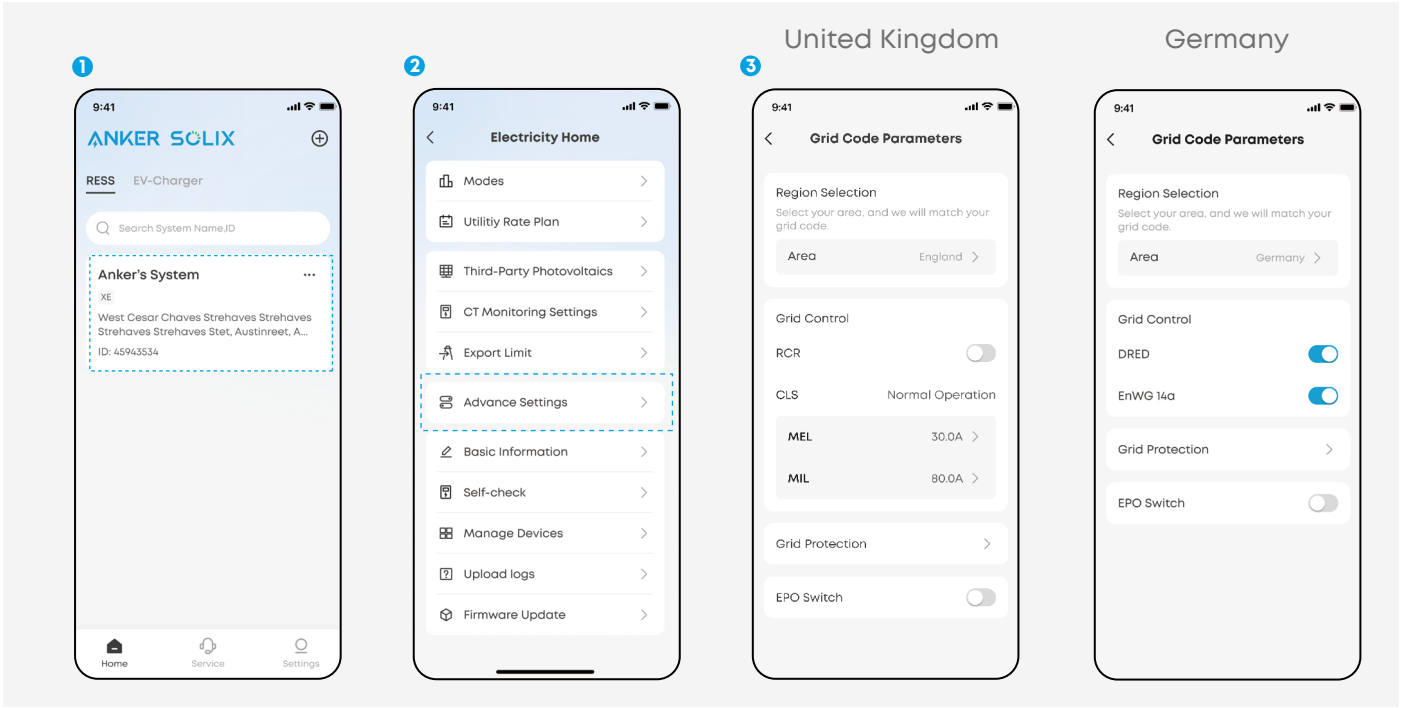
Item	Description
Software Export Limit	Controls grid export through internal logic in the main module. · **Unlimited**: No export limit. · **Customize**: Set a custom export limit. · **Zero Export**: Set the export power to 0 W. The system does not export power to the grid. · **Export Period Limit:** You can set up to 24 periods. If periods overlap, they will be merged automatically.

Advanced Settings

Use advanced settings to configure system parameters, including grid code, grid dispatch, grid protection, and EPO switch.

How to Set Up

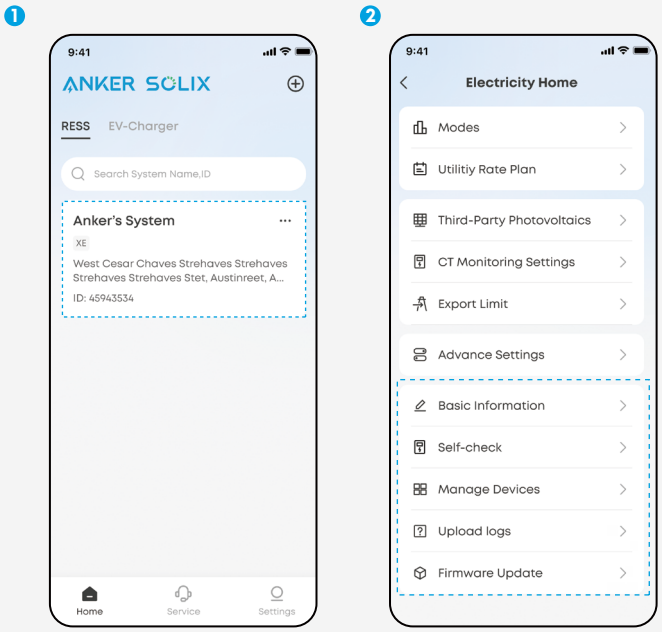
1. Tap the system name on the home screen.
2. Tap **Advanced Settings**.
3. Modify the required settings.



Item	Description
Grid Dispatch	This feature enables the flow of electricity between the system and the grid, allowing for both power import and export. The toggle switch is off by default. Turn it on if the main module is connected to the appropriate power control device. The power control device may vary by country. · United Kingdom: RRCR, CLS · Germany: RCR, EnWG 14a
Grid Protection	Specify thresholds and duration for level-1 and level-2 grid protection.
EPO Switch	Turn on this switch when the main module is connected to an Emergency Power Off (EPO) device.

Other Settings

Tap the system name on the home screen to access additional settings.



Item	Description
Basic Information	View basic system and owner information. Edit selected information, such as the system name and email address.
Self-Check	Run a remote device self-check. If the check fails, the app displays the cause and recommended action.
Manage Devices	Remove devices from the system or add devices to the system, such as a battery module and a smart meter.
Upload Logs	Upload device logs to diagnose device issues.
Firmware Update	Perform remote firmware updates for devices added to the system.