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1. About This Guide

1.1 Purpose

This document provides guidance for installing the Anker SOLIX X1 Power Module X1-H(3.68~6)K-S series hybrid single-phase power modules.

1.2 Product Overview

The following table lists the Anker SOLIX X1 Power Module models to which this document applies.

Product Name	Anker SOLIX X1 Power Module
Product Models	X1-H3.68K-S, X1-H4.6K-S, X1-H5K-S, X1-H6K-S
Description	X1: Product series
	H: Product category (Hybrid inverter)
	(3.68~6)K: Power level (3.68 kW, 4.6 kW, 5 kW, 6 kW)
	S: Type of AC power distribution (Single-phase)
Specifications	220 / 230 / 240 VAC

1.3 Intended Audience

This guide is intended for:

- Sales engineers
- System engineers
- Technical support engineers

2. Unboxing

2.1 Check Before Installation

Check the Outer Packing

Before unpacking the equipment, check the outer packing for damage, such as holes and cracks, and check the equipment model. If any damage is found or the model is not what you requested, do not unpack the equipment and contact the dealer as soon as possible.

Check Deliverables

After unpacking the equipment, check that the deliverables are intact and complete, and free from any obvious damage. If any item is missing or damaged, contact the dealer.

2.2 In the Power Module Box

No.	Item	Specifications	Amount
1	Power Module	X1-H3.68K-S / X1-H4.6K-S / X1-H5K-S / X1-H6K-S	1
2	WLAN Dongle	DG-WF-H	1
3	Power Sensor	100×36×65.5 mm, DDSU666 (100 A)	1
4	Floor Mounting Base	670×150×75 mm	1
5	Wall Mount Bracket	575×65×26 mm	1
6	Left Side Cover	319×118.5×28 mm	1
7	Right Side Cover	319×118×28 mm	1
8	Left-Side Wire Cover	78.9×54×51.6 mm	1
9	Right-Side Wire Cover	157.2×66.9×21.6 mm	1
10	PV Connector (+)	63×18.85 mm	2
11	PV Connector (-)	69×18.85 mm	2

12	Male Dust Cap	Black, 10.6×7.6×3.8 mm	1
13	Female Dust Cap	Black, 19.3×25×8.3 mm	1
14	RJ45 Connector with 2×120Ω Resistors	8 Pins, Black, 2×120Ω Resistors	1
15	20-Pin Terminal Block	20 Pins, 41.9×27.1×13.25 mm	1
16	3-Pin Terminal Block	3 Pins, 22.5×11.3×7.6 mm	1
17	AC Connector (Grid)	3 Pins, Black, 76.7×32.2 mm	1
18	AC Connector (Backup)	3 Pins, Grey, 76.7×32.2 mm	1
19	RS485 Cable	8 m	1
20	RJ45 Connector	RJ45, 8 Pins	3
21	Ring Terminal	RNB5.5-5	1
22	Insulated Tube Terminal (COM)	Length: 16 mm	25
23	Insulated Tube Terminal (Meter)	Length: 15 mm	2
24	AC Wire Sleeve Terminal	Length: 19.5 mm	11
25	Heat Shrink Tubing	Black, Caliber: 8 mm, Length: 25 mm	1
26	Module Interlocker	38×17×2.5 mm	2
27	M5×14mm Bolt	M5×14 mm	6
28	M6×50mm Expansion Bolt	M6×50 mm	2
29	Shim	118×40×7 mm	1
30	M12 Flat Washer	M12	3
31	Packing List	/	1
32	Quick Installation Guide	/	1
33	Inspection Report	/	1
34	Positioning Card	/	1
35	Safety Instructions	/	1
36	WLAN Dongle Safety Instructions	/	1

2.3 Optional Accessories and Service Parts

The following accessories must be ordered separately.

Wall-Mount Kit

Item	Specifications	Amount
Bracket Holder	/	2
Battery Module Base (For Wall Mounting)	/	1
Left Base Baffle	/	1
Right Base Baffle	/	1
Screw	M8×70 mm	4
Screw	M4×10 mm	8

Top Cover Kit

Item	Specifications	Amount
Battery Module Top Cover	For Anker SOLIX X1 Battery Module	1
Top Cover Baffle	/	2
Module Interlocker	38×17×2.5 mm	2
Bolt	M4×10 mm	4
Screw	M5×14 mm	4
Wedge Shim	/	2

2nd Column Battery Module Accessory Kit

Item	Specifications	Amount
RJ45 Connector	8 Pins	2
Positive DC Power Connector	For 8 mm ² Cable	2
Negative DC Power Connector	For 8 mm ² Cable	2
Ring Terminal	RNB5.5-5	2
Heat Shrink Tubing	Black, Caliber: 8 mm, Length: 25 mm	2
Screw	M5×14 mm	2

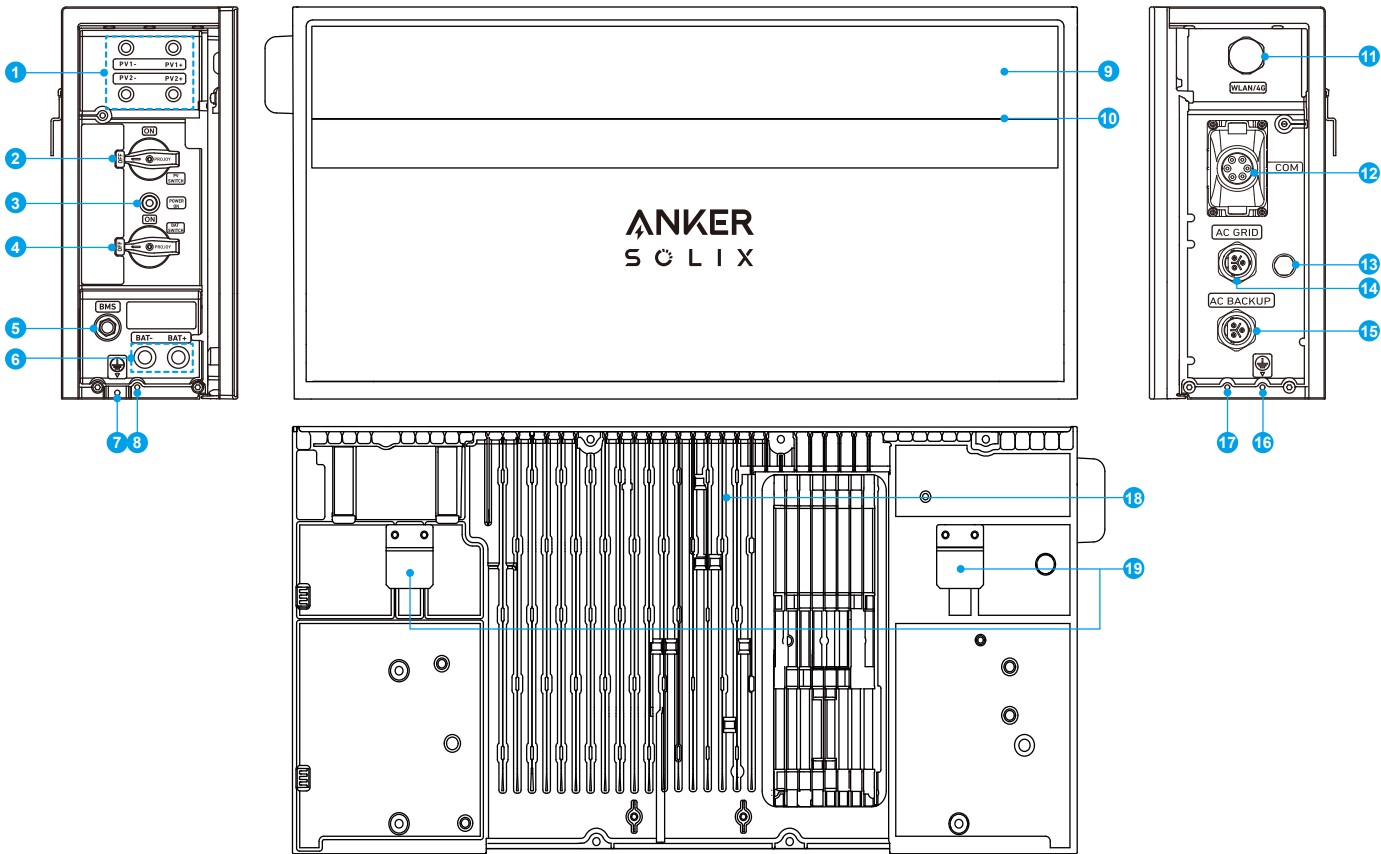
Power Sensor Kit

Item	Specifications	Amount
Power Sensor	100×72×65 mm, DTSU666 (250 A)	1
Current Transformer	/	1

The service parts listed below can be ordered separately and replaced during field installation by following the instructions provided in this guide.

Item	Specifications
Left Side Cover	For Power Module 319×118.5×28 mm
Right Side Cover	For Power Module 319×118×28 mm
Left-Side Wire Cover	For Power Module 78.9×54×51.6 mm
Right-Side Wire Cover	For Power Module 157.2×66.9×21.6 mm
Wall Mount Bracket	575×65×26 mm
Side Cover	For Anker SOLIX X1 Battery Module 360×117.4×21.8 mm

3. At a Glance



- ❶ PV power ports (PV1+ / PV1–, PV2+ / PV2–)
- ❷ PV switch
- ❸ Black start button
- ❹ BAT switch
- ❺ BMS port
- ❻ DC power ports (BAT+ / BAT–)
- ❼ Internal ground point
- ❽ Screw hole for locking modules
- ❾ LED screen
- ❿ Status light
- ⓫ WLAN/4G port
- ⓬ Communication ports / terminals *
- ⓭ Breather valve
- ⓮ AC grid port
- ⓯ AC backup port
- ⓰ External ground point
- ⓱ Screw hole for locking modules
- ⓲ Heat sink
- ⓳ Wall-mount cleats

* For the layout and function description of communication ports and terminals, refer to “Appendix B. Communication Ports and Terminals”.

4. Pre-Installation

4.1 Select Installation Site

1. Environment Requirements

- The power module with protection rating IP66 can be installed both indoors and outdoors.
- The ambient temperature must not be lower than -20°C or higher than 55°C, and the relative humidity should be 5% to 95%.
- 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.
- Ensure the site is protected from potential hazards such as floods.
- The maximum operating altitude is 4,000 m.
- Do not install equipment in living spaces or habitable areas of dwelling units, such as living rooms.
- 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.
- The equipment can be installed indoors or outdoors at any sites up to 300 m (984 ft) away from the coast without special requirements.
- Protective measures need to be taken if the equipment is installed at a site within 50 to 300 m (164 to 984 ft) from the coast.
 - a. Indoor installation is recommended and should be prioritised.
 - b. Semi-enclosed sites: If the installation site directly faces the ocean, effective barrier structures must be installed between the equipment and the sea to block marine airflow.
 - c. Outdoor installation: This is only permitted when indoor installation is not possible. The following protective measures must be implemented:
 - i. A physical protective structure must be constructed to shield the equipment from sea breezes. The equipment must be placed between 40 and 100 cm (15.7 and 39.4") away from the structure.
 - ii. The top of the equipment must be covered to avoid vertical ocean airflow.
- Installation is prohibited in sites within 50 m (164 ft) of the coast due to high salt fog concentration, intense corrosion, and climate conditions, which violate operational safety standards.

*Note:

- (1) Requirements for regions prone to sea breezes may vary depending on weather conditions (e.g., typhoons, monsoons) and terrain features (e.g., dams, hills).
- (2) The operational environment must be properly ventilated to dissipate heat. Installation must strictly adhere to the

spacing requirements. Maintain a minimum safe distance from surrounding objects to improve heat dissipation and prolong equipment life.

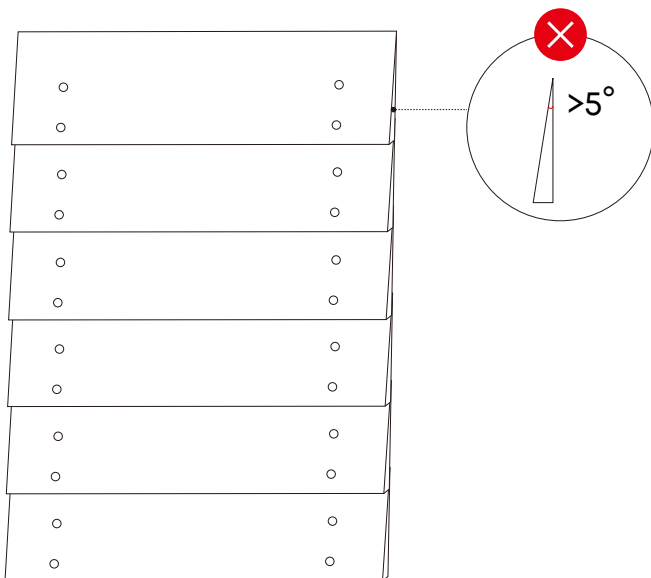
2. Load-Bearing Requirements

The Anker SOLIX X1 Power Module supports up to six Anker SOLIX X1 Battery Modules (Model: X1-B5-H). The power and battery modules can be installed on either the floor or wall.

- **Concrete / Masonry:** Minimum strength requirements are 18 MPa for concrete, 12 MPa for clay brick, and 11 MPa for masonry. Use the expansion bolts (M6×50 mm, included) to fully embed them into the wall. Prior to mounting, inspect the surface and avoid using weak compositions.
- **Blocking / Wood Studs:** Mount the modules directly onto the wood studs, which should be spaced 508 mm, 406 mm, or 304 mm apart. Use the self-tapping screws (M8×70 mm, not included) to fully embed them into the studs.
- **Other Types of Walls:** Verify that the selected walls meet the load bearing requirements and choose appropriate screws. For wall mounting, choose a wall capable of supporting the full weight of the equipment.
 - Power module: 19 kg
 - Battery module: 51 kg

3. Requirements for Inclined Walls

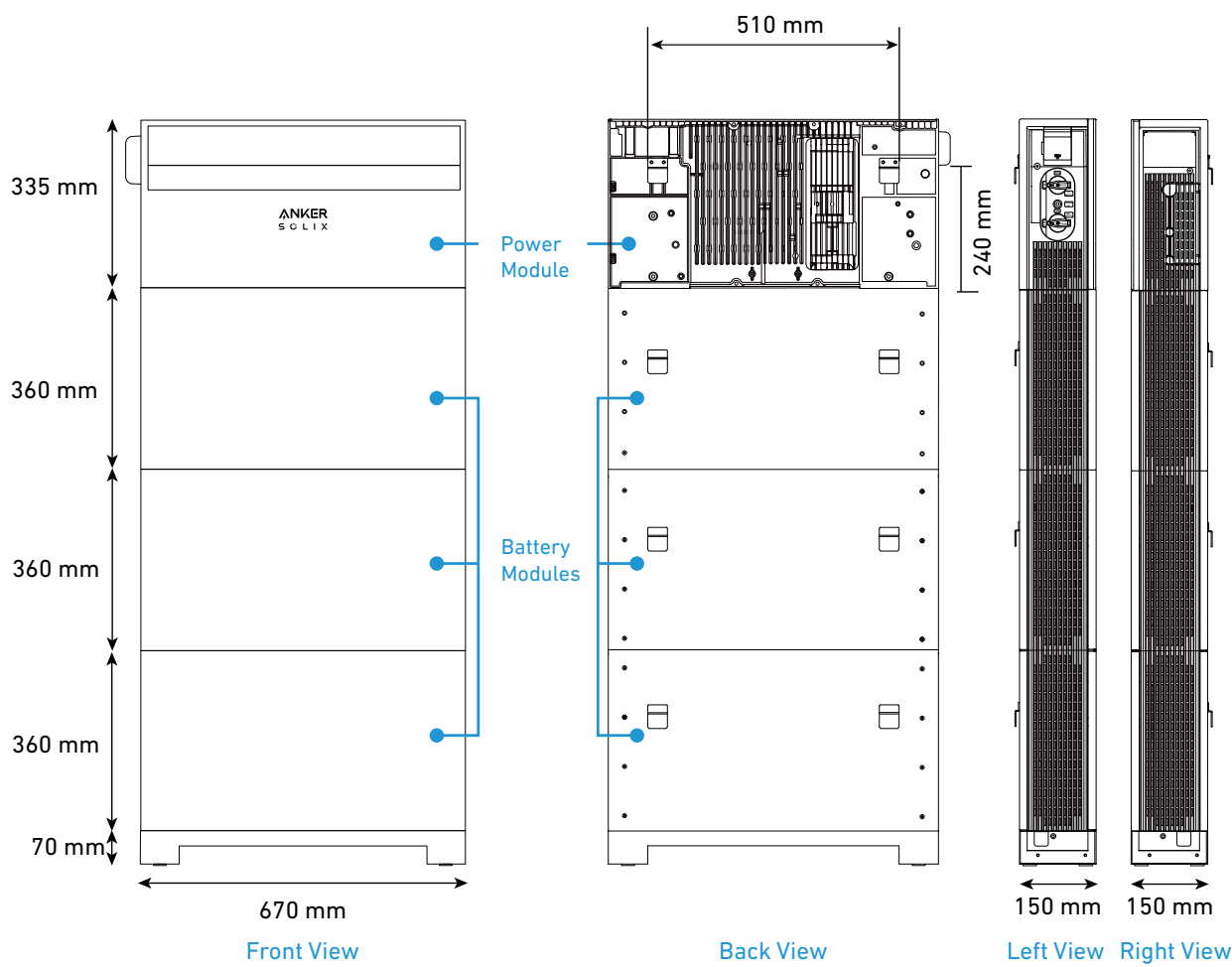
Do not install the equipment on a wall with an inclination greater than 5°. Installing on an inclined wall may complicate the installation, restrict heat dissipation, reduce mounting stability, and create safety hazards.



4.2 Measure Distance

Utilize the dimensions provided in the figures below to reserve sufficient spacing for heat dissipation and safety isolation, and plan for a short and efficient conduit run.

Dimensions

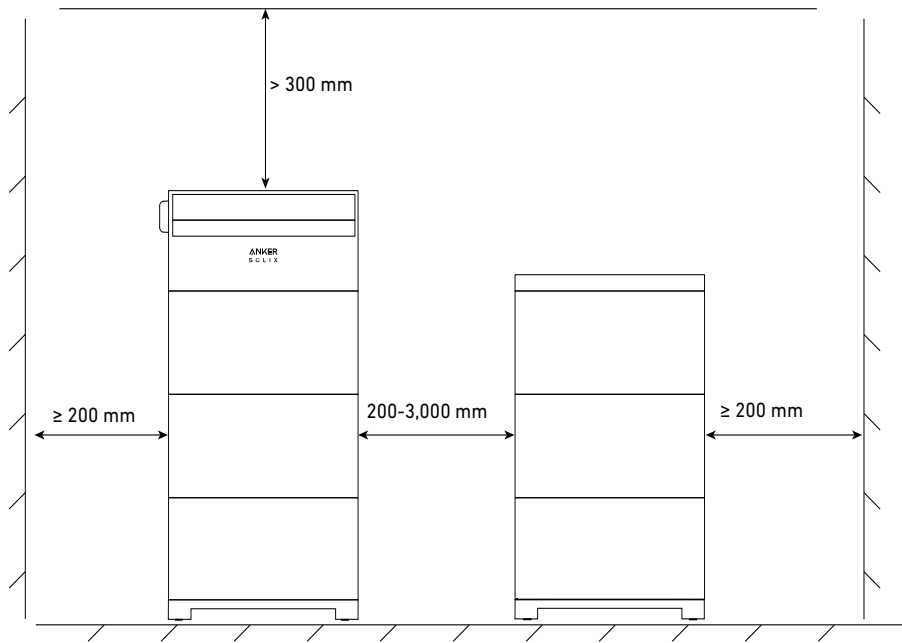


Spacing

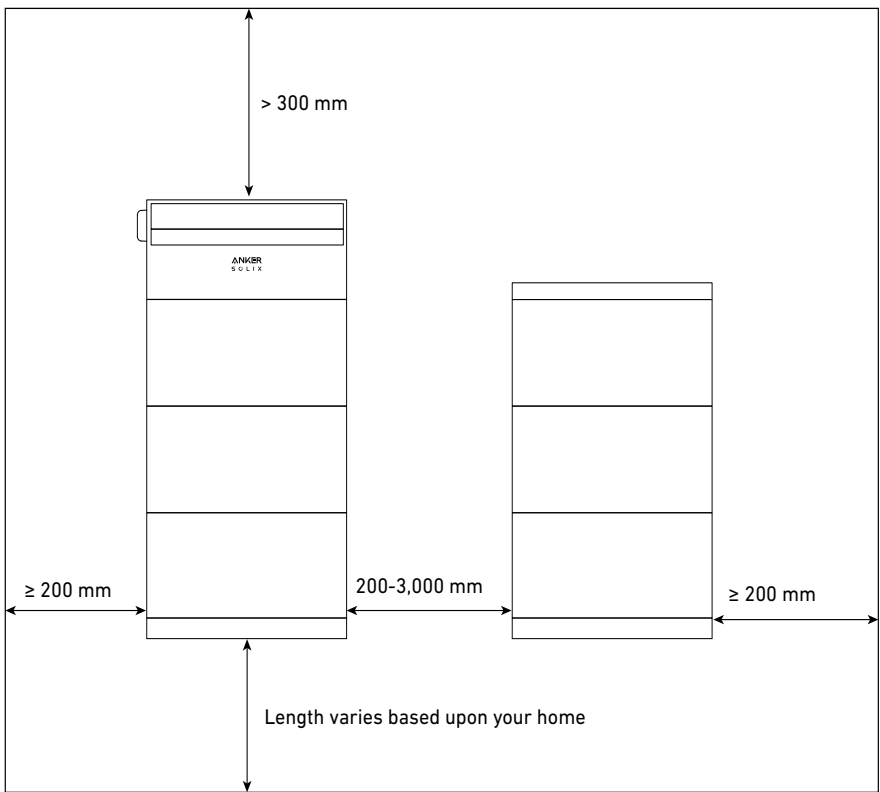
Ensure sufficient spacing for cabling, heat dissipation, and safety isolation.

Minimum clearance from the wall on both sides	200 mm
Minimum clearance from the ceiling	300 mm
Clearance between side-by-side modules	200 mm to 3000 mm (300 mm to 600 mm recommended)
Minimum clearance in front of the modules	500 mm
Minimum clearance from any heat source (hot water system, gas heater or the like)	60 cm

Installation space for floor-mounted modules

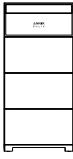
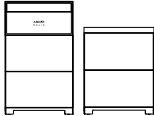


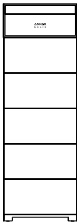
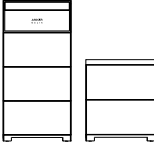
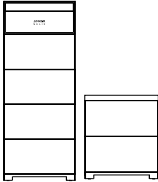
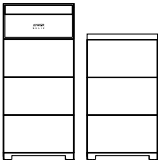
Installation space for wall-mounted modules



Stacking

The following illustrations for stacking are for reference only. You may stack the modules in other ways. However, for floor mounting, stack no more than **five** battery modules plus one power module in one column; for wall mounting, stack no more than **four** battery modules plus one power module in one column.

Anker SOLIX X1				 or 
Battery Module	×1	×2	×3	×4
Energy Capacity	5 kWh	10 kWh	15 kWh	20 kWh
Weight*	73.5 kg	124.5 kg	175.5 kg	232 kg

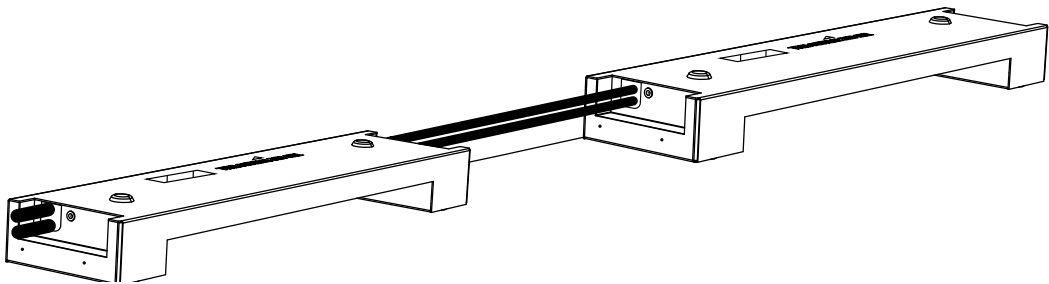
Anker SOLIX X1	 or  (This one-column stacking only for floor mounting)	 or 
Battery Module	×5	×6
Energy Capacity	25 kWh	30 kWh
Weight*	283 kg	334 kg

*Includes floor mounting base and top cover.

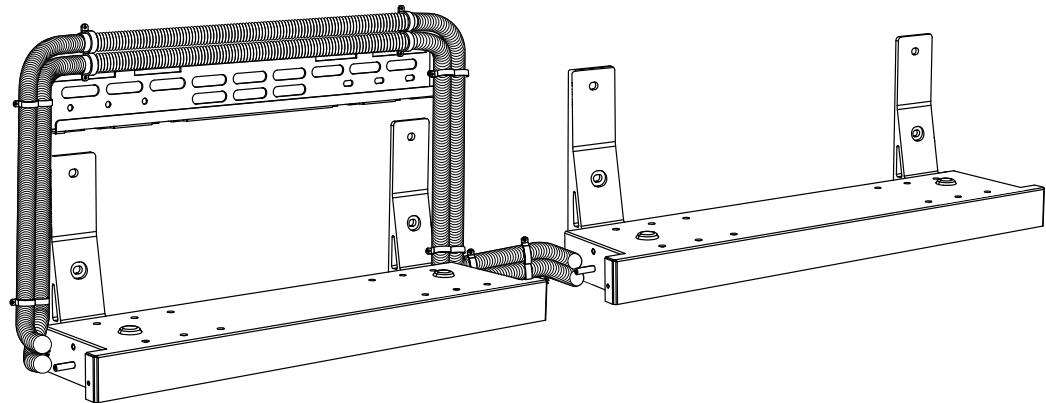
4.3 Plan Conduit Run

When connecting two columns of modules, it is recommended to follow the instructions below.

- For floor mounting, route cables into the second column from the inside of the floor mounting base in the first column.



- For wall mounting, route cables into the second column from the back of the first column.



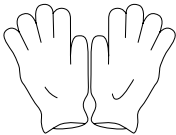
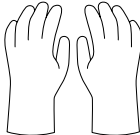
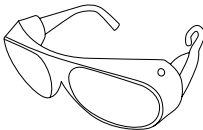
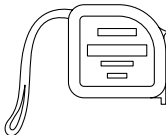
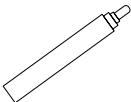
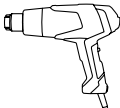
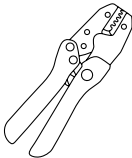
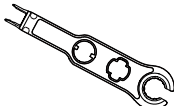
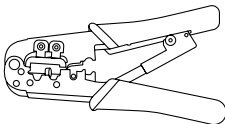
4.4 Prepare Tools and Supplies

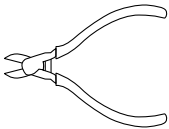
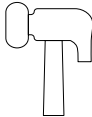
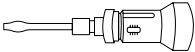
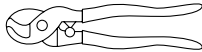
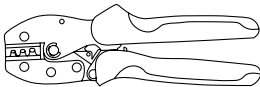
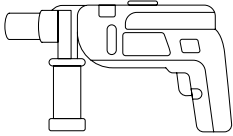
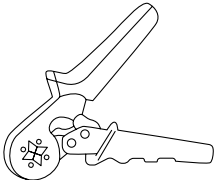
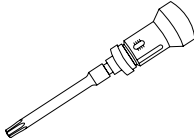
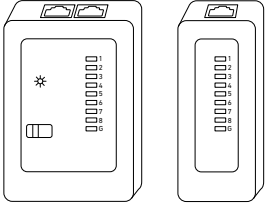
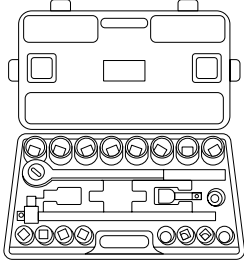
The following tools and supplies are not included in the package. Ensure that you have them ready before proceeding with the installation and electrical connections.

Required Tools



Use 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
	
Measuring Instruments	
Level	Metal Tape Measure
	
Installation and Wiring Tools	
Marker	Heat Gun
	
Wire Stripper	OT Terminal Crimper
	
Disassembly Tool	RJ45 Crimping Tool
	

Pliers	Rubber Mallet
	
Flathead Screwdriver	Cable Cutter
	
Solar Crimping Tool	Power Drill
	 Drill Bit: 10 mm
Tube Terminal Crimper	No. 1 Phillips Screwdriver
	
Cable Tester	Torque Wrench
	 Cross Socket Bits: PH1 / PZ1 (M4), PH2 / PZ2 (M5) Hex Socket: 10 mm (M6), 13 mm (M8)

Required Supplies

You need to prepare necessary cables or conduits for more complicated connection requirements. Make sure the cables or conduits meet the local electrical regulations. All cables are rated minimum 90°C.

Function	Cable / Conduit	Specifications
Connection Between Two Module Columns	GND cable	6 mm ² , Minimum 600 V Rating, Copper
	Positive DC Power Cable	6/8/10 mm ² , Minimum 600 V Rating, Copper
	Negative DC Power Cable	6/8/10 mm ² , Minimum 600 V Rating, Copper
	RJ45 Signal Cable	Cat 5 or Higher, 5-6 mm in Diameter, 8-Conductor, Shielded (Recommended)
	Cable Conduit	- For floor-mount installation: rigid metal conduits, inner diameter of 20 mm, outer diameter of 25 mm, 304 stainless steel - For wall-mount installation: flexible metal conduits, inner diameter of 15 mm, outer diameter of 20 mm, 304 stainless steel

Connection from Power Module to PV Panels	Positive PV Cable for Outdoors	4–6 mm ² , Minimum 600 V Rating, Copper
	Negative PV Cable for Outdoors	4–6 mm ² , Minimum 600 V Rating, Copper
Connection from Power Module to AC Grid / Backup Loads	3-Conductor AC Power Cable	11–14 mm in Outer Diameter • L Conductor: 6 mm², Minimum 300 V Rating, Copper • N Conductor: 6 mm², Minimum 300 V Rating, Copper • PE Conductor: 6 mm², Minimum 300 V Rating, Copper
Connection Between PV-Side Power Sensor and Grid-Side Power Sensor (Only for Retrofitting)	RS485 Signal Cable	5.5±0.5 mm in Outer Diameter, 2-Wire (485+ and 485-), 0.2 to 0.5 mm ²
Connection Between Grid and Power Sensor	AC Power Wires	• L Wire: 6 mm², Minimum 300 V Rating, Copper • Neutral Wire: 6 mm², Minimum 300 V Rating, Copper
Internet Connection Through Ethernet	RJ45 Signal Cable	Cat 5 or Higher, 5–6 mm in Diameter, 8-Conductor, Shielded (Recommended)

5. Installation

You can mount the modules on a floor support or to the wall. The procedures describe the installation of one power module and six battery modules (power module and three battery modules in the first column; another three battery modules in the second column) as an example.

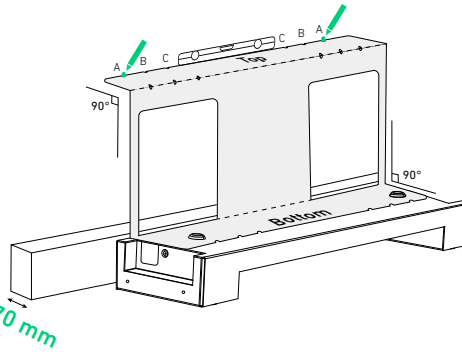
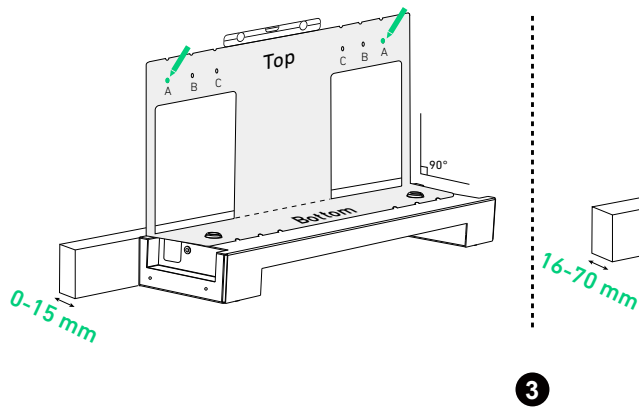
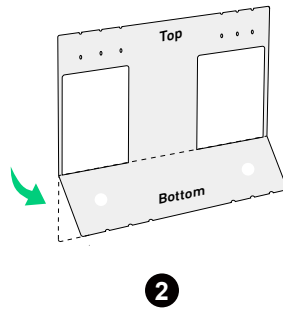
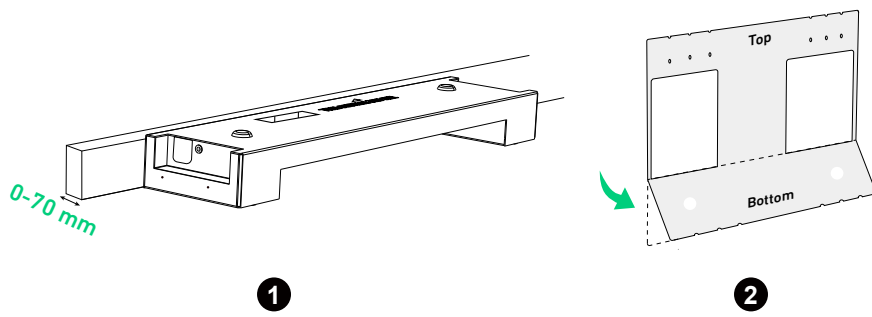


- Leave a minimum of 300 mm of workspace on either side of the equipment.
- If the baseboard is thicker than 70 mm, mount the modules to the wall.

5.1 Floor Mounting

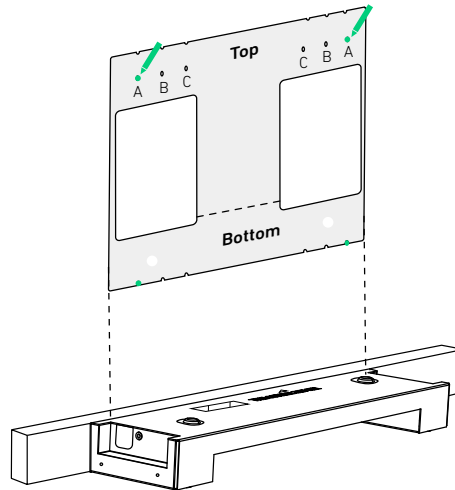
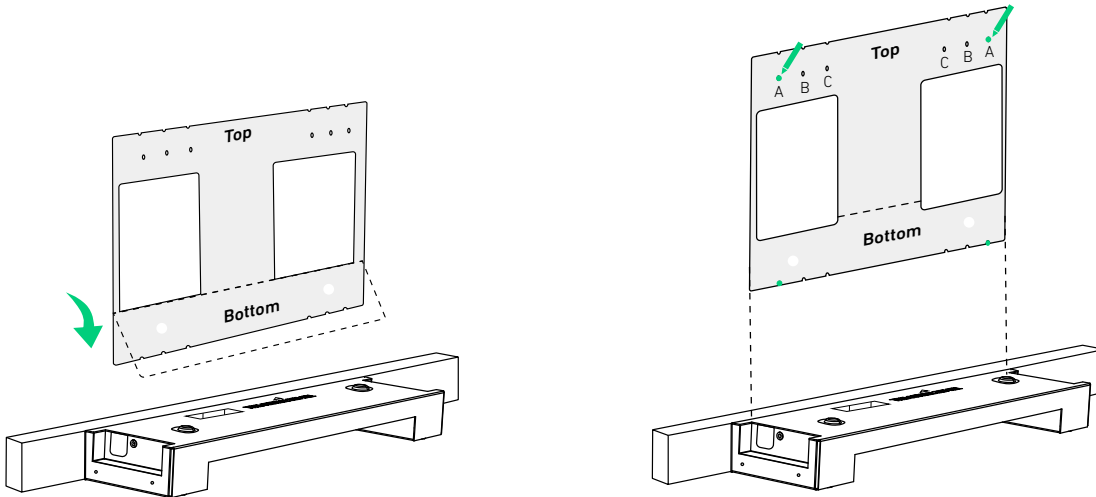
Step 1: Mark pilot holes for the first module.

1. Position the floor mounting base on a level surface against the wall or the baseboard.
 2. Fold the positioning card (included) along the crease.
 3. Align the card with the top of the floor mounting base and use a level to ensure it is horizontal. Verify spacing and mark a hole on each side to secure the first module.
- If there is no baseboard or the baseboard is 0–15 mm thick, fold the positioning card only along the bottom crease.
 - If the baseboard is 16–70 mm thick, also fold the positioning card along the top crease and move the floor mounting base so that the top edge of the card touches the wall at a 90-degree angle.
- 
 - Markings are for reference only. Select position A, B, or C based on your actual installation conditions.
 - If anchoring to a wall with studs, select position A for studs spaced 508 mm apart, position B for studs spaced 406 mm apart, or position C for studs spaced 304 mm apart.

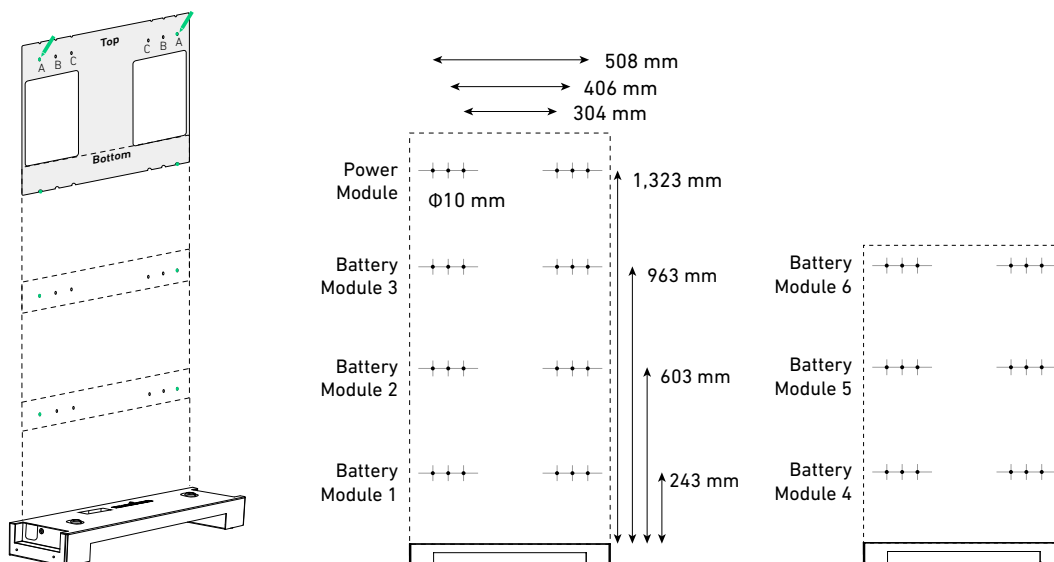


Step 2: Mark pilot holes for the remaining modules.

1. Unfold the positioning card and align the bottom row of holes with the marked holes. Choose and mark a hole on each side at the top for the second module.



2. Repeat the previous step to mark any remaining pilot holes as necessary.

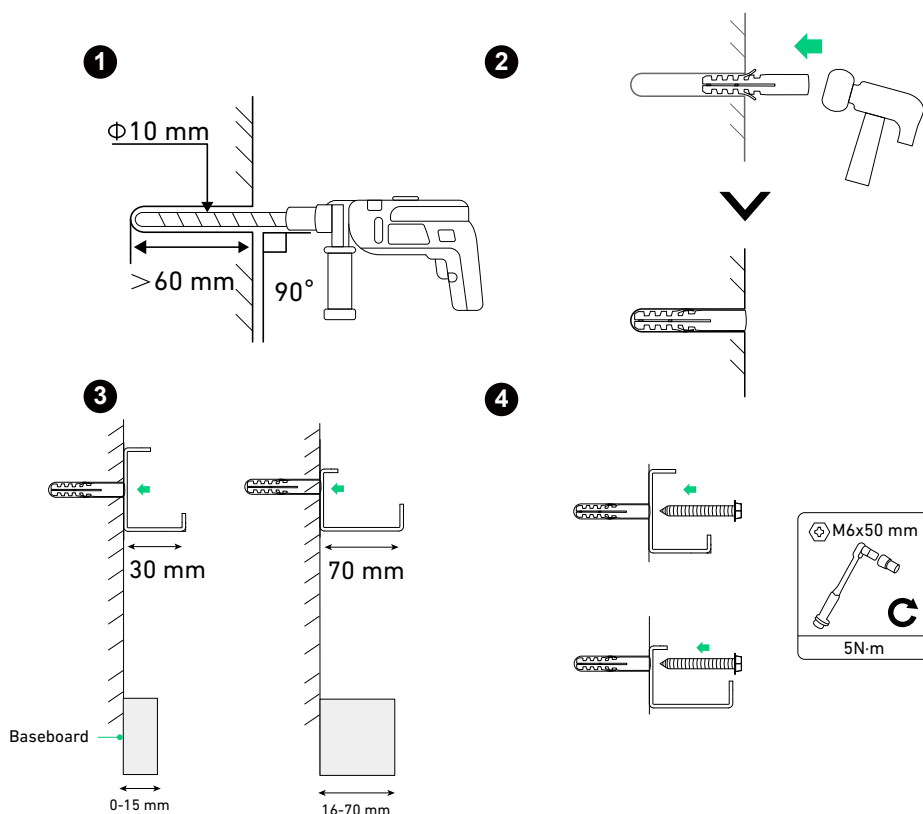


Step 3: Attach mount brackets to the wall.

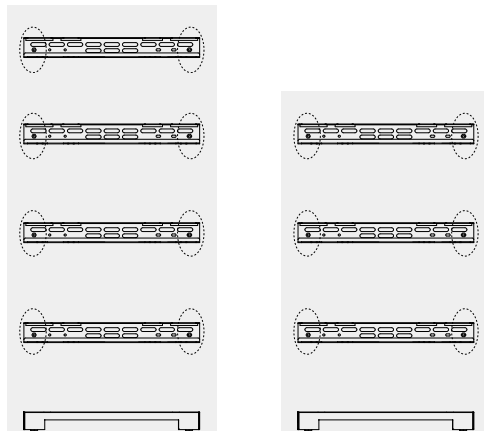
1. Drill the marked pilot holes in the wall ($\Phi 10$ mm, > 60 mm deep). Make sure the drill bit is aligned with the center of the holes.
2. Insert the expansion bolts (M6×50 mm, included, with screws removed) into the pilot holes. Make sure the bolts are flush with the wall.
3. Check the baseboard and position the mount bracket properly against the wall. Align the bolts with the corresponding slots of the mount bracket. Verify that the mount bracket is level and adjust as needed.
- If there is no baseboard or the baseboard is less than 15 mm thick, position the wide bar of the mount bracket against the wall.
- If the baseboard is between 16-70 mm thick, position the narrow bar of the mount bracket against the wall.
4. Drill the screws (included with the expansion bolts) clockwise into the bolts to secure the mount bracket.
5. Repeat the above steps to install all of the mount brackets onto the wall.



After drilling, clean up any shavings that have accumulated inside or outside the equipment.



5



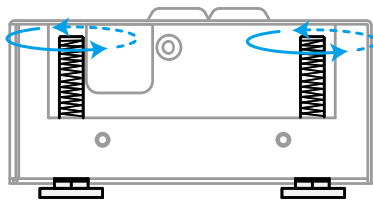
Step 4: Mount modules onto the brackets.

1. To ensure proper alignment, fasten the floor mounting base to the first battery module before hanging them onto the mount bracket.

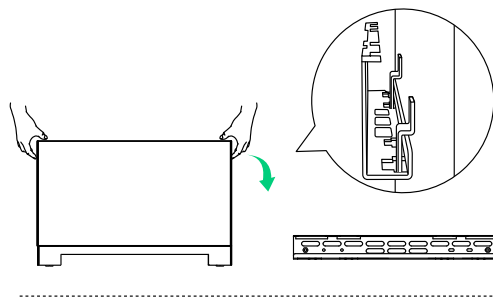


- Before mounting, tighten the leveling screws to ensure that the floor mounting base is leveled horizontally.
- When securing the module interlockers, make sure that the inner edges of the floor mounting base and all the modules are aligned within a tolerance of 1 mm.

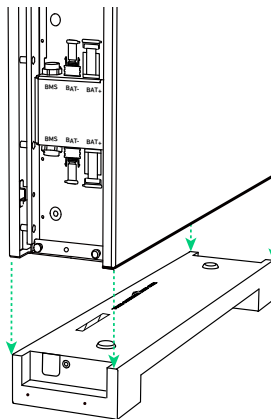
a



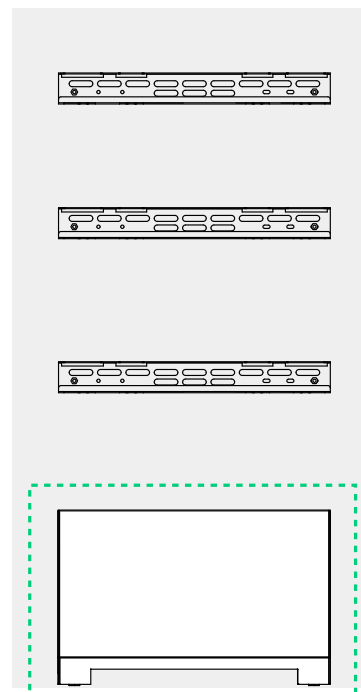
d



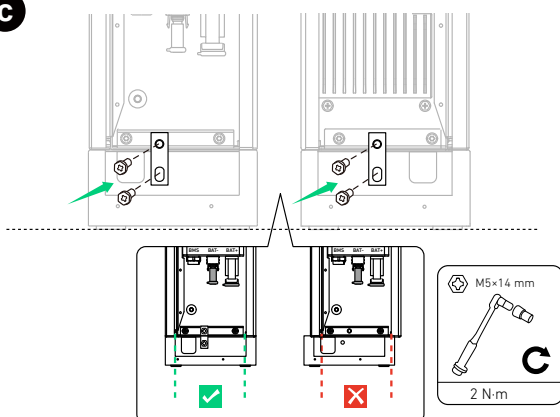
b



e



c

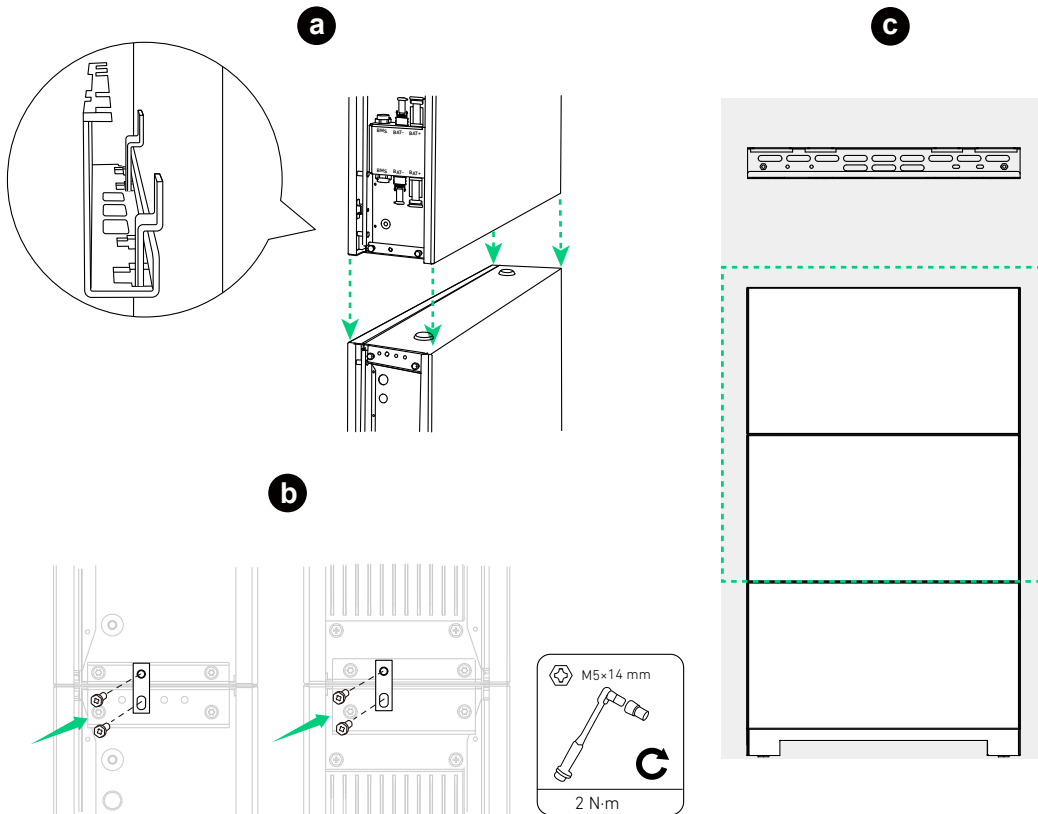


2. Mount the remaining power module and battery modules from bottom to top.

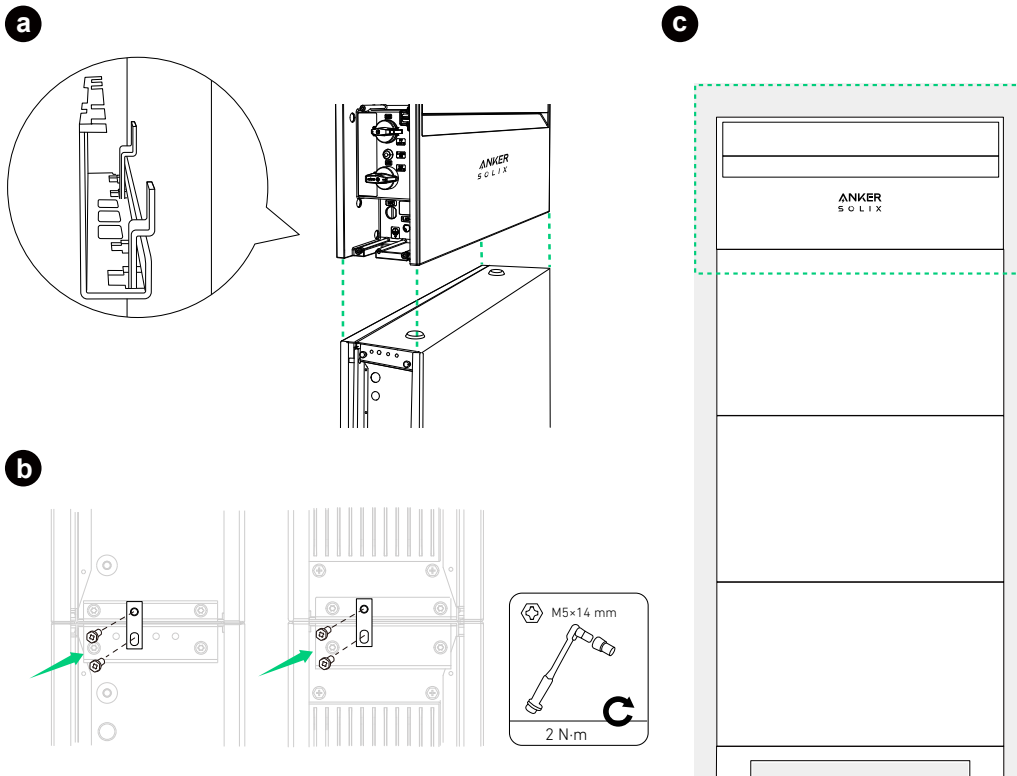


After installing a module, tighten the module interlockers using the included screws (M5×14 mm), and then mount the next module.

• Mount the remaining battery modules.

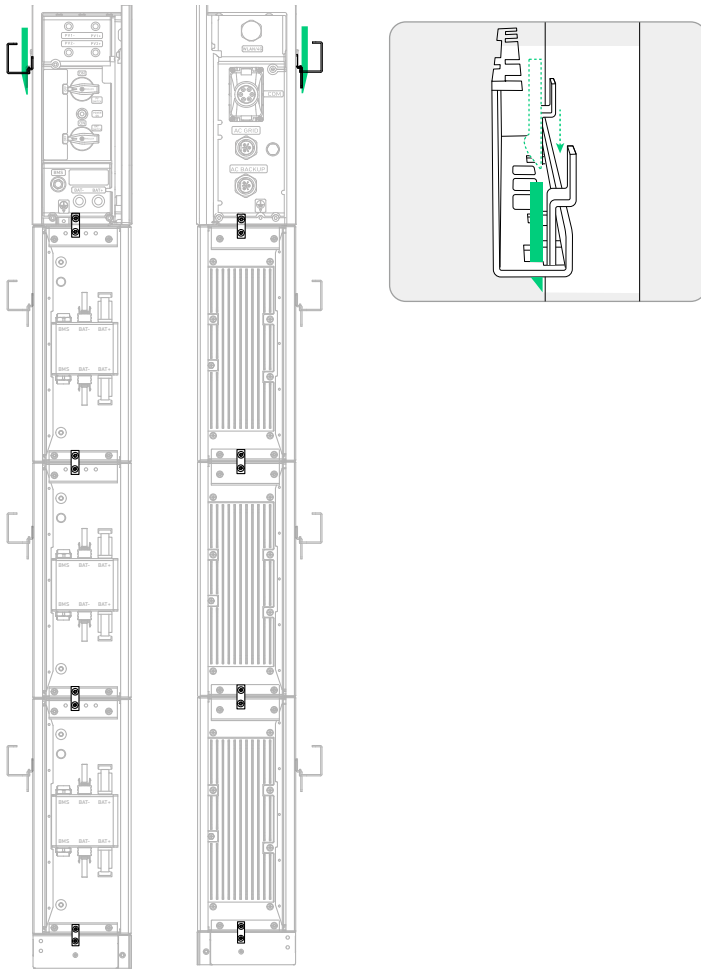


• Mount the power module.

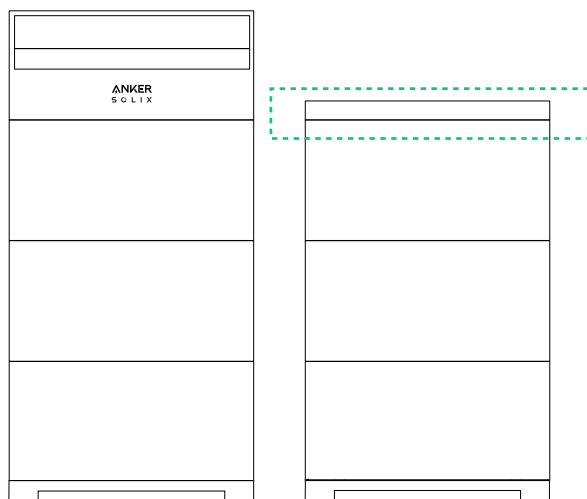
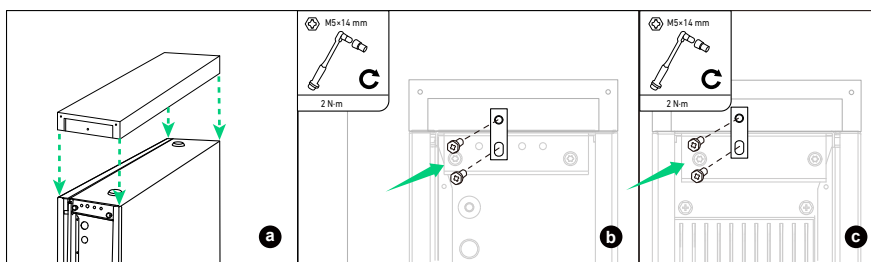




If necessary, insert the included wedge shim into the power module's mount bracket to ensure stability.



3. When adding the second column, attach the top cover to the top battery module using the screws (M5×14 mm, included).



5.2 Wall Mounting

Step 1: Install the battery module base and bracket holders on the wall.

1. To secure the battery module base (for wall mounting) and bracket holders, verify the spacing, select a set of screw holes based on the wall conditions and tighten the screws (M4×10 mm, included).



- Markings are for reference only. Select position A, B, or C based on your actual installation conditions.
- If anchoring to a wall with studs, select position A for studs spaced 508 mm apart, position B for studs spaced 406 mm apart, or position C for studs spaced 304 mm apart.

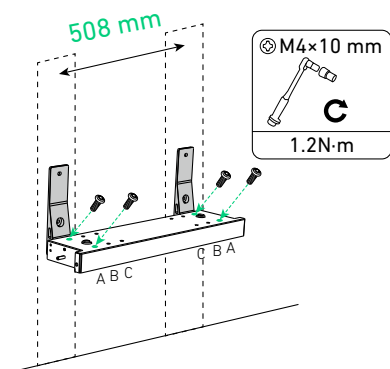
2. Position the battery module base and bracket holders on the wall, ensuring that they are level, and mark four pilot holes.

3. Drill the marked pilot holes in the wall ($\Phi 10$ mm, > 70 mm deep). Make sure the drill bit is aligned with the center of the holes.

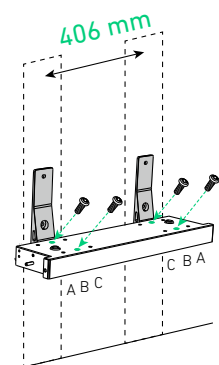
4. Insert the expansion bolts (M8×70 mm, included) into the pilot holes and remove the washers and nuts.

5. Align the bolts with the corresponding screw holes of the bracket holders and screw the washers and nuts into the bolts.

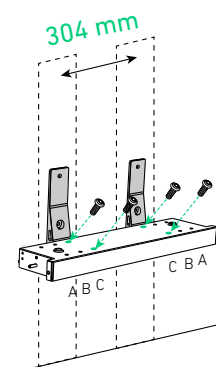
1



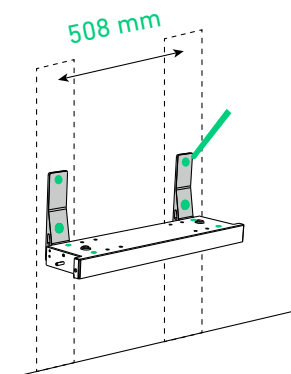
OR



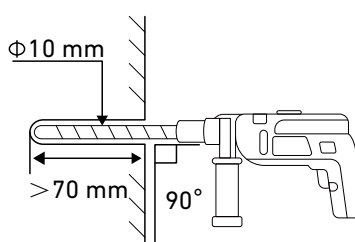
OR



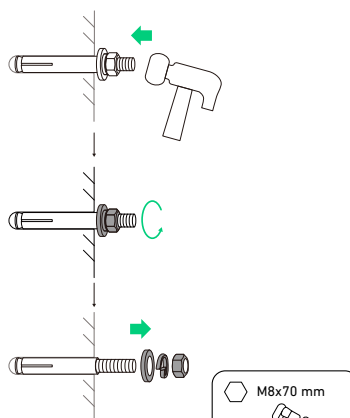
2



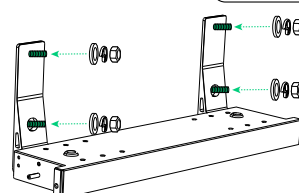
3



4



5



Step 2: Mark pilot holes on the wall.

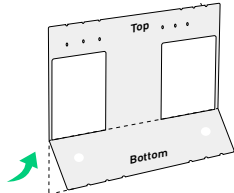
1. Fold the positioning card (included with the power module package) along the crease.
2. Align the card with the top of the battery module base and use a level to ensure it is horizontal.
3. Select and mark a hole on each side based on the wall conditions to secure the first module.



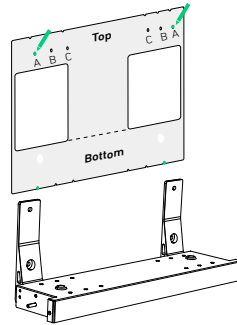
If anchoring to a wall with studs, select position A for studs spaced 508 mm apart, position B for studs spaced 406 mm apart, or position C for studs spaced 304 mm apart.

4. Unfold the positioning card and align the bottom row of holes with the marked holes. Choose and mark a hole on each side at the top for the second module.
5. Repeat the previous step to mark any remaining pilot holes as necessary.

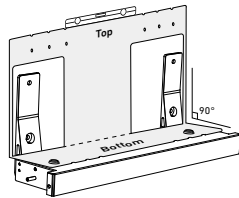
1



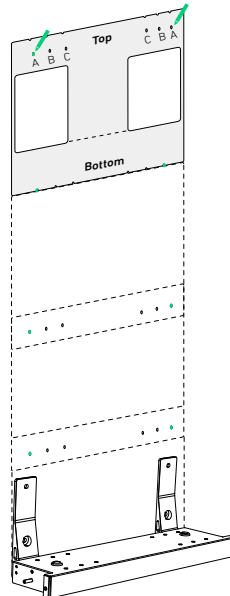
4



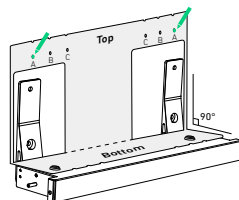
2



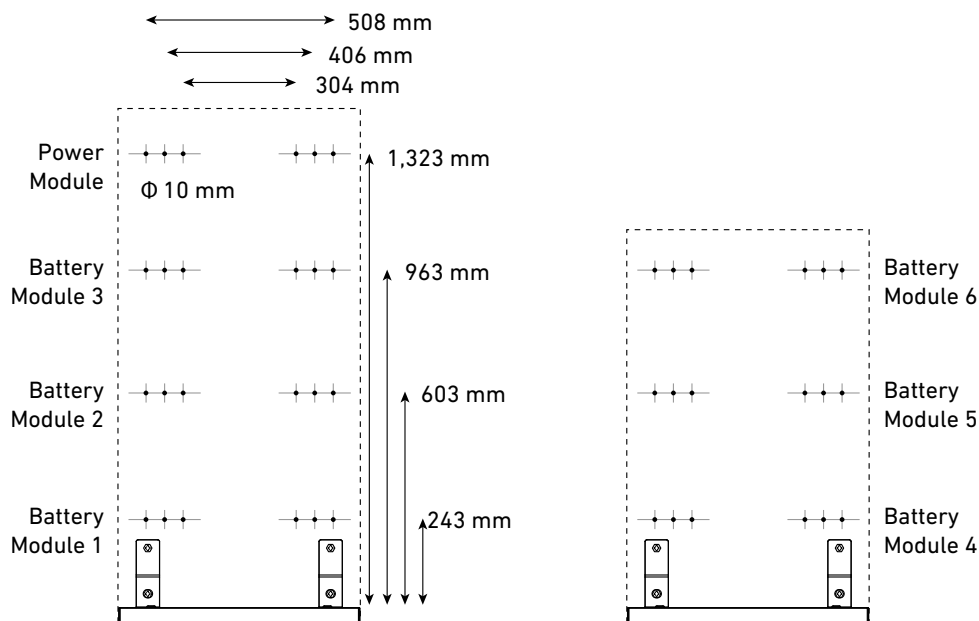
5



3



• Dimensions of pilot holes.

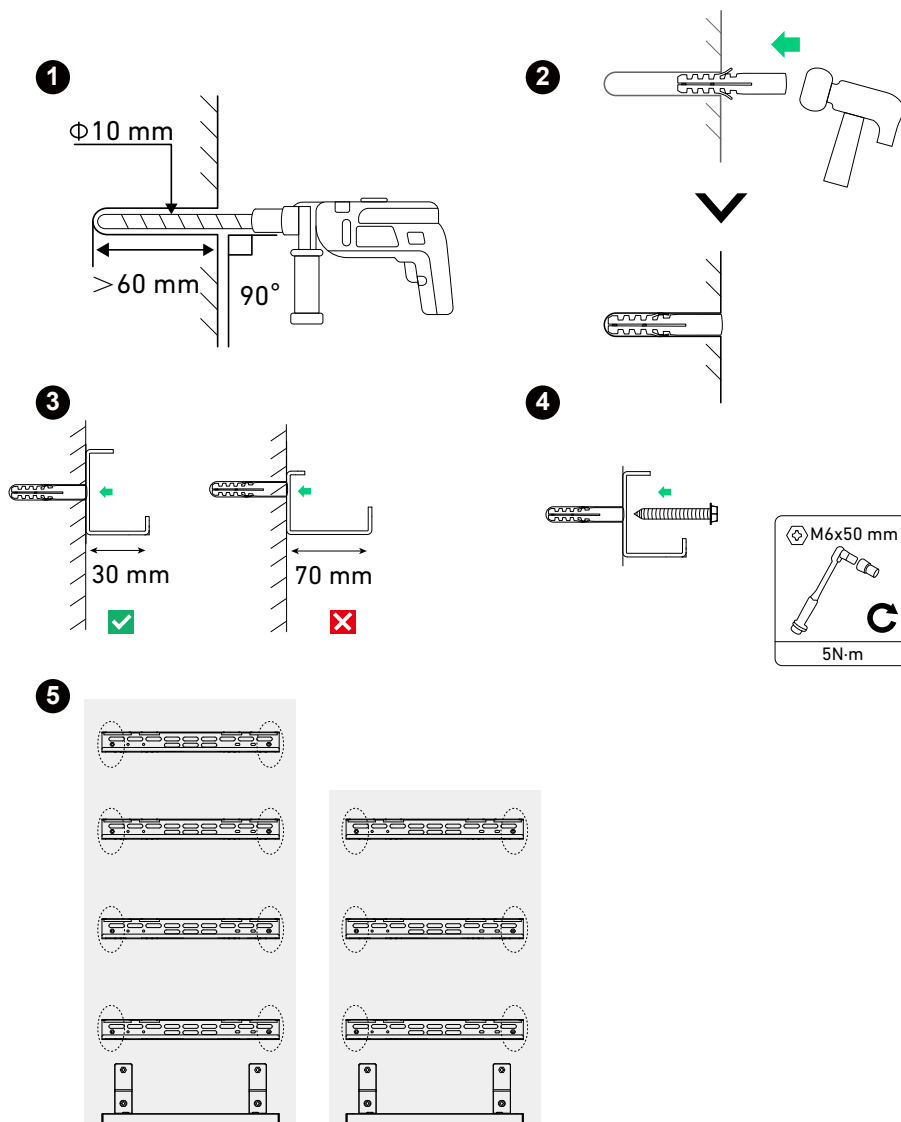


Step 3: Attach mount brackets to the wall.

1. Drill the marked pilot holes in the wall ($\Phi 10$ mm, > 60 mm deep). Make sure the drill bit is aligned with the center of the holes.
2. Insert the expansion bolts (M6x50 mm, included, with screws removed) into the pilot holes. Make sure the bolts are flush with the wall.
3. Position the wide bar of the mount bracket against the wall. Align the bolts with the corresponding slots of the mount bracket. Verify that the mount bracket is level and adjust as needed.
4. Drill the screws (included with the expansion bolts) clockwise into the bolts to secure the mount bracket.
5. Repeat the above steps to install all of the mount brackets onto the wall.

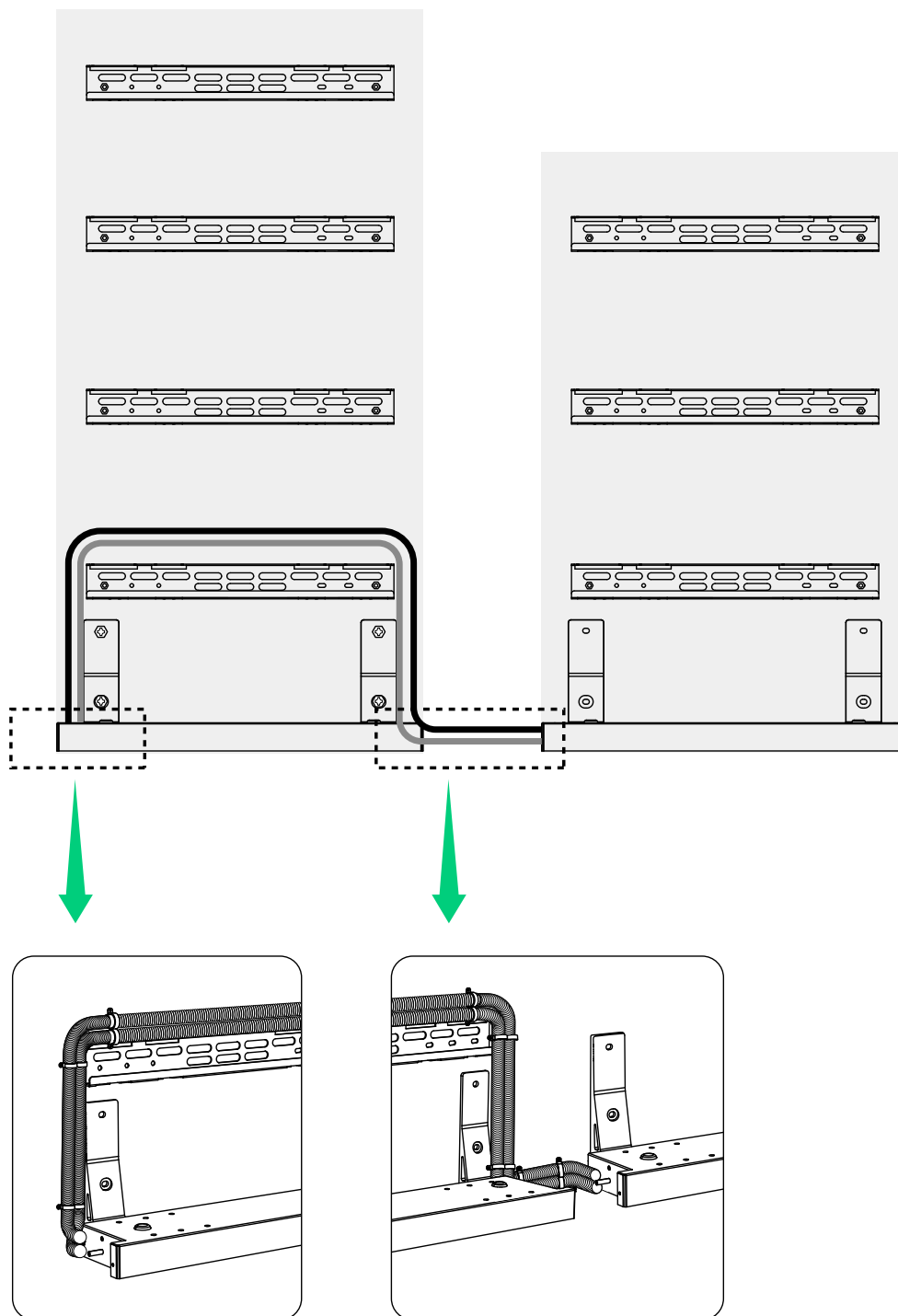


After drilling, clean up any shavings that have accumulated inside or outside the equipment.



Step 4: Install conduits between two columns.

When installing two columns, run conduits from the back of the first column to the second column.

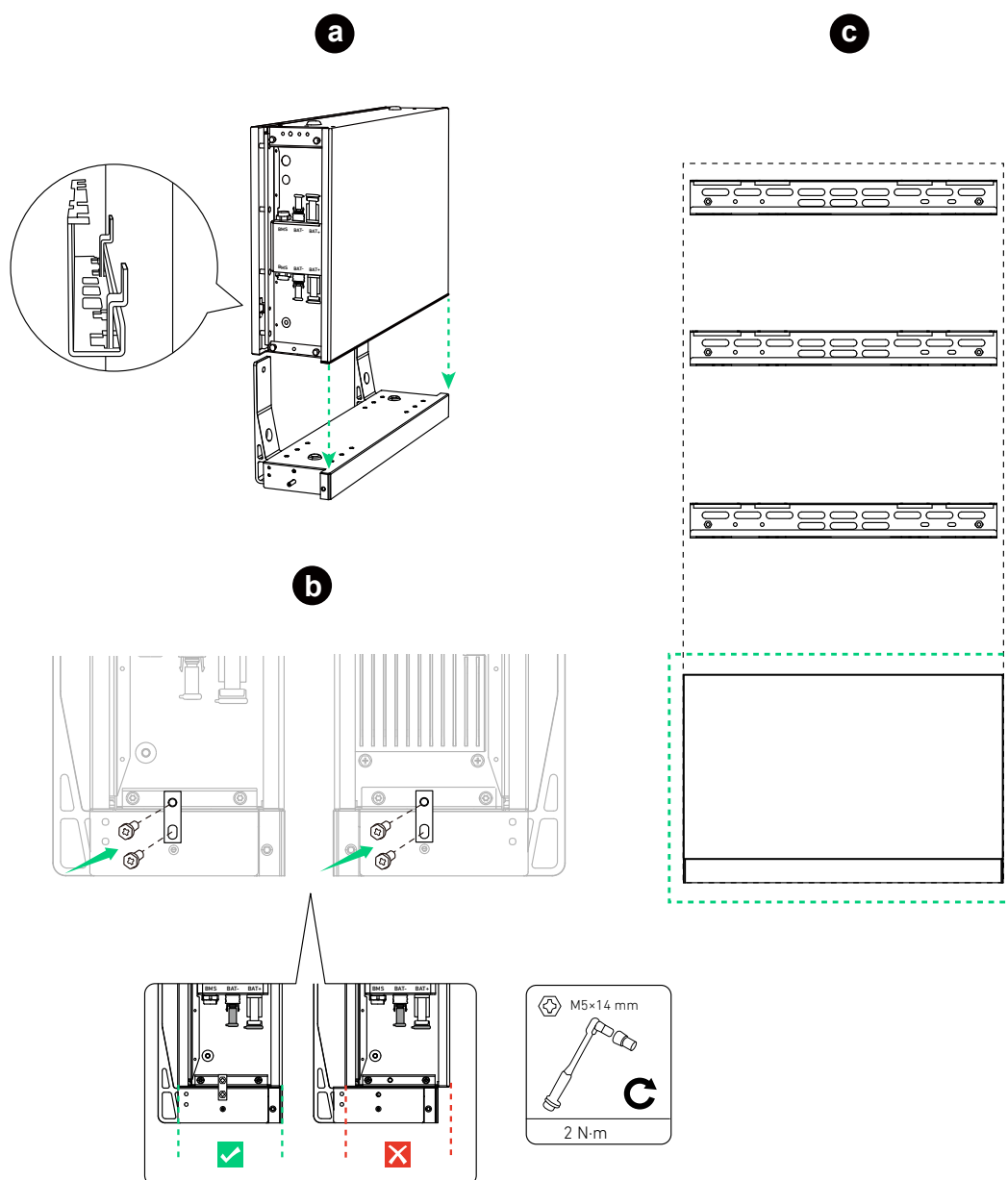


Step 5: Mount modules onto the brackets.

1. Hang the first battery module onto the mount bracket and fasten the module to the battery module base.



When securing the module interlockers, make sure that the inner edges of the battery module base and all the modules are aligned within a tolerance of 1 mm.

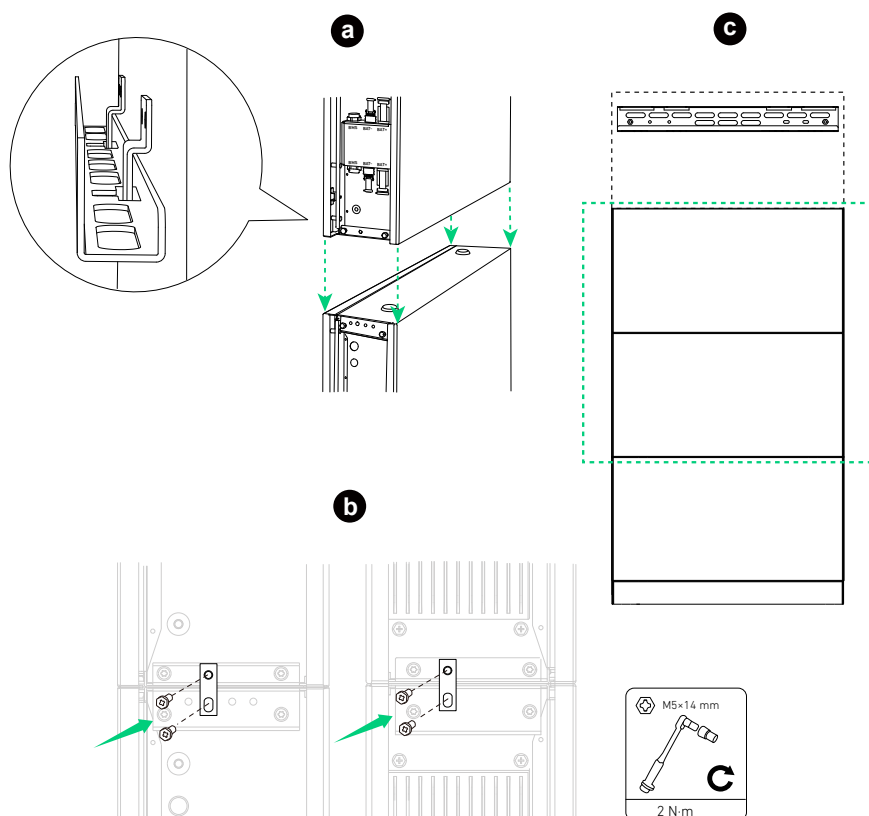


2. Mount the remaining power module and battery modules from bottom to top.

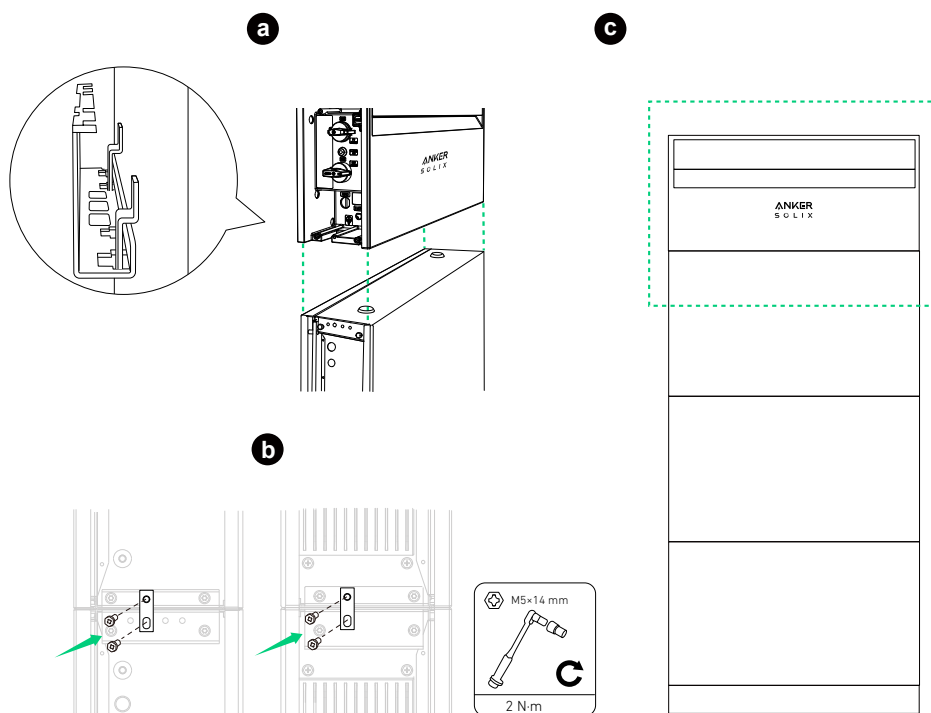


After installing a module, tighten the module interlockers using the screws (M5×14 mm, included), and then mount the next module.

- Mount the second and third battery modules.

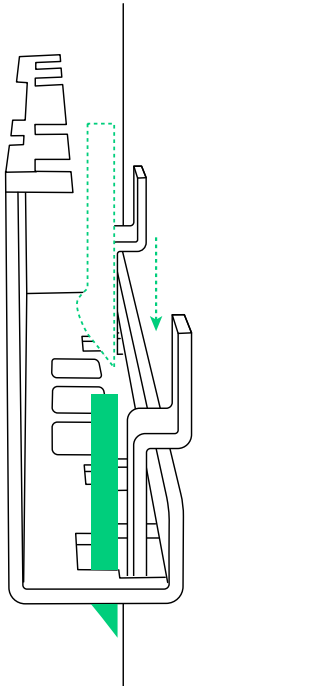


- Mount the power module.

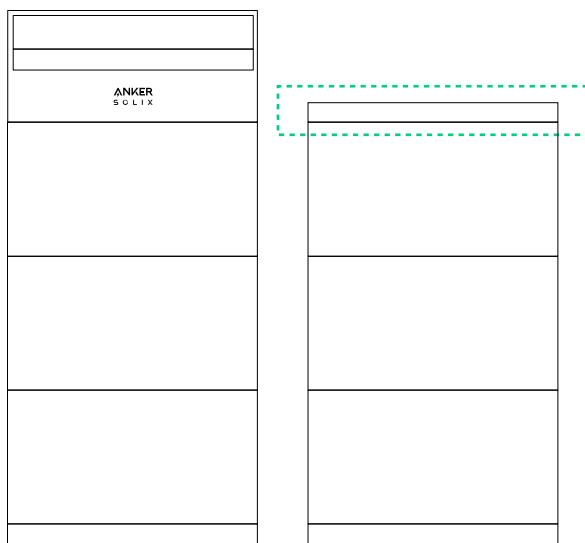
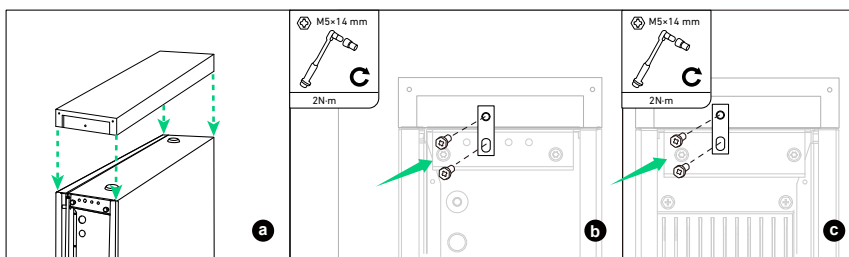




If necessary, insert the included wedge shim into the power module's mount bracket to ensure stability.



3. When adding the second column, attach the top cover to the top battery module using the screws (M5×14 mm, included).



6. Electrical Connection

The procedures describe the electrical connection of one power module and six battery modules (power module and three battery modules in the first column; another three battery modules in the second column) as an example.



- Before connecting or reconnecting cables, ensure the BAT switch and the PV switch on the power module are set to OFF.



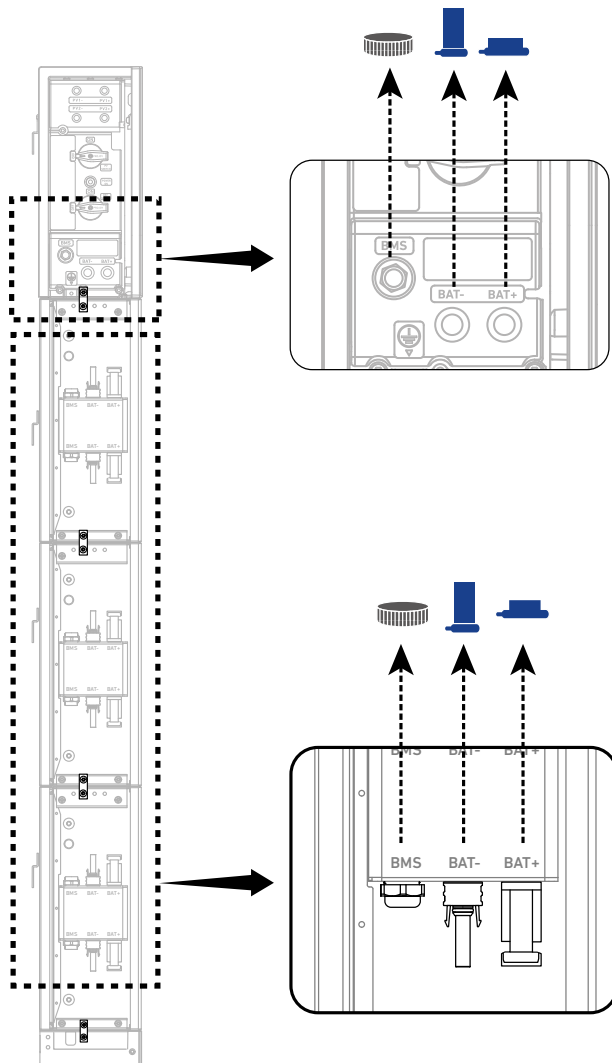
- Depending on local requirements, the wiring can be installed through conduits or cable glands.
- For the system wiring diagrams, refer to “Appendix A. System Wiring”.

6.1 Connect the Power Module and Battery Modules

Connect One Column of Modules

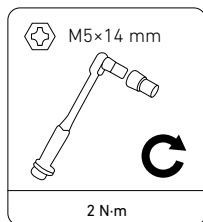
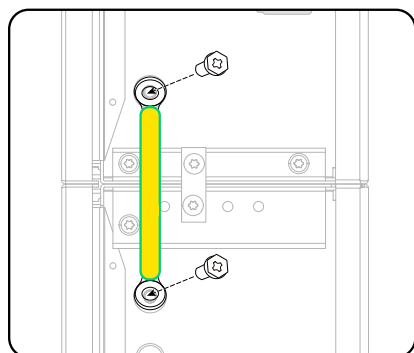
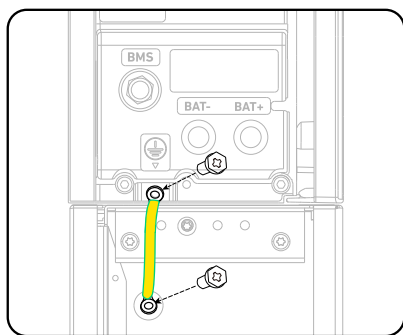
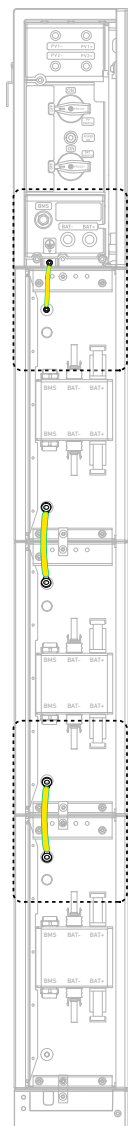
To connect one column, which consists of a power module and three battery modules in this example, follow the steps below.

1. Remove the dustproof plugs from all the modules' BMS ports and power ports (BAT+ and BAT-).



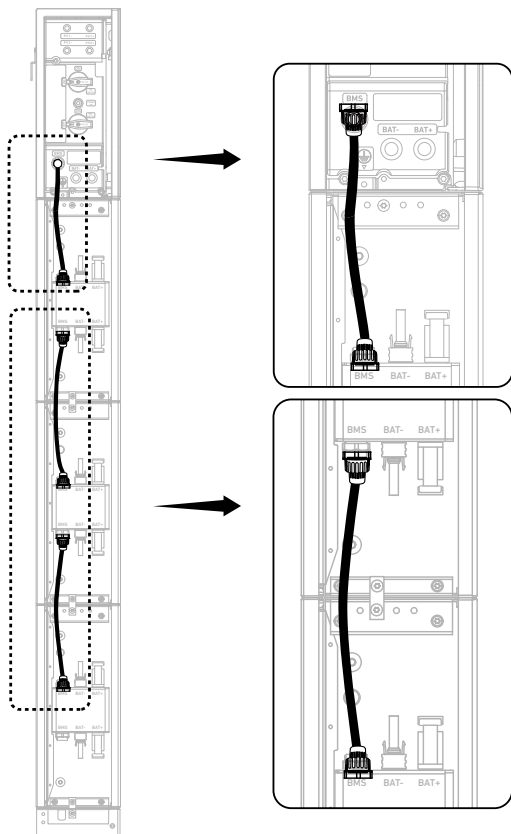
2. Connect the GND cables between the modules.

Connect a GND cable (6 mm², yellow/green, included) to the internal ground ports of each two vertically adjacent modules, and secure the cables using the screws (M5×14 mm, included).



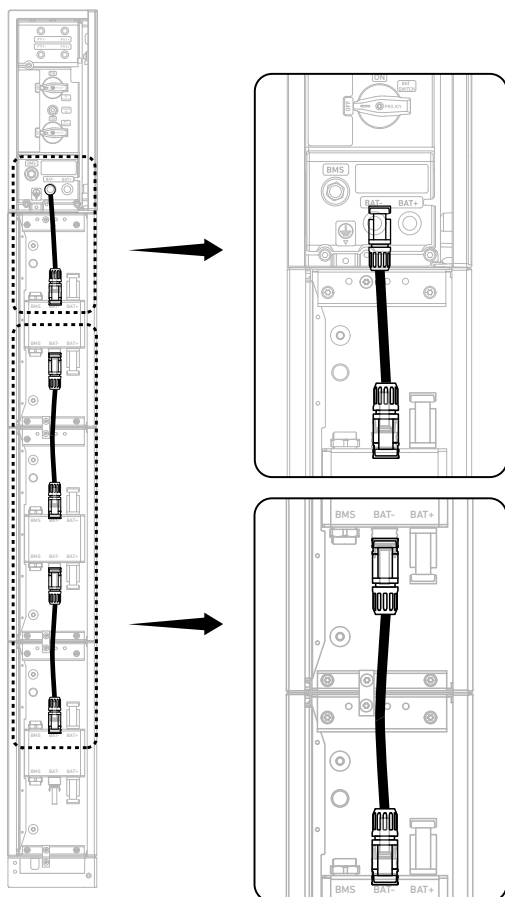
3. Connect the RJ45 signal cables between the modules.

Connect an RJ45 signal cable (black, included) to the BMS ports of each two vertically adjacent modules. To do this, loosen the locking caps, insert the cable into the BMS ports, and rotate the locking caps to secure.



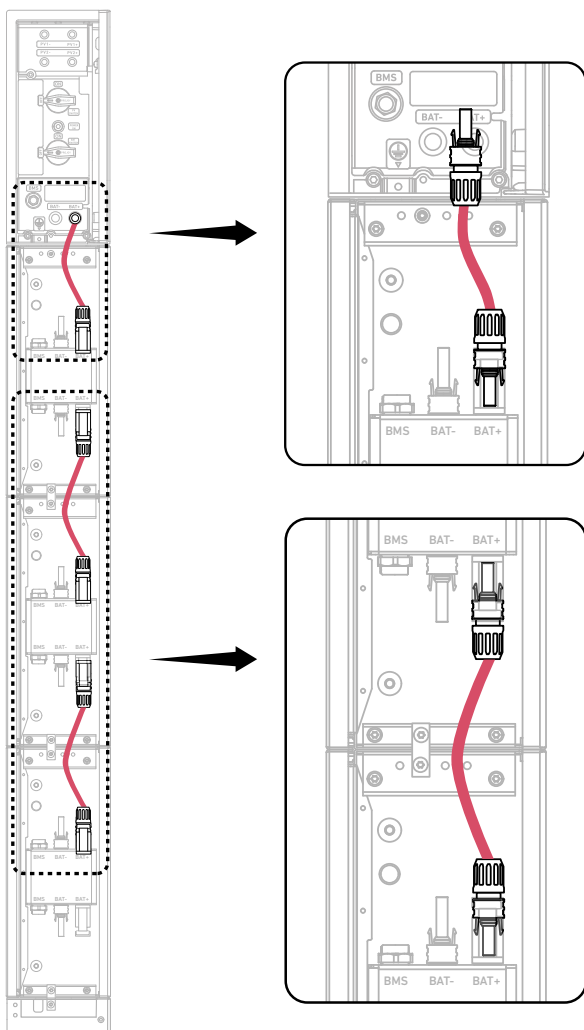
4. Connect the negative DC power cables between the modules.

Connect a negative DC power cable (black, included) to the BAT- ports of each two vertically adjacent modules.

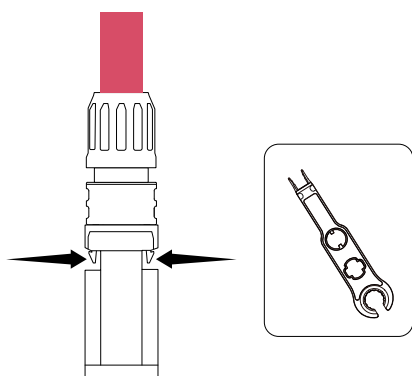


5. Connect the positive DC power cables between the modules.

Connect a positive DC power cable (red, included) to the BAT+ ports of each two vertically adjacent modules.

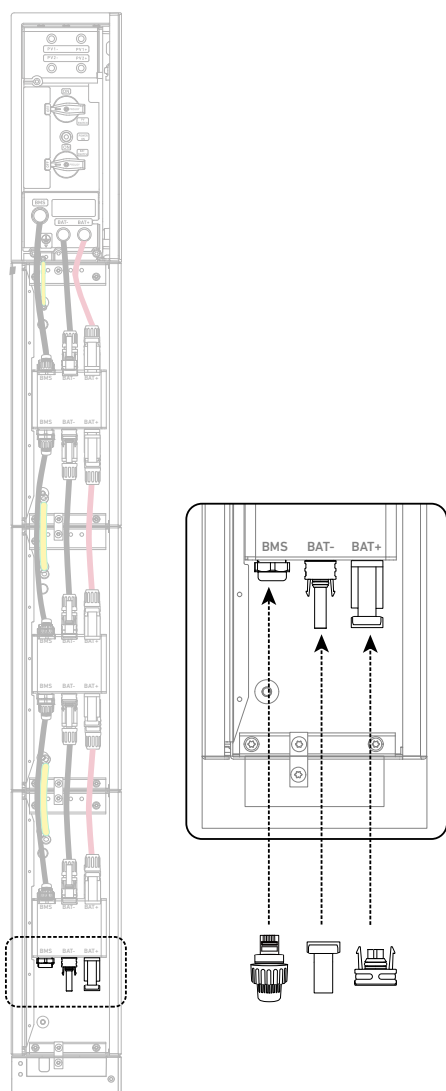


Use a disassembly tool (not included) to remove the connected DC power cables.



6. Seal unused ports.

On the bottom battery module, insert an RJ45 connector (with 2×120Ω terminating resistors, included) into the BMS port, a female dustproof cap (included) into the negative DC power port (BAT-), and a male dustproof cap (included) into the positive DC power port (BAT+).



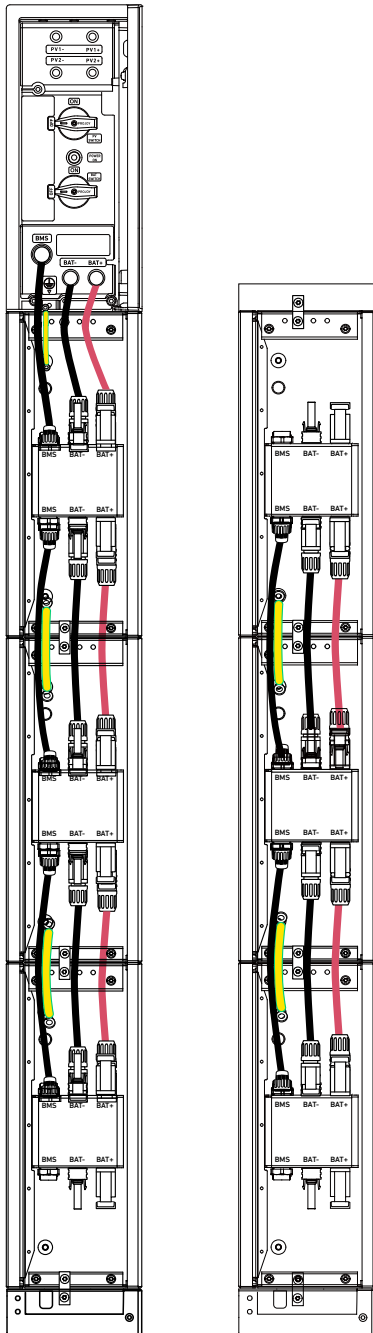
Connect Two Columns of Modules

To connect two columns, which consist of a power module and six battery modules in this example, follow the steps below.

1. Connect cables between vertically adjacent modules.



Install the GND, RJ45 signal, and DC power cables. Refer to the "Connect One Column of Modules" section for detailed instructions.

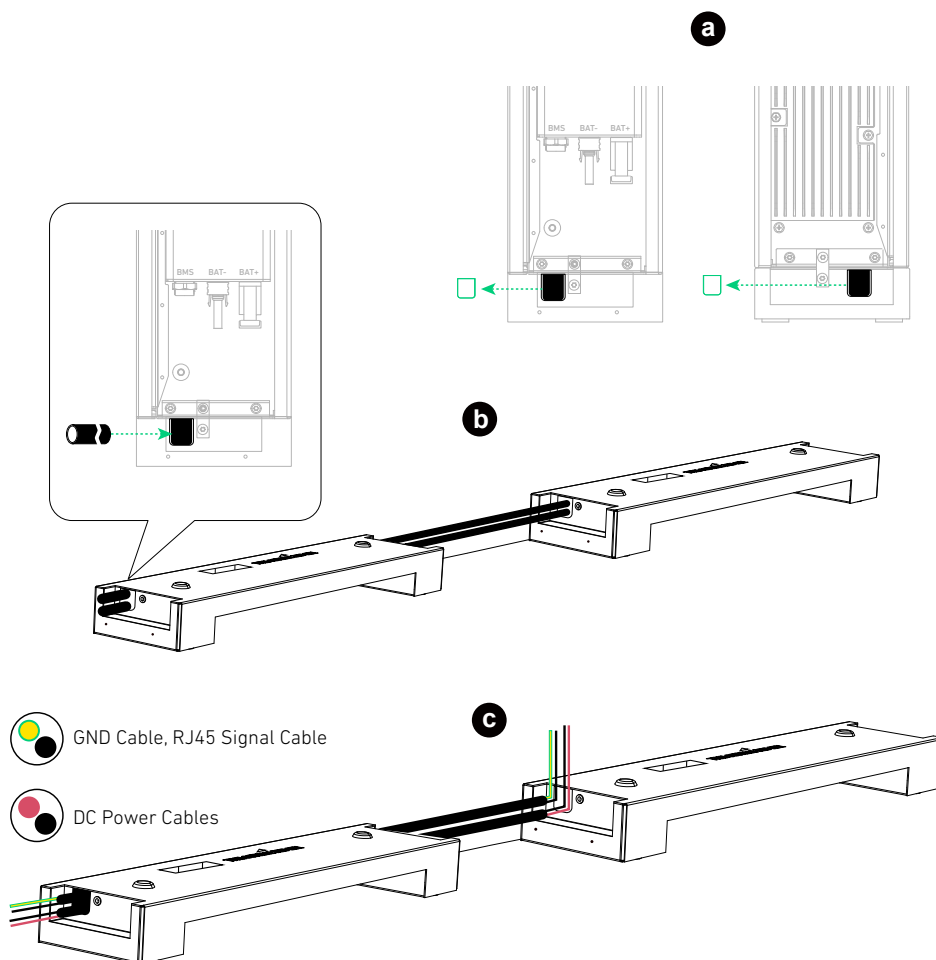


2. Connect cables between the bottom modules.

① Thread cables through conduits.

Floor-Mounted Modules

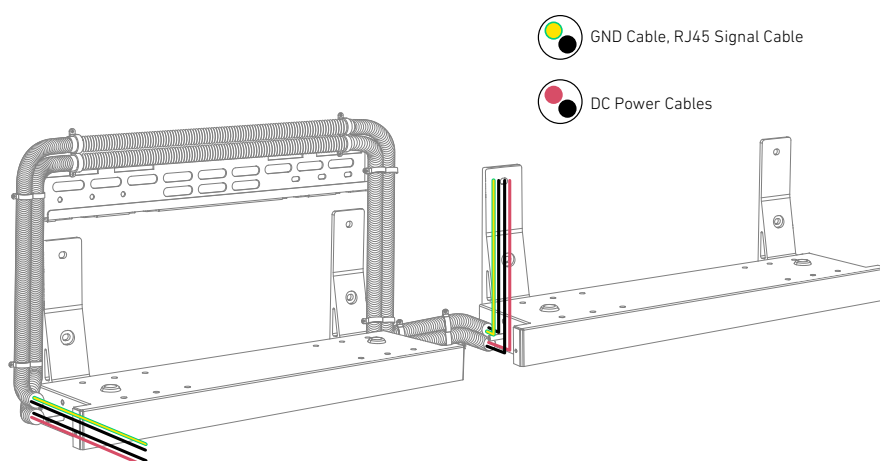
- Remove the cable knockouts from the floor mounting base in the first column.
- Insert a cable conduit (DN25, not included) into each opening.
- Thread a GND cable (6 mm², not included) and a signal cable (Cat 5 or higher, 5-6 mm in diameter, not included, shielding recommended) through the cable conduit near the wall. Thread a positive DC power cable (6/8/10 mm², not included) and a negative DC power cable (6/8/10 mm², not included) through the outward cable conduit.



Wall-Mounted Modules

Thread a GND cable (6 mm², not included) and a signal cable (Cat 5 or higher, 5-6 mm in diameter, not included, shielding recommended) through the upper conduit. Thread a positive DC power cable (6/8/10 mm², not included) and a negative DC power cable (6/8/10 mm², not included) through the lower conduit.

Thread cables through conduits for wall mounting.



② Assemble the GND cable and RJ45 signal cable.

To assemble the GND cable:

- Strip the insulation layers from both ends.
- Insert the heat shrink tubing (included) and ring terminals (included).
- Crimp the ring terminals onto the GND cable.
- Wrap the crimping area with the heat shrink tubing using a heat gun.

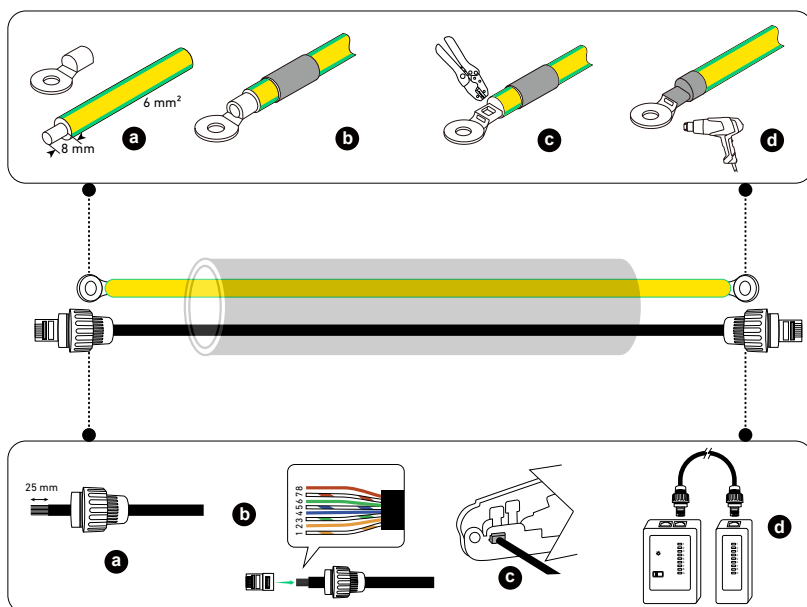
To assemble the RJ45 signal cable:

- Insert the signal cable into the RJ45 cable glands and strip the insulation layers from both ends.
- Insert the wires into the RJ45 connectors (included) in the EIA/TIA 568B order.

From Bottom to Top (Clip Faces Away)								
Pin	1	2	3	4	5	6	7	8
Wire Color	Orange-White	Orange	Green-White	Blue	Blue-White	Green	Brown-White	Brown

- Crimp the RJ45 connectors using the RJ45 crimping tool.
- Use a cable tester to verify proper wiring and continuity.

Thread cables through conduits for wall mounting.

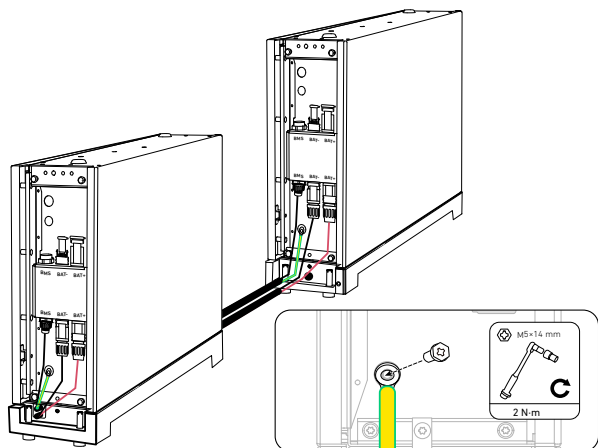


③ Install the GND cable and RJ45 signal cable.

On the bottom battery modules in both columns, connect the GND cable to the ground points and the RJ45 signal cable to the BMS ports.

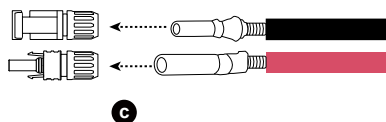
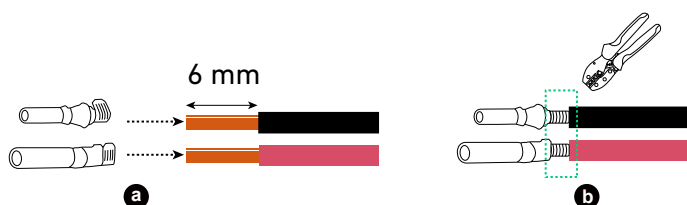


- The length of signal cable between two battery modules must not exceed 6 metres.



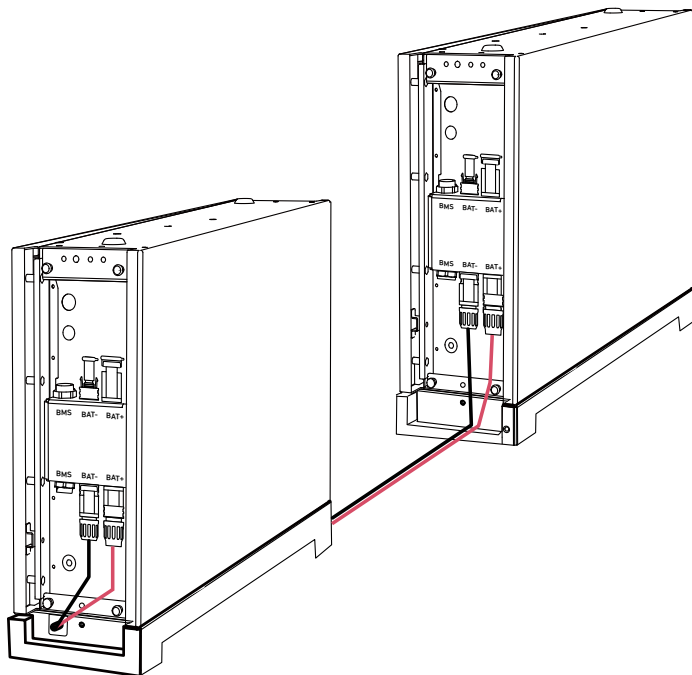
④ Assemble the positive and negative DC power cables.

- Strip the insulation layers from both ends.
- Crimp the positive and negative metal terminals (included) onto the corresponding cables. Make sure the terminals are securely attached and cannot be pulled out.
- Insert the positive and negative metal terminals into the corresponding DC power connectors (included). You should hear a click when they are properly connected.
- Tighten the locking nuts to secure the connection.



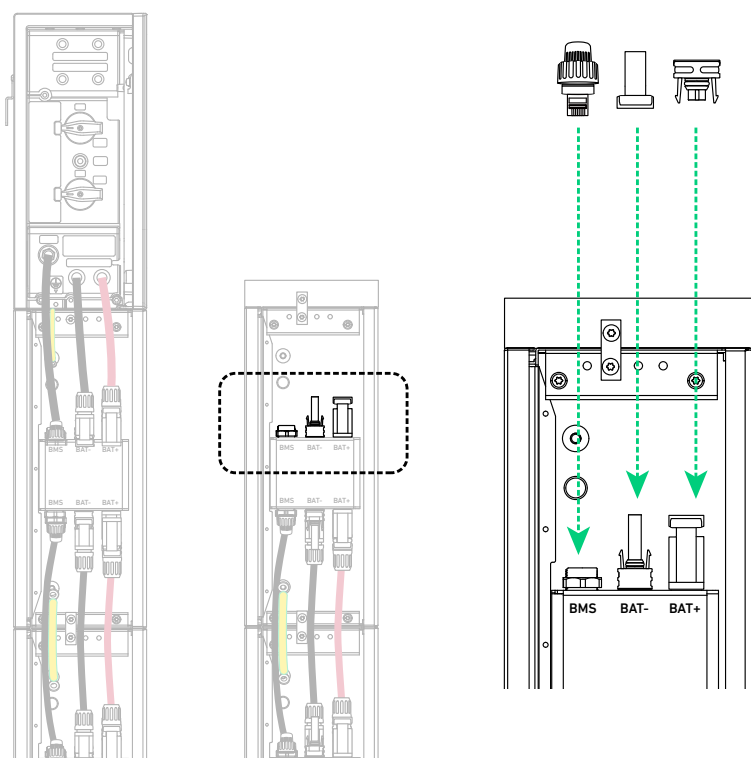
⑤ Install the positive and negative DC power cables.

On the bottom battery modules in both columns, connect the negative DC power cables to the negative power ports (BAT-) and the positive DC power cables to the positive power ports (BAT+).



3. Seal unused ports.

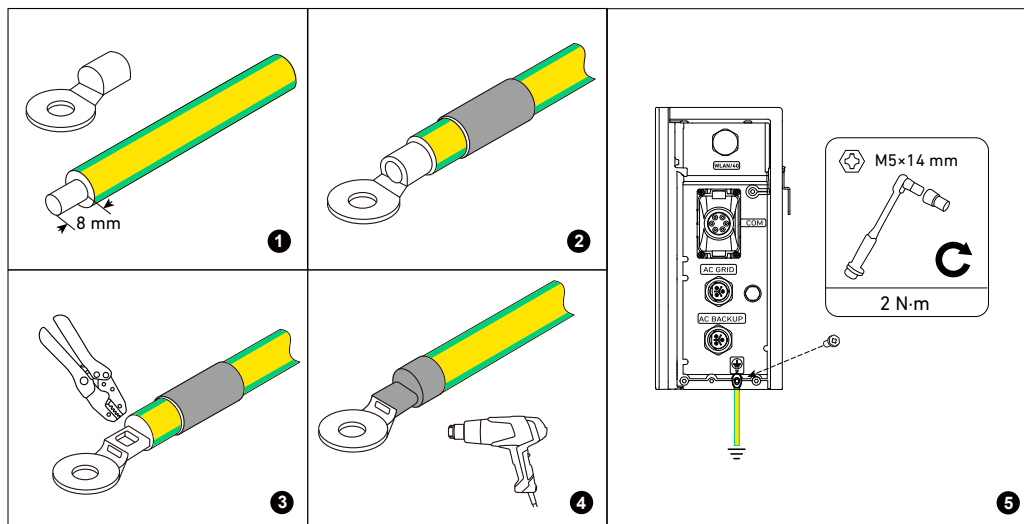
On the top battery module in the second column, insert an RJ45 connector (with 2×120Ω terminating resistor, included) into the BMS port, a female dustproof cap (included) into the negative DC power port (BAT-), and a male dustproof cap (included) into the positive DC power port (BAT+).



6.2 Connect to the External Ground

Connect a GND cable from the power module to the external ground point.

- ① Strip the insulation layer of a GND cable (6 mm², not included).
- ② Insert a heat shrink tubing (included) and a ring terminal (included) into the GND cable.
- ③ Crimp the ring terminal onto the GND cable.
- ④ Wrap the wire crimping area with the heat shrink tubing using a heat gun.
- ⑤ On the right side of the power module, connect the GND cable to the external ground port and secure the GND cable's ring terminal using the screw (M5×14 mm, included).



6.3 Connect to PV Panels



• Always switch OFF the BAT switch and the PV switch before connecting or reconnecting the PV panels..

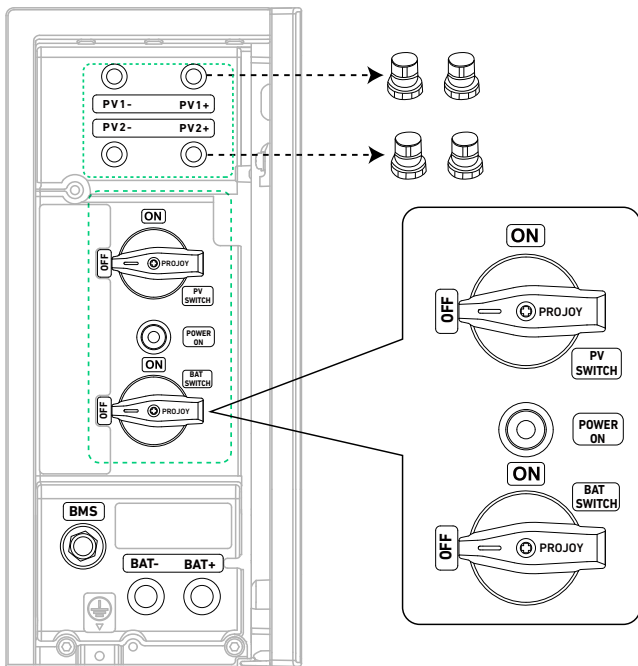


- The power module can receive inputs from up to two PV strings.
- We recommend using PV cables with a conductor cross section of 4 to 6 mm².
- Ensure that the PV cables have been connected to the PV panels.
- Ensure that the PV input does not exceed the specified limits.

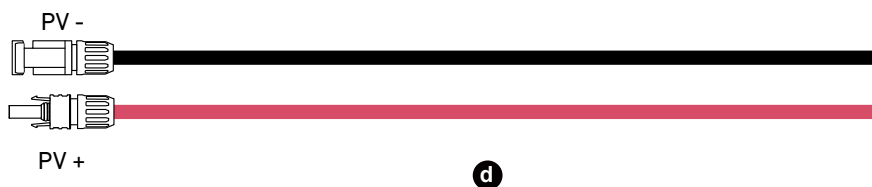
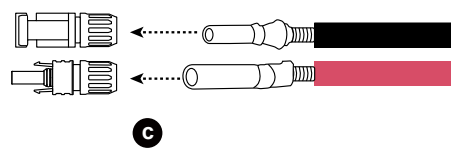
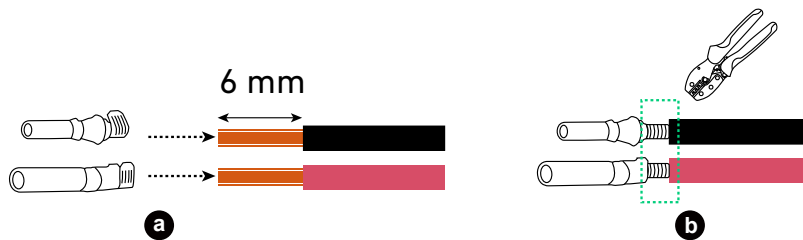
PV Input Limits	X1-H3.68K-S	X1-H4.6K-S	X1-H5K-S	X1-H6K-S
Maximum Open Circuit Voltage	600 V	600 V	600 V	600 V
Minimum Open Circuit Voltage	60 V	60 V	60 V	60 V
Maximum Short Circuit Current	20 A	20 A	20 A	20 A
Maximum Power per String	7.36 kW	9.2 kW	10 kW	12 kW

The following procedure uses connecting to one PV input as an example.

1. Turn off the PV switch and remove the dustproof plugs from one pair of PV power ports (PV1+ and PV1–, or PV2+ and PV2–).

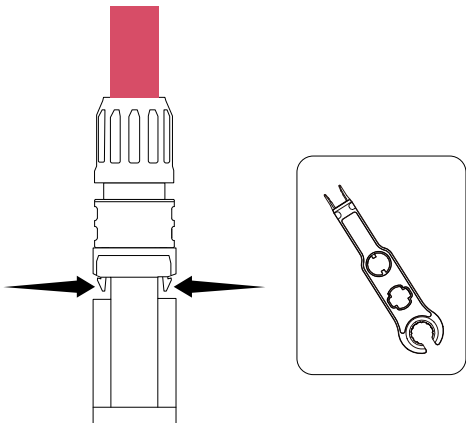


2. Strip the insulation layers on the ends of the positive and negative PV cables (not included). Crimp the positive and negative metal terminals (included) onto the corresponding cables. Make sure the terminals are securely attached and cannot be pulled out. Insert the positive and negative metal terminals into the corresponding PV connectors (included). You should hear a click when they are properly connected. Tighten the locking nuts to secure the connection.



3. Connect the positive PV connector to a positive PV power port (PV1+ or PV2+) and the negative PV connector to a negative PV power port (PV1- for PV1+, or PV2- for PV2+).

 Use a disassembly tool (not included) to remove the connected PV cables.

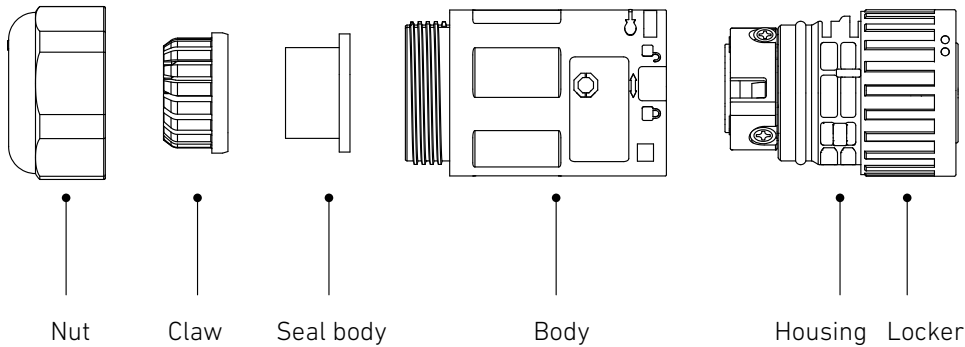


6.4 Connect to the Grid and Backup Loads

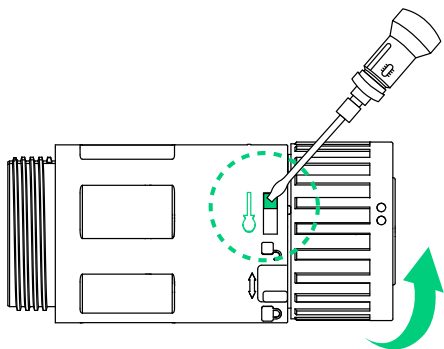
 • AC power cables with 11-14 mm outer diameter and 6 mm² conductors are recommended.
• Ensure that the cable lengths do not exceed the maximum lengths allowed.

Cross-Sectional Area	Maximum Cable Length Allowed			
	X1-H3.68K-S	X1-H4.6K-S	X1-H5K-S	X1-H6K-S
6 mm ² Cables	70 m	44 m	35 m	28 m

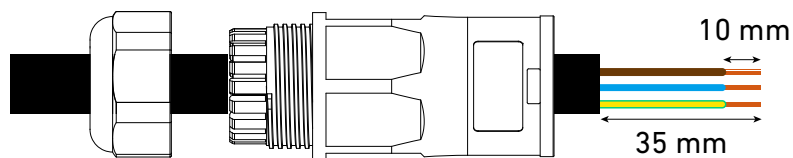
1. Disassemble the AC grid connector (female, included).



 To separate the body from the locker, depress the buckle and turn the body to the unlock icon.

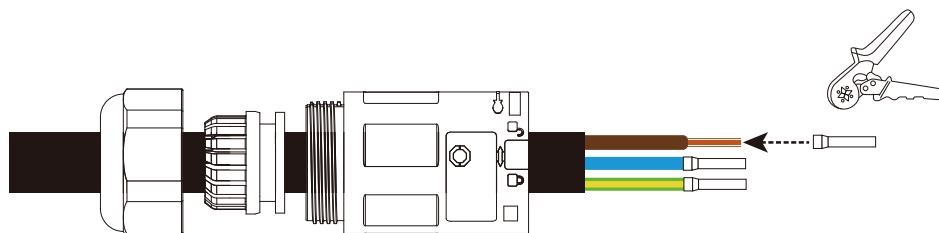


2. Route a 3-conductor AC power cable (11-14 mm in outer diameter, not included) through the nut and body. Then, strip the insulation layers from the conductors.

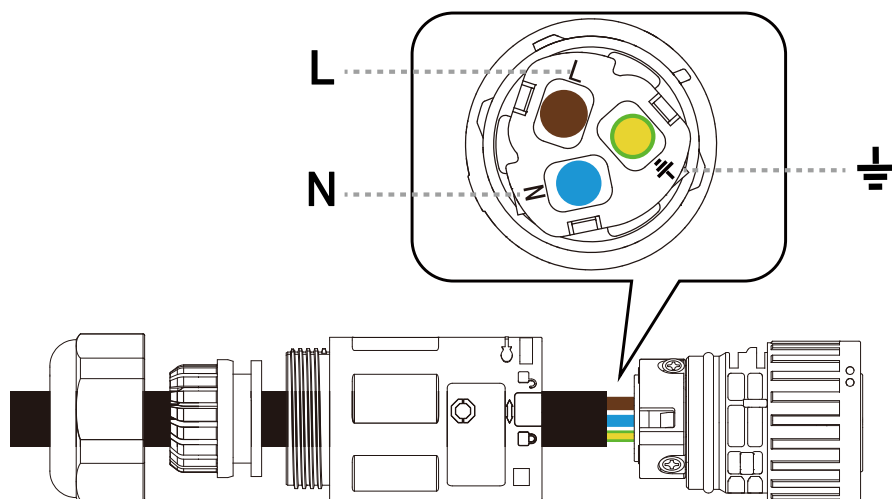


Wiring colors may vary by country or region.

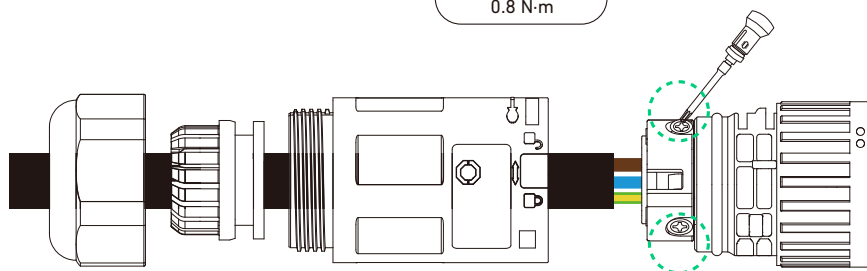
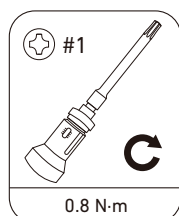
3. Insert and crimp the wire sleeve terminals (included).



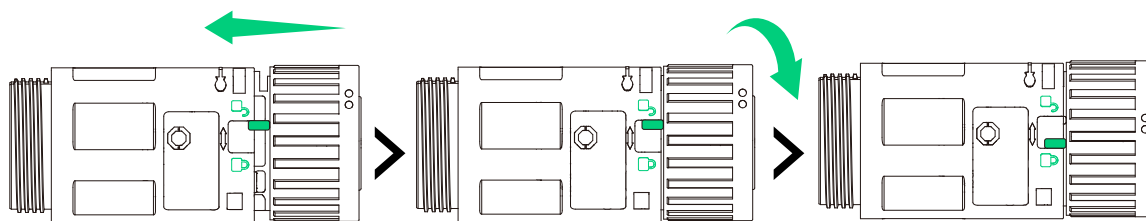
4. Connect the live, neutral, and PE conductors to the sockets labelled L, N, and PE respectively.



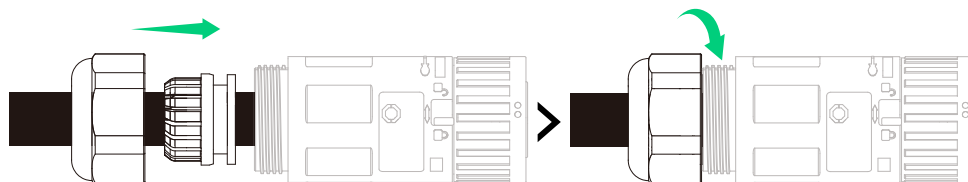
5. Tighten the three screws on the housing with a No. 1 Phillips screwdriver.



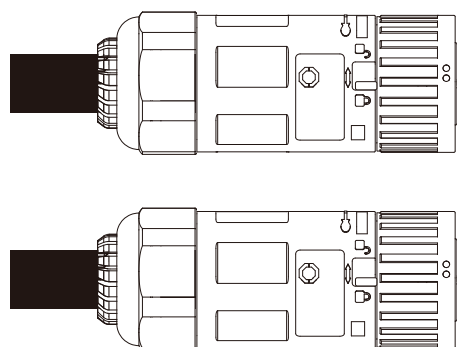
6. Align the locker and the body, and rotate the locker until you hear a click.



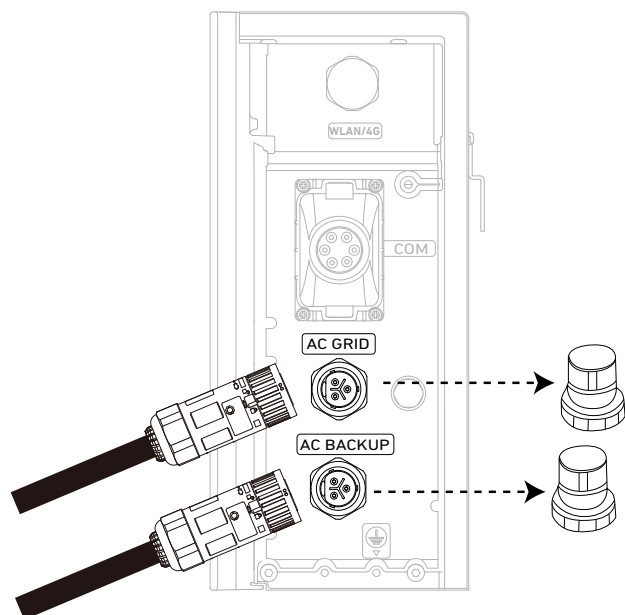
7. Tighten the nut to secure the cable.



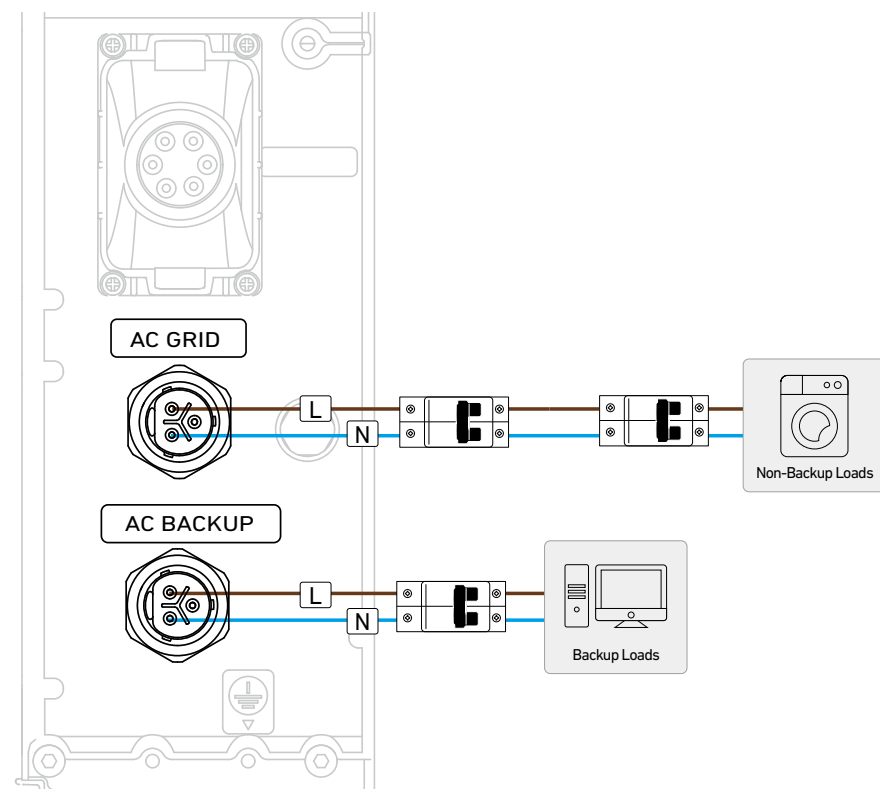
8. Repeat steps one to seven to assemble the AC backup connector (male, included).



9. Remove the dustproof covers from the AC power ports. Then, insert the AC grid connector (female) to the AC grid port, and insert the AC backup connector (male) to the AC backup port. Rotate the locker in the locking direction to tighten the connectors.



10. Connect the AC grid cable to the main panel, and the AC backup cable to the subpanel.

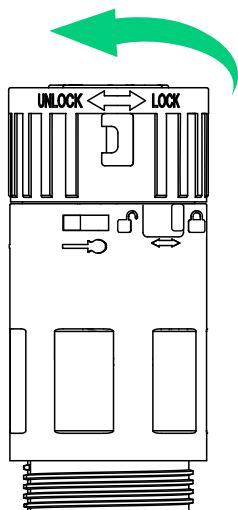


For the grid connection, we recommend the use of a C40 circuit breaker or a circuit breaker with a higher rated current in the main panel.

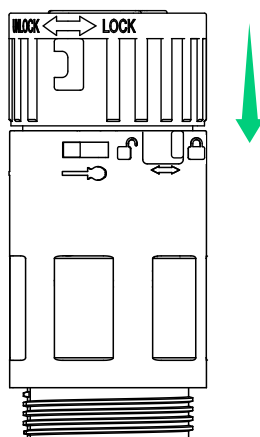


To remove the AC grid or AC backup connector, turn the locker in the unlocking direction and pull out the connector.

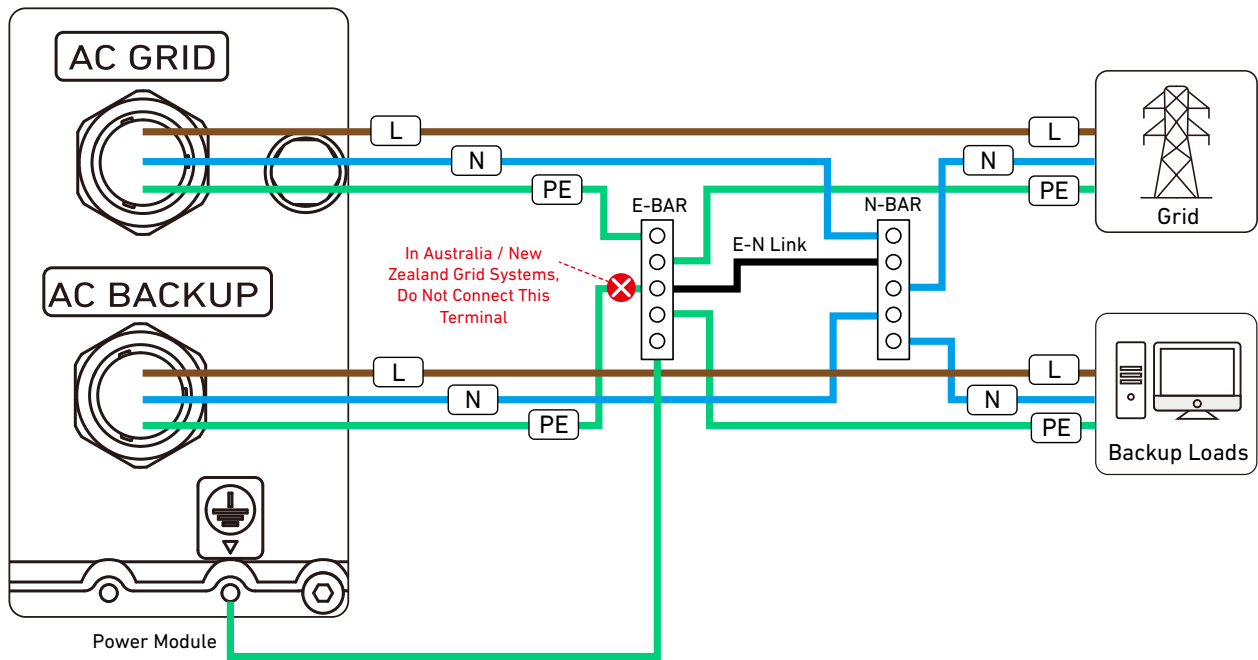
1



2



- The power module uses the AC backup port as the off-grid port, which is separate from the grid-interactive port (AC grid port).
- In Australia and New Zealand, an E-N link must be created between the neutral bar and the earth bar in the distribution box. Do not connect the PE conductor of the AC backup port to the earth bar.



6.5 Connect to Power Sensors



Backflow Prevention Measures:

- The Anker SOLIX X1's anti-reverse flow measures include real-time power monitoring through communication between the power module and the power sensors (Models: DDSU666, DTSU666), with software and hardware interventions to prevent power from feeding back into the grid.
- Software approaches adjust discharge currents, while hardware solutions involve shutting down and disconnecting from the grid. In the event of communication failures, the power module will automatically shut down and disconnect from the grid until normal operations can be safely resumed.

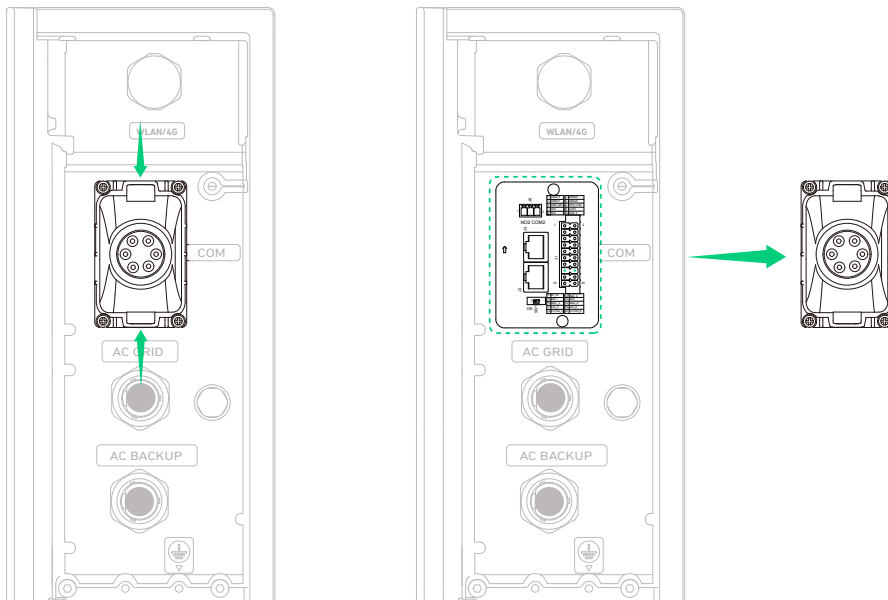
Using Power Sensors:

- If the energy storage system is a new installation with no existing PV system, only one power sensor is required on the grid side. If the energy storage system is added to an existing PV system, two power sensors are required, one on the PV side and one on the grid side.

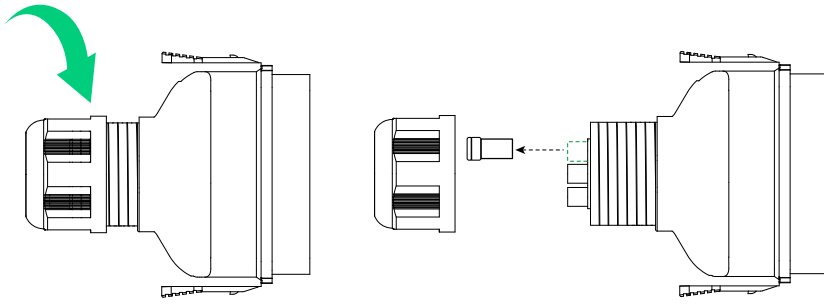
See [Anker SOLIX X1-H5/6K-S Meter Wiring Diagram \(AU\)](#) for an overview of meter wiring diagrams in different scenarios.

Scenario 1: No CTs

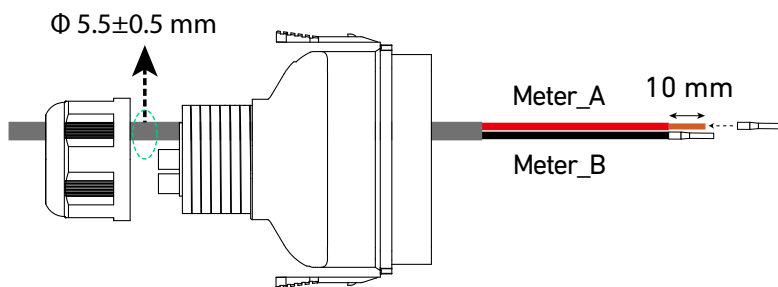
1. Remove the wiring compartment cover by pressing the clips on both sides.



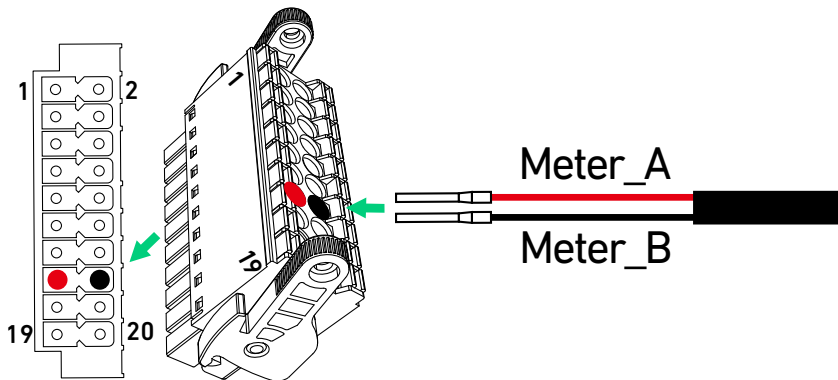
2. Rotate to remove the locking cap from the wiring compartment cover. Then take out the waterproof plug.



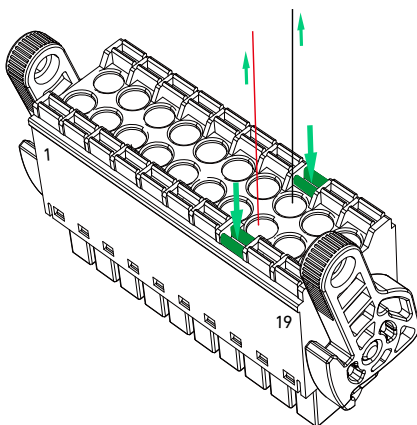
3. Route the RS485 cable (included) through the locking cap and wiring compartment cover. Crimp one tube terminal (15 mm, included) onto the Meter_A conductor, and the other tube terminal onto the Meter_B conductor.



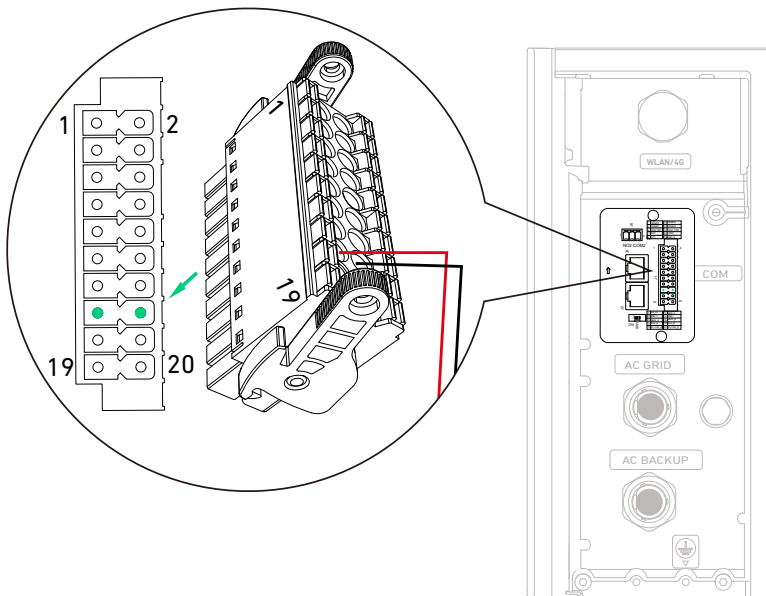
4. Insert the tube terminals into the 20-pin terminal block connector (included).



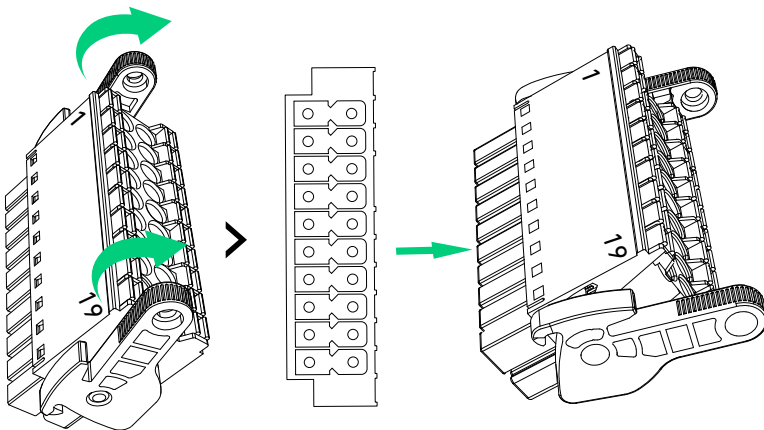
To remove the wires, depress the actuator buttons next to slots 15 and 16 and pull the wires out.



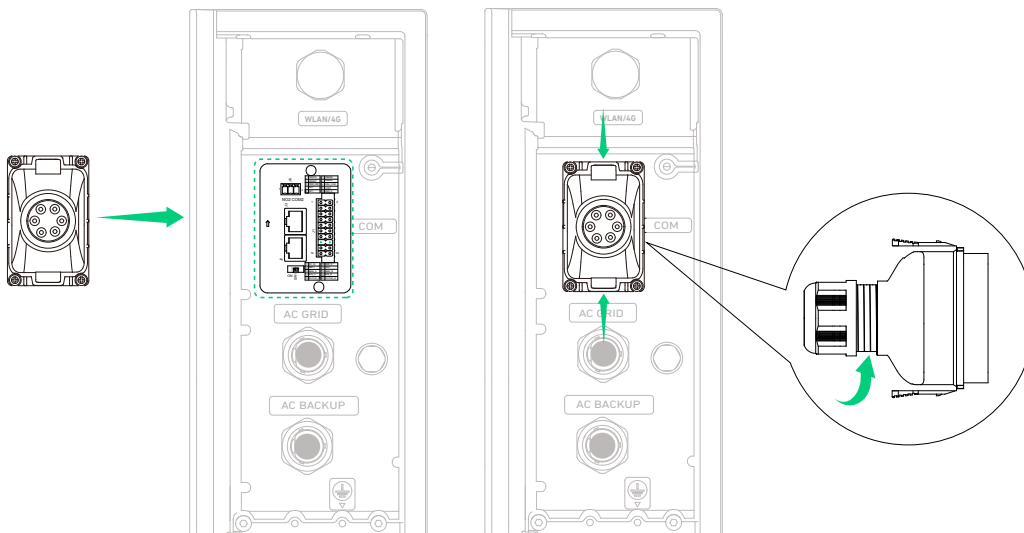
5. Plug the terminal block connector into the terminal block socket labelled J1 on the power module.



• To remove the terminal block connector, turn the lever locks to loosen the connector and pull the connector out of the socket.



6. Insert the wiring compartment cover by pressing the clips on both sides and tighten the locking cap.

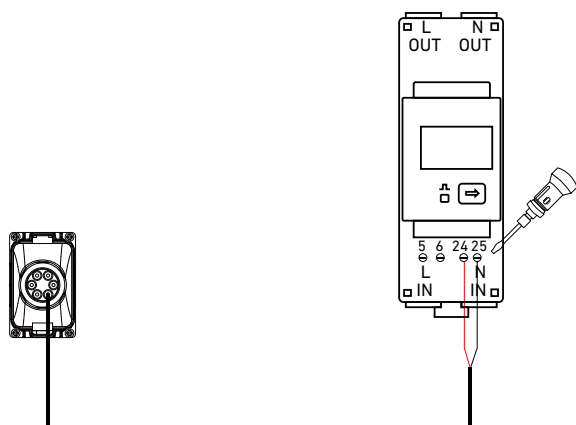


7. For installation without an existing PV system:

Insert the other ends of the Meter_A and Meter_B wires into the RS485-24-A and RS485-25-B terminals on the grid-side power sensor (Model: DDSU666, 100A, included), and tighten the screws.



- The power sensor provided in the package can measure currents up to 100 A. If the current range exceeds 100 A, use DTSU666 (250 A) instead, which can be ordered from Anker SOLIX.
- If you are retrofitting an existing PV system, skip this step and go to the next.

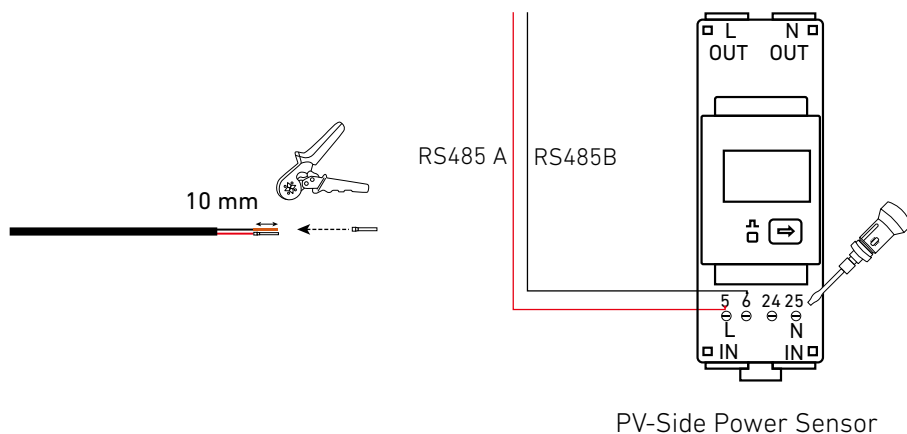


8. For installation with an existing PV system:

Two power sensors for the PV side and the grid side are required respectively.

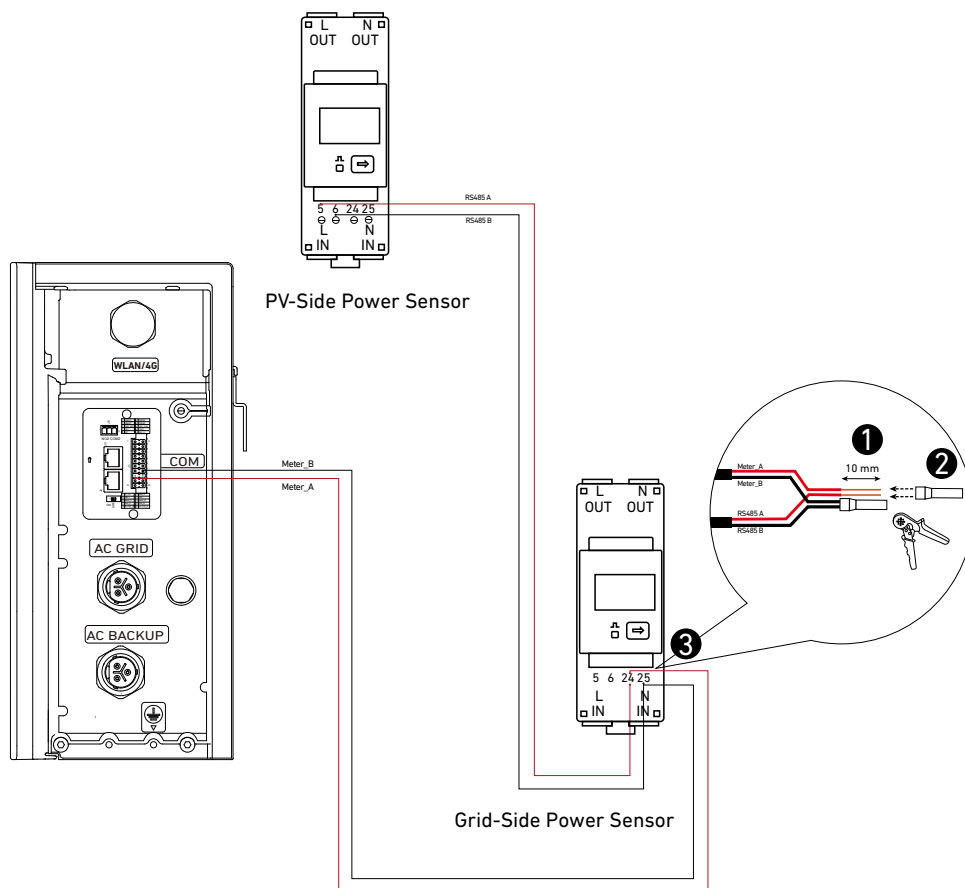
PV-Side Power Sensor:

- ① Prepare an RS485 cable (0.2-0.5 mm² in conductor cross section). Strip the insulation layers from the RS485 A and RS485 B wires.
- ② Crimp the tube terminals (16 mm, included) onto the wires.
- ③ Insert the RS485 A and RS485 B wires into the RS485-5-A2 and RS485-6-B2 terminals on the PV-side power sensor respectively and tighten the screws.



Grid-Side Power Sensor:

- ① Strip the insulation layers from the other ends of the RS485 A and RS485 B wires connected to the PV-side power sensor. Also strip the insulation layers from the other ends of the RS485 A and RS485 B wires connected to the power module.
- ② Twist the two RS485 A wires and crimp the tube terminal (16 mm, included) onto the wires. Crimp the two RS485 B wires in the same way.
- ③ Insert the A and B wire tube terminals into the RS485-24-A and RS485-25-B terminals on the grid-side power sensor respectively and tighten the screws.

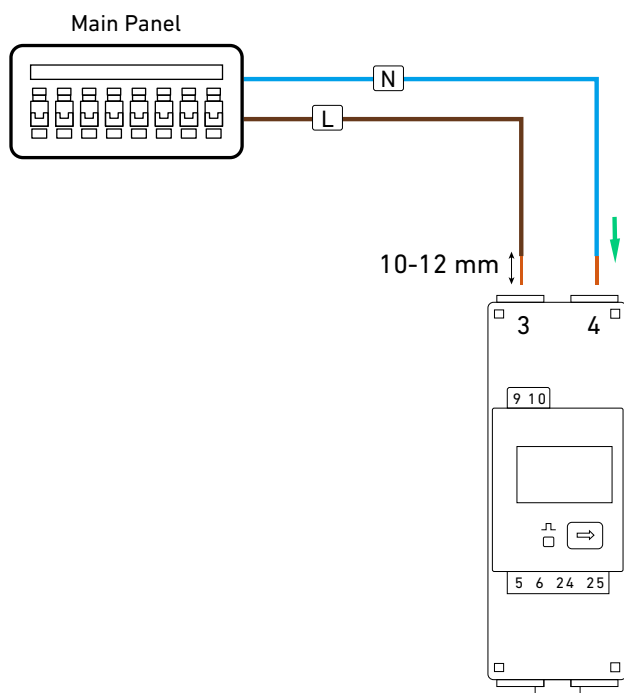


9. Connect power wires to the grid-side power sensor.



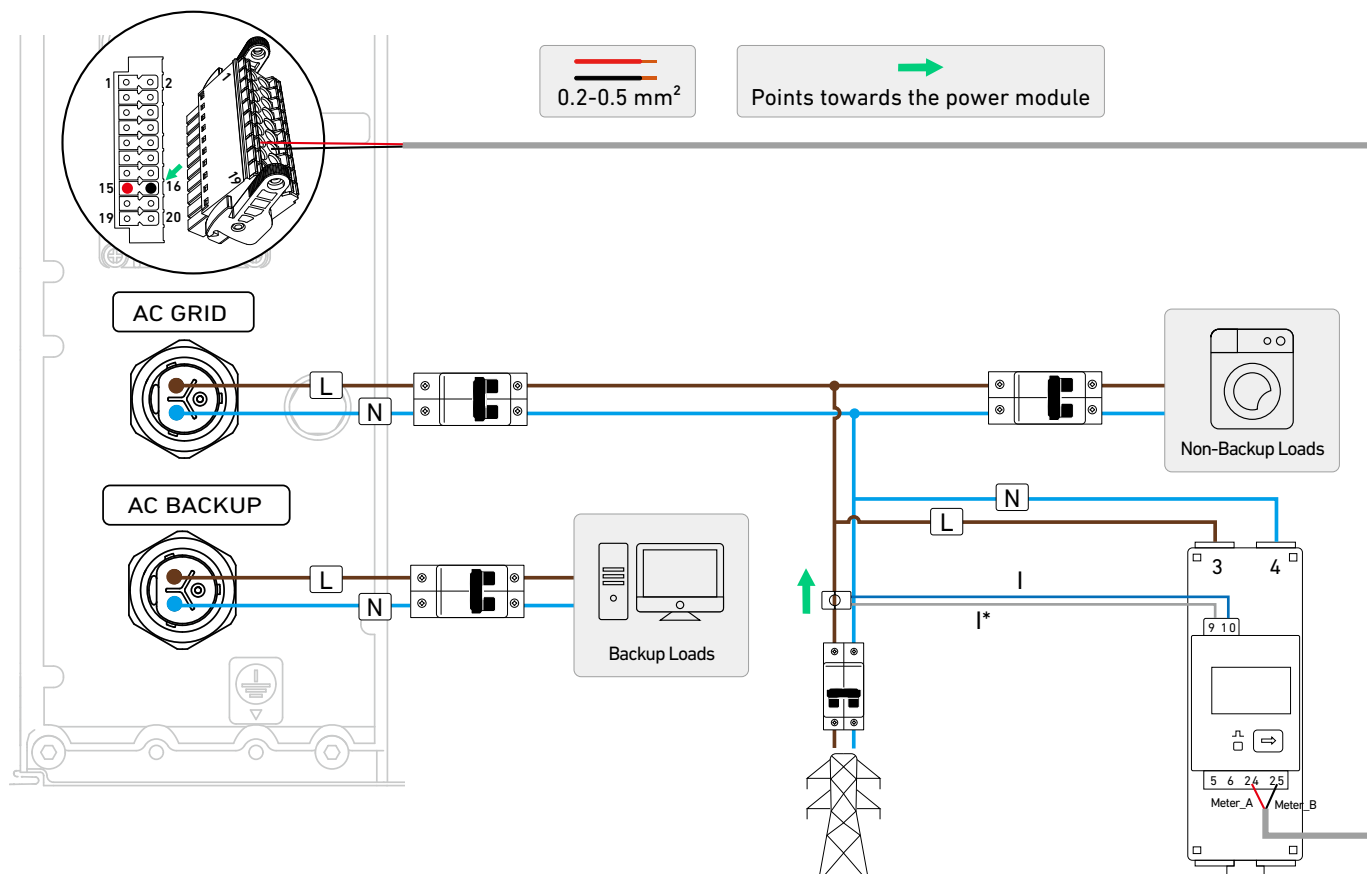
Before this operation, ensure that the grid-side circuit breaker is disconnected.

- ① Cut the live and neutral wires on the grid side.
- ② Strip the insulation layers from both cut ends of the wires.
- ③ Insert the live and neutral wires near the main panel into the L OUT and N OUT terminals respectively and tighten the screws.
- ④ Insert the live and neutral wires near the grid into the L IN and N IN terminals respectively and tighten the screws.



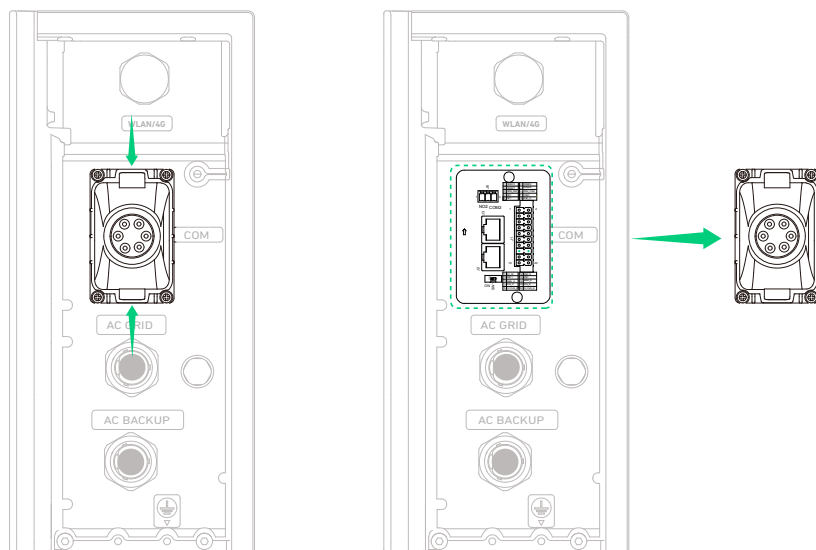
Scenario 2: Has CTs

Installation Without Existing PV System

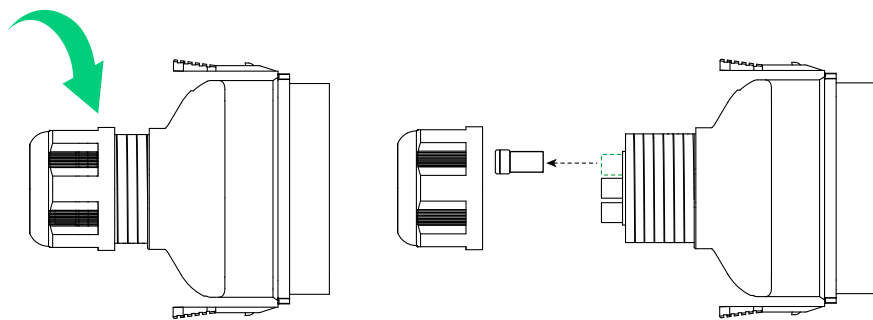


Component	Terminal	Definition	Wire Size	Strip Length	Tube Terminal
Power module	15	RS485 differential signal+	Conductor cross-sectional area of 0.2-0.5 mm ² , not included	10 mm	15 mm, included
	16	RS485 differential signal-			
Power sensor	24	RS485 differential signal+ for address 1			
	25	RS485 differential signal- for address 1			

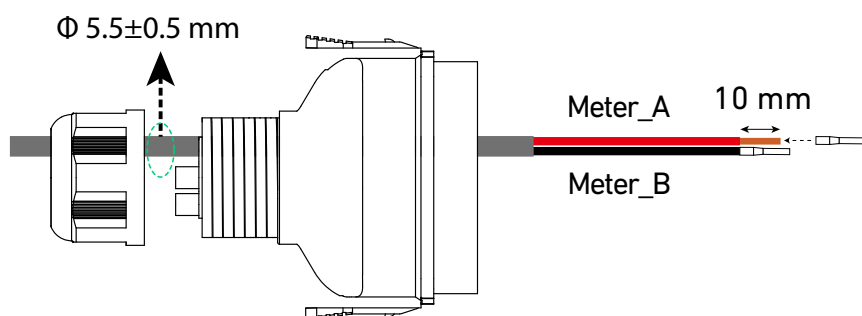
① Remove the wiring compartment cover by pressing the clips on both sides.



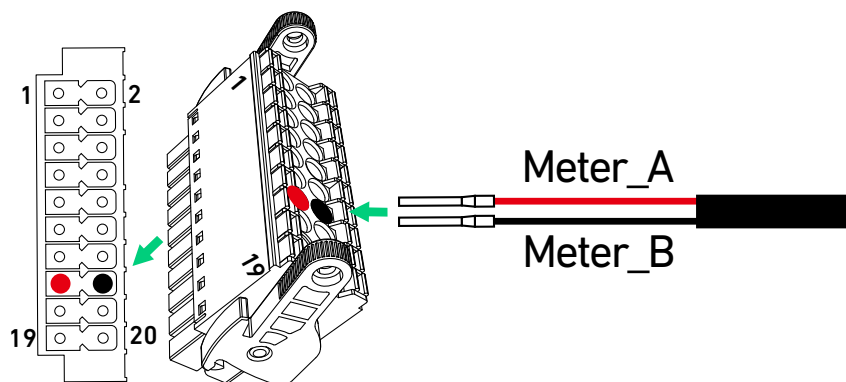
② Rotate to remove the locking cap from the wiring compartment cover. Then take out a waterproof plug.



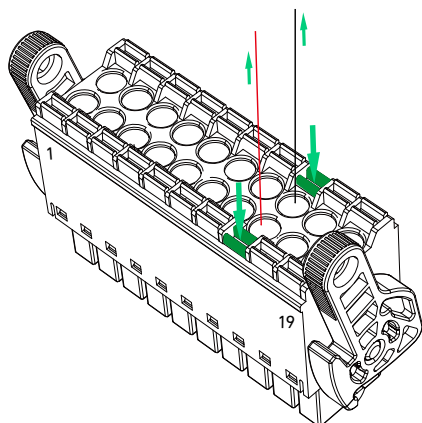
③ Route the RS485 cable (included) through the locking cap and wiring compartment cover. Crimp one tube terminal (15 mm, included) onto the Meter_A conductor, and the other tube terminal onto the Meter_B conductor.



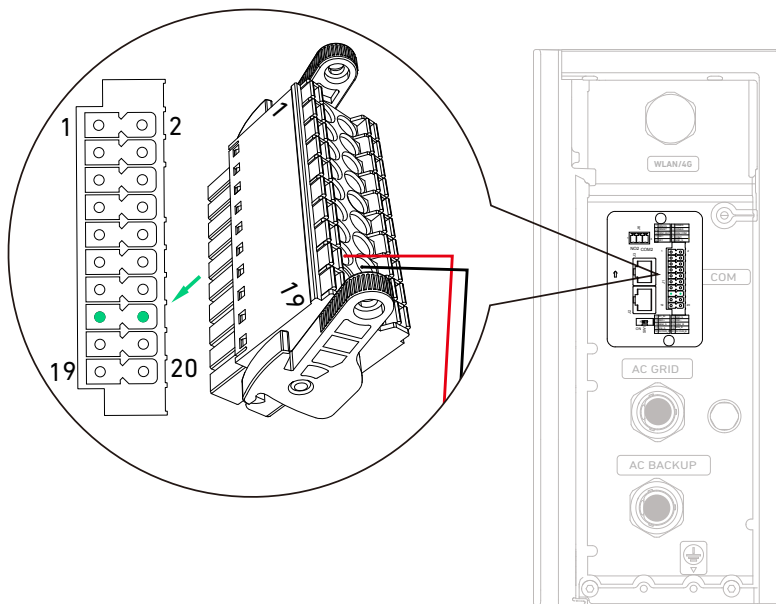
④ Insert the tube terminals into the 20-pin terminal block connector (included).



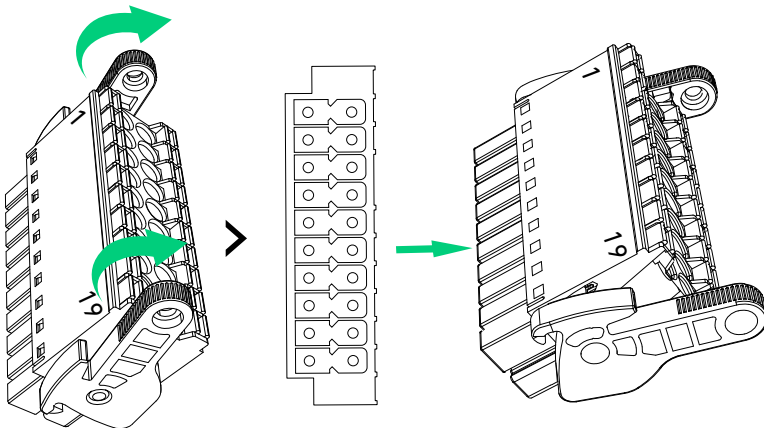
• To remove the wires, depress the actuator buttons next to slots 15 and 16 and pull the wires out.



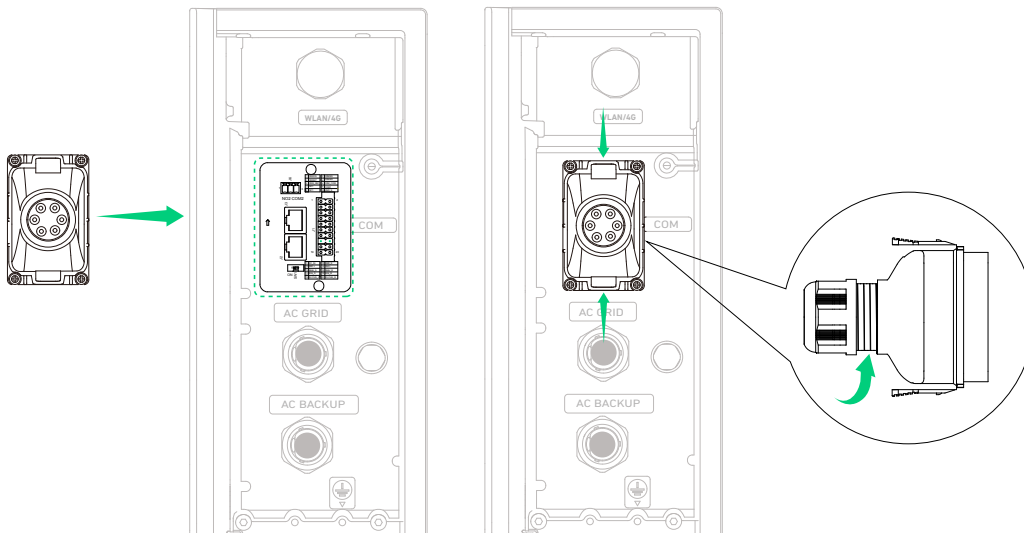
⑤ Plug the terminal block connector into the terminal block socket labelled J1 on the power module.



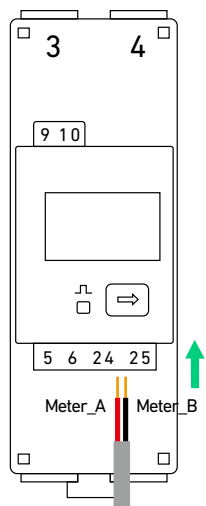
• To remove the terminal block connector, turn the lever locks to loosen the connector and pull the connector out of the socket.



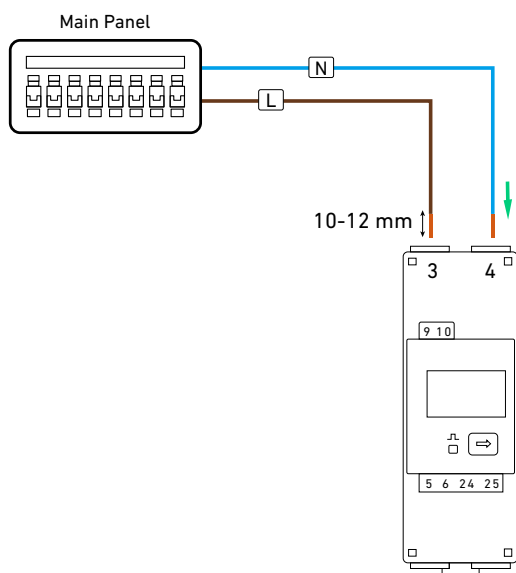
⑥ Insert the wiring compartment cover by pressing the clips on both sides and tighten the locking cap.



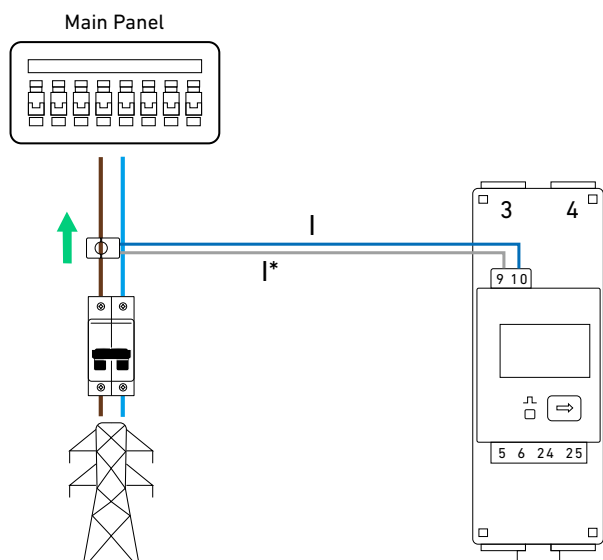
- ⑦ Secure the other ends of the Meter_A and Meter_B conductors to the 24 and 25 terminals on the power sensor.



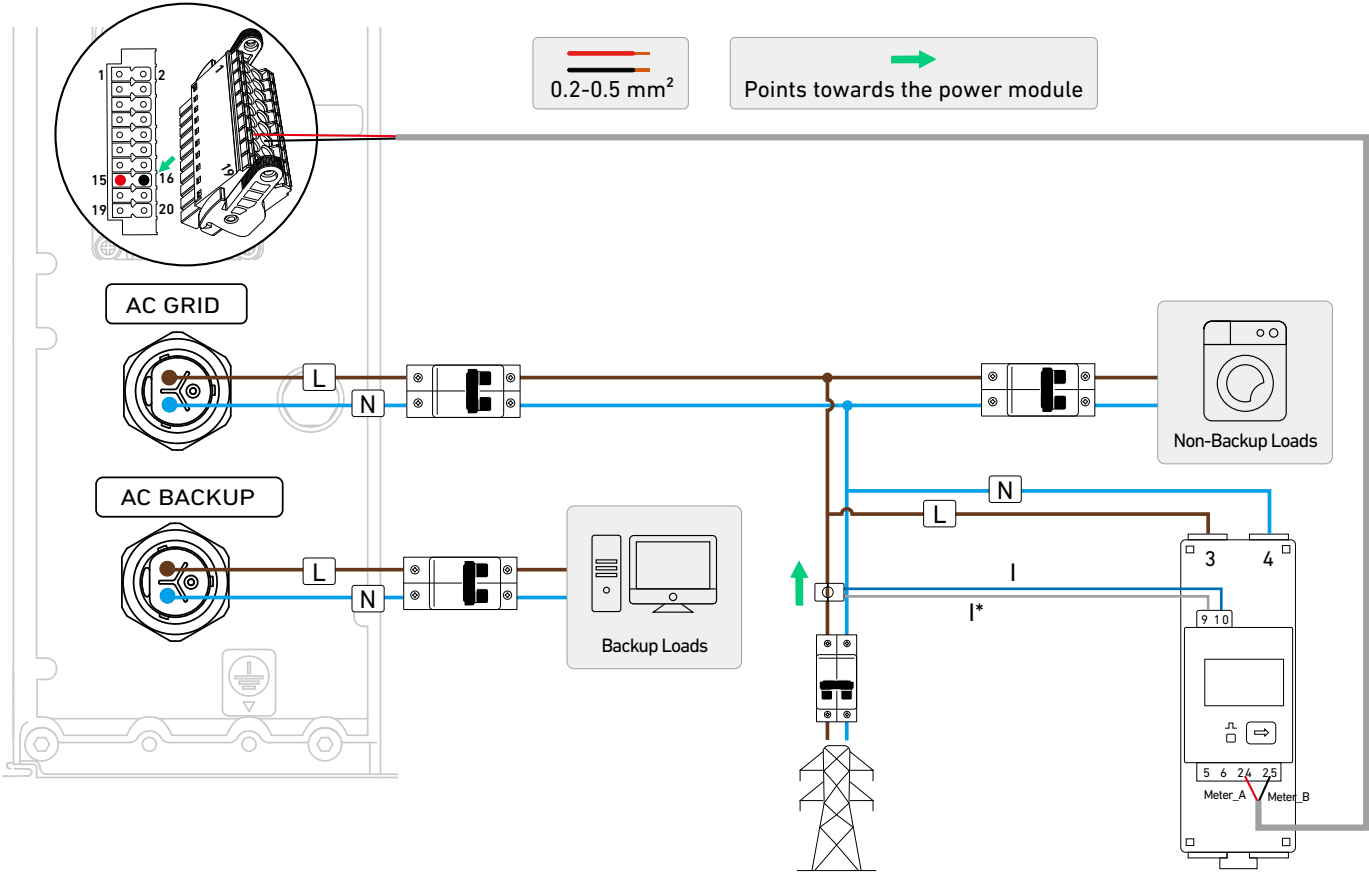
- ⑧ Connect power cables from the power sensor to the main panel.



- ⑨ Connect the CT to the 9 and 10 terminals on the power sensor. Snap the CT with the arrow pointing towards the power module.

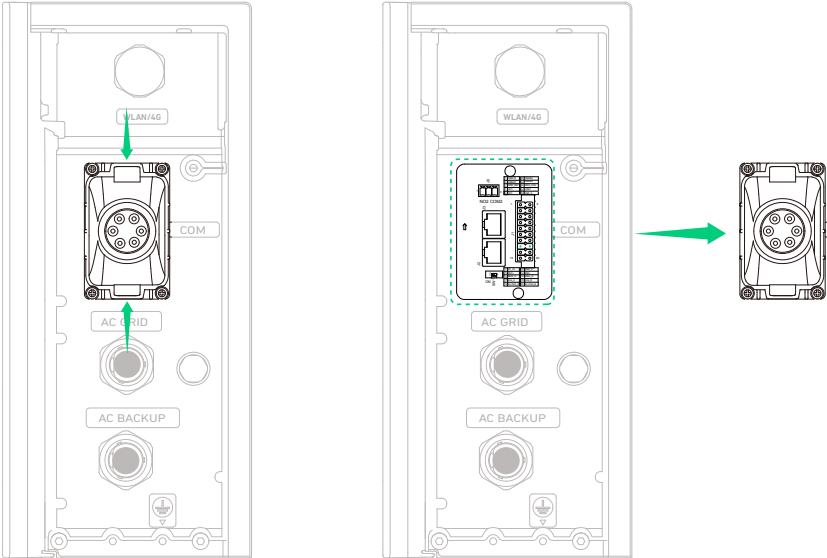


Installation with Existing PV System

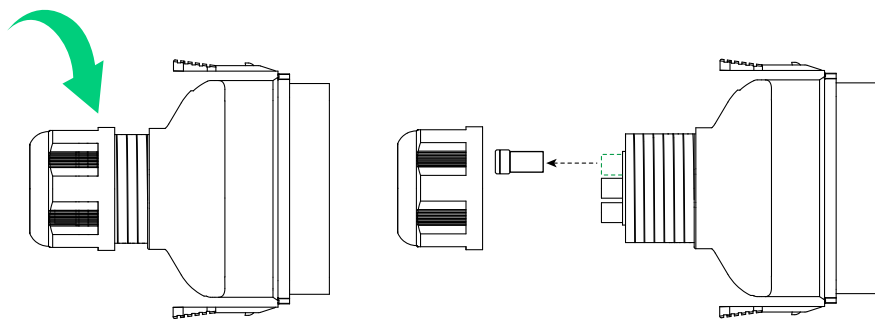


Component	Terminal	Definition	Wire Size	Strip Length	Tube Terminal
Power module	15	RS485 differential signal+	Conductor cross-sectional area of 0.2-0.5 mm ² , not included	10 mm	15 mm, included
	16	RS485 differential signal-			
Power sensor	24	RS485 differential signal+ for address 1			
	25	RS485 differential signal- for address 1			

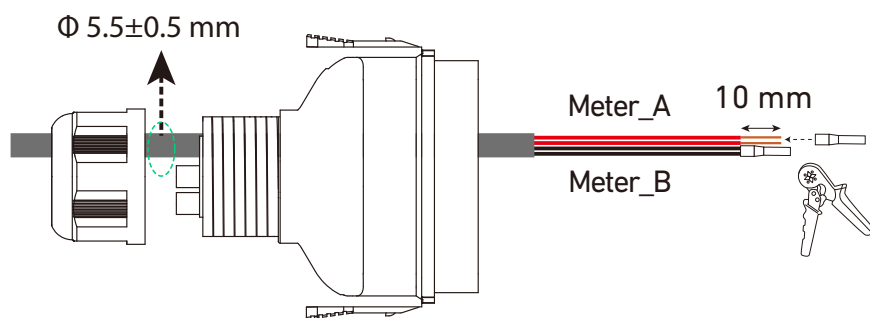
① Remove the wiring compartment cover by pressing the clips on both sides.



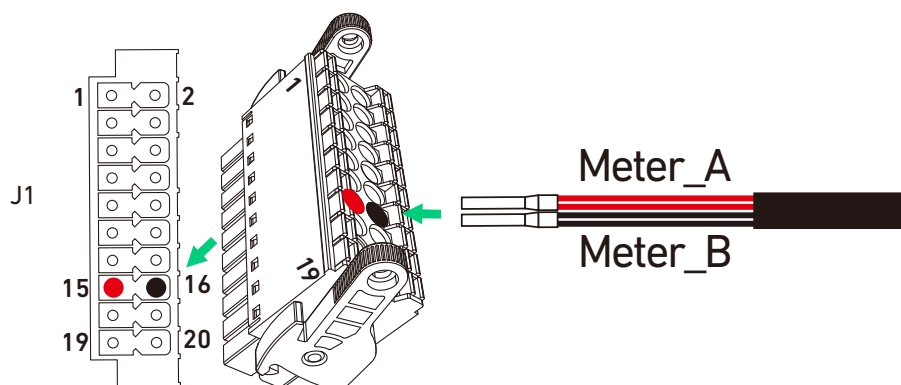
② Rotate to remove the locking cap from the wiring compartment cover. Then take out a waterproof plug.



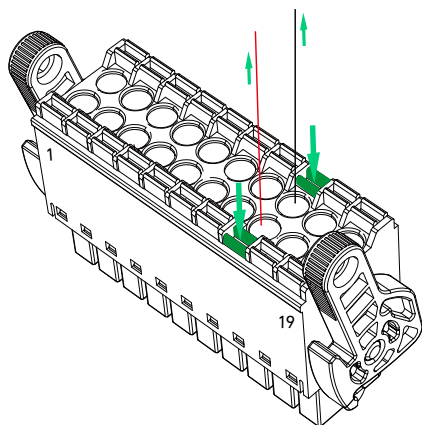
③ Route the RS485 cable through the locking cap and wiring compartment cover. Crimp one tube terminal (15 mm, included) onto the Meter_A conductor, and the other tube terminal onto the Meter_B conductor.



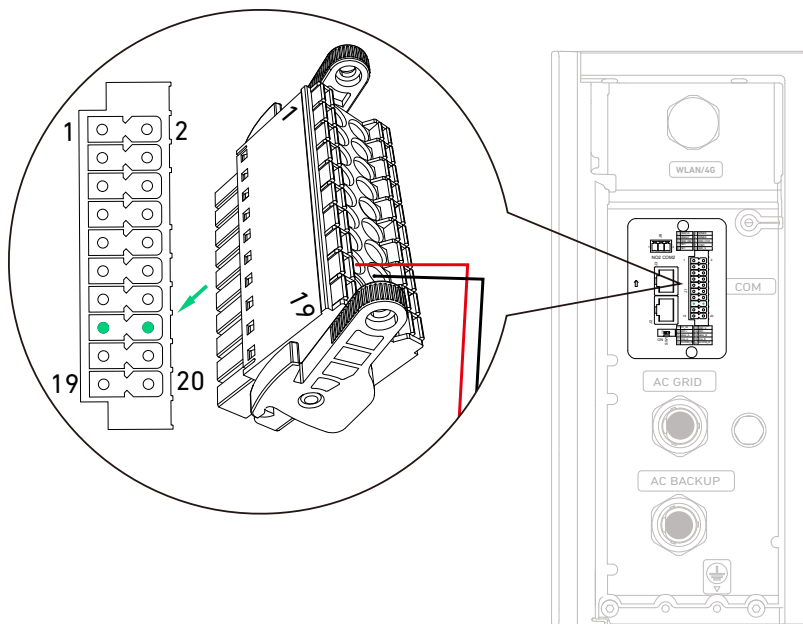
④ Insert the tube terminals into the 20-pin terminal block connector (included).



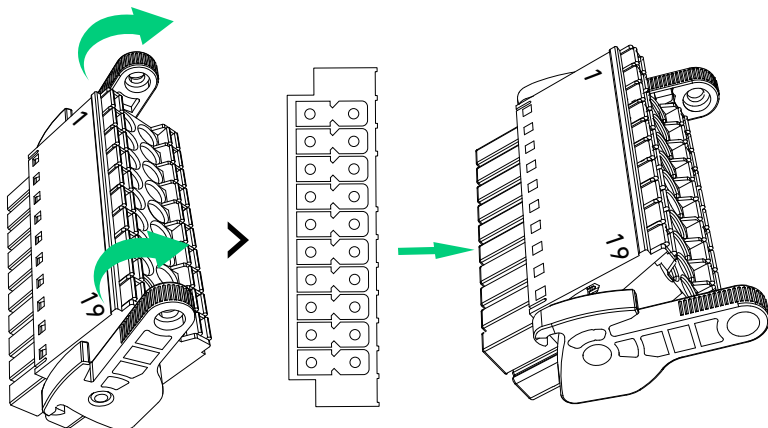
• To remove the wires, depress the actuator buttons next to slots 15 and 16 and pull the wires out.



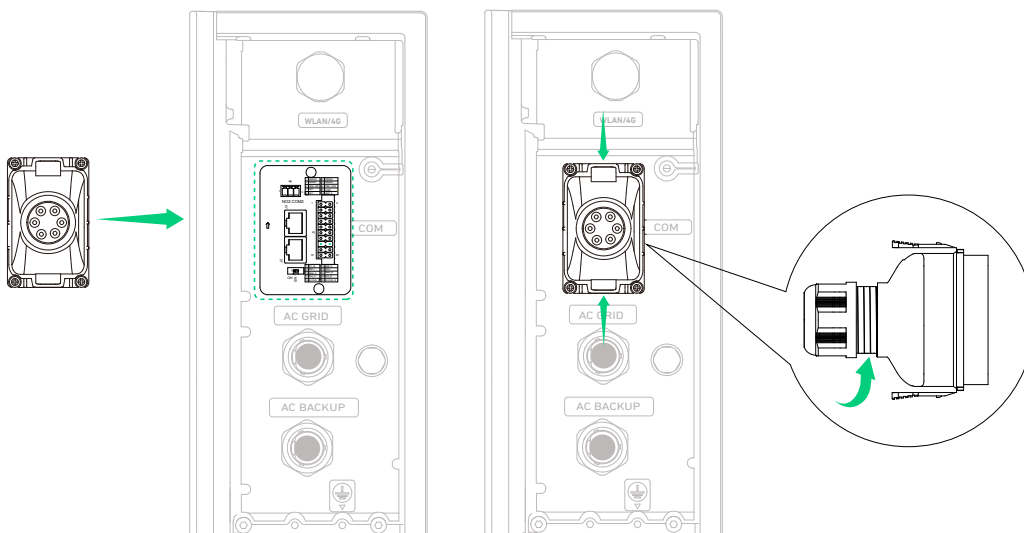
⑤ Plug the terminal block connector into the terminal block socket labelled J1 on the power module.



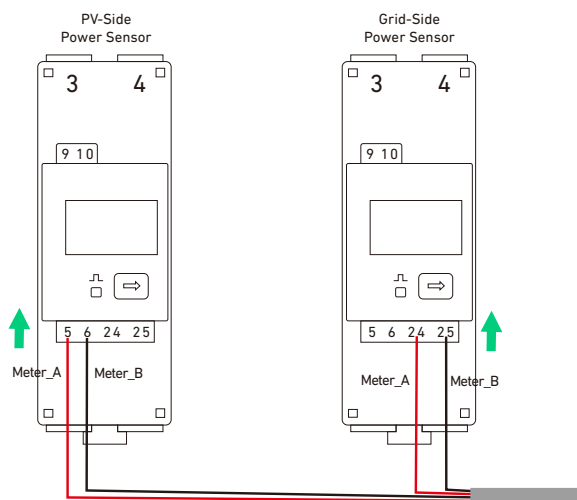
• To remove the terminal block connector, turn the lever locks to loosen the connector and pull the connector out of the socket.



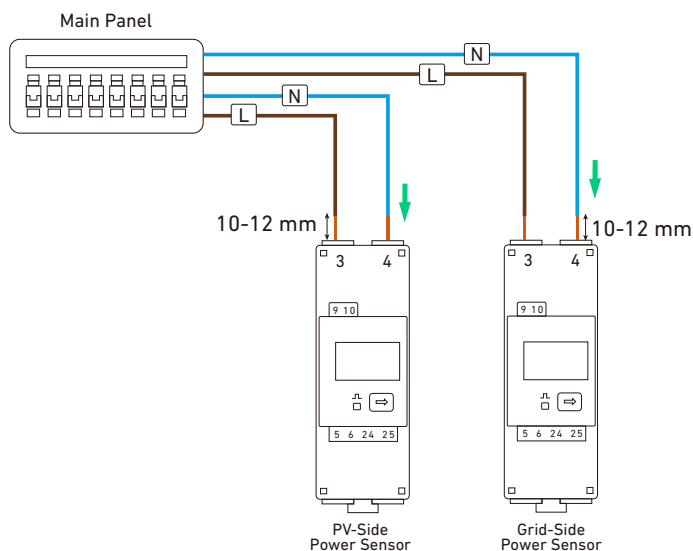
⑥ Insert the wiring compartment cover by pressing the clips on both sides and tighten the locking cap.



- ⑦ Secure the other ends of the Meter_A and Meter_B conductors to the 24 and 25 terminals on the grid-side power sensor, and to the 5 and 6 terminals on the PV-side power sensor.

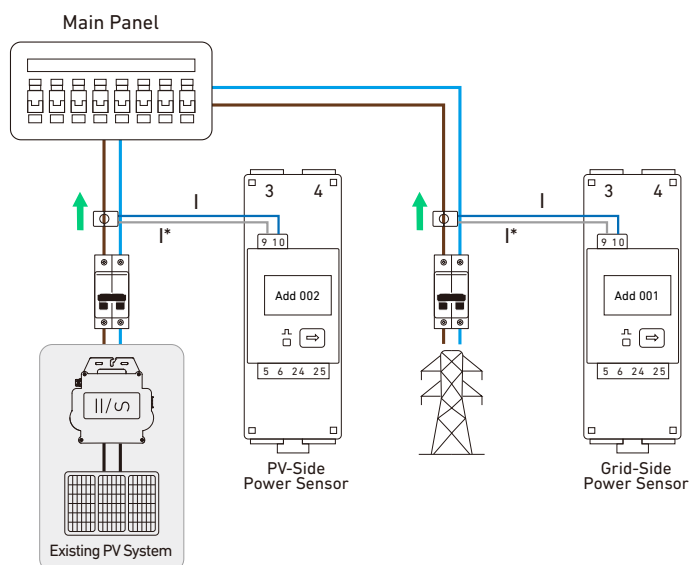


- ⑧ Connect power cables from the power sensors to the main panel.



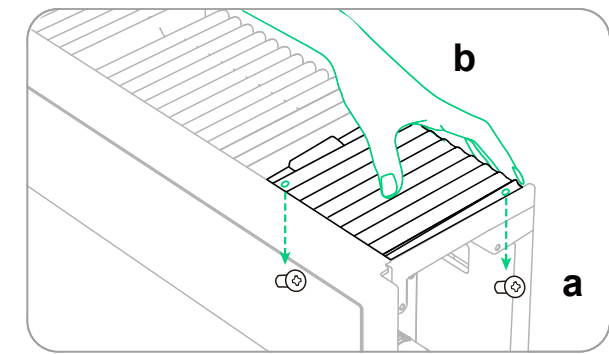
- ⑨ Connect the CTs to the 9 and 10 terminals on the power sensors. Snap the CTs with the arrows pointing towards the power module. Set the communication address of the power sensors.

- Power sensor on the grid side: Add 001
- Power sensor on the PV side: Add 002

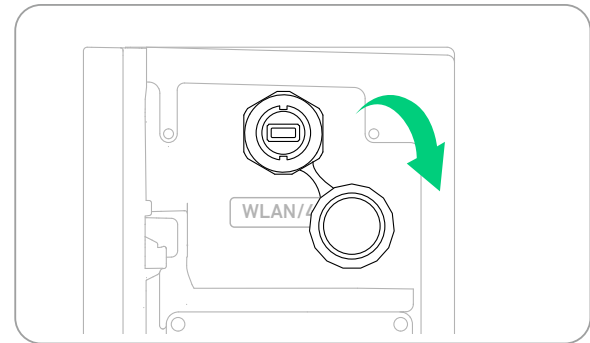


6.6 Connect to the Internet

① Remove the panel from the upper right of the power module. Keep the two screws (M3×8 mm) for later reinstallation.



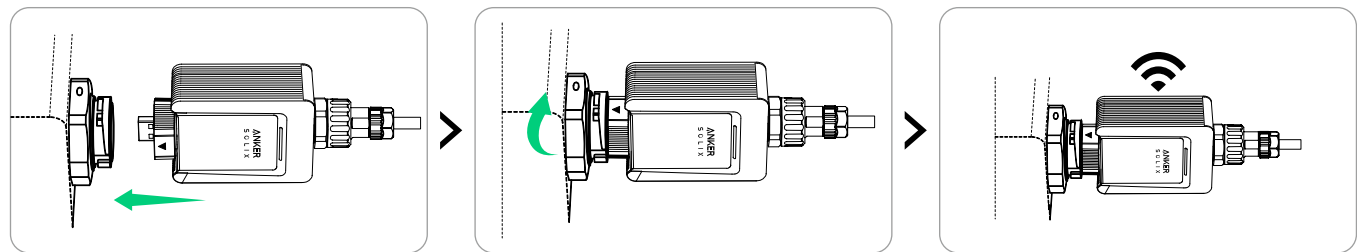
② Open the WLAN/4G port cover on the right side of the power module.



③ Install the appropriate dongle according to the networking methods.

Option 1: Connect via Wi-Fi.

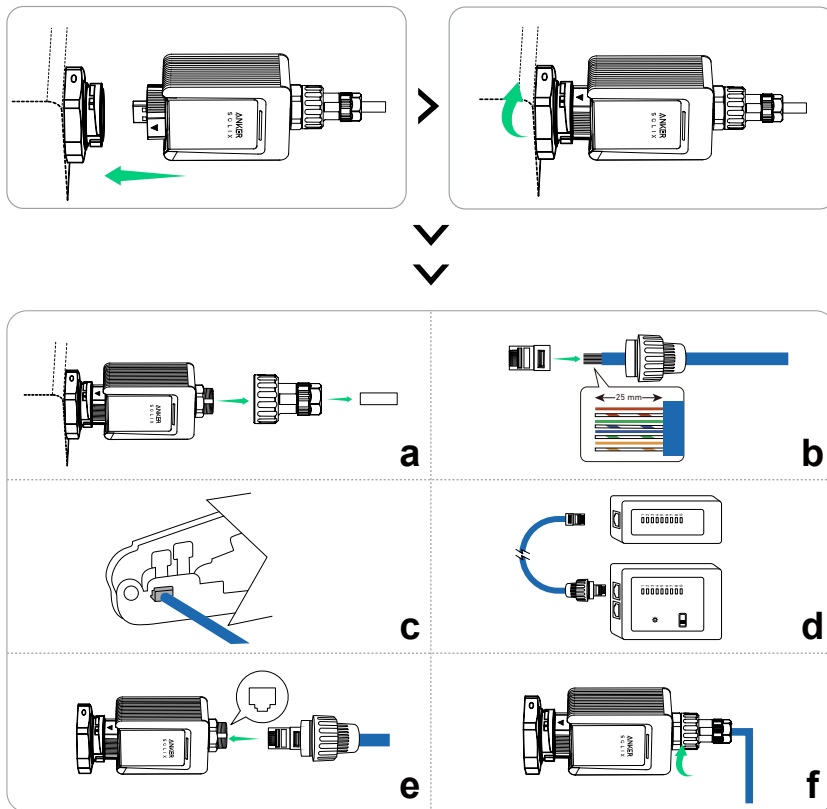
Insert the WLAN dongle (DG-WF-H, included) into the WLAN/4G port.



Option 2: Connect via Ethernet.

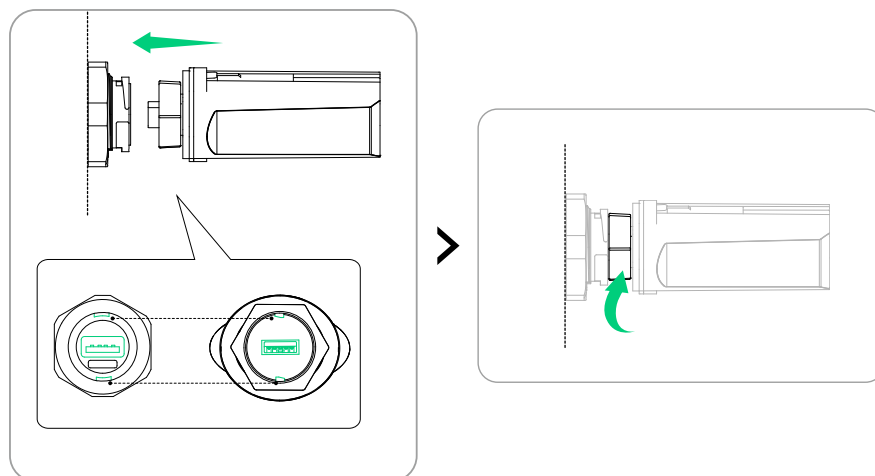
Plug an Ethernet cable (Cat 5 or higher, 5-6 mm in diameter, not included, shielding recommended) into the WLAN dongle (DG-WF-H, included).

From Bottom to Top (Clip Faces Away)								
Pin	1	2	3	4	5	6	7	8
Wire Color	Orange-White	Orange	Green-White	Blue	Blue-White	Green	Brown-White	Brown

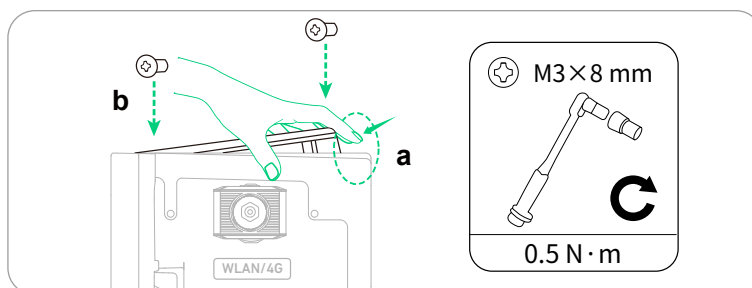


Option 3: Connect via 4G.

Insert the Mobile dongle (VCB-5106L6-WB-AK, not included) into the WLAN/4G port.



- ④ Press the back of the panel to reinstall it, and then tighten the screws (M3×8 mm).



- ⑤ After installing the dongle, configure the Internet settings in the Anker SOLIX Professional app. For detailed instructions, refer to "[7.3 Use the Anker SOLIX Professional App](#)".

6.7 Connect to RCD and Breakers

Residual Current Monitoring Device

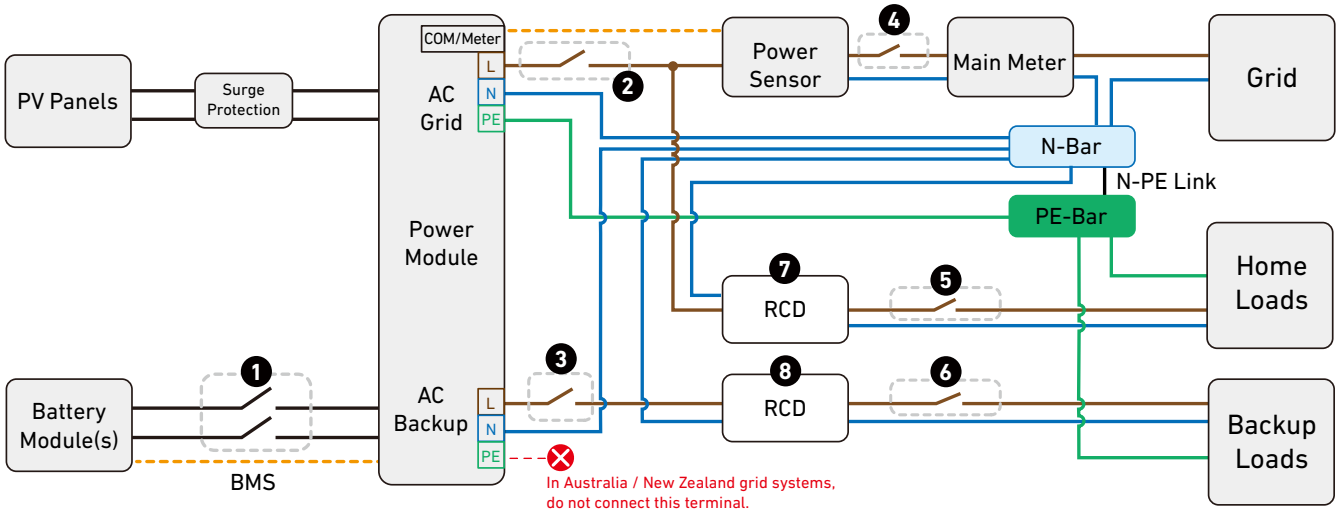


The power module includes an integrated universal current-sensitive residual current monitoring unit. This unit will disconnect the power module from the mains power immediately if a fault current with a value exceeding the limit is detected.

If an external Residual Current Device (RCD) is mandatory, the RCD must meet the requirements of Type B and triggered at a residual current of 300 mA (recommended). Local standards may allow for the use of RCDs with other specifications.

RCD Type	B
Action Current	300 mA
Rated Continuous Current	≥ 50 A
Rated Voltage	L+N+PE ≥ 400 VAC

Wiring diagram (Australia / New Zealand).

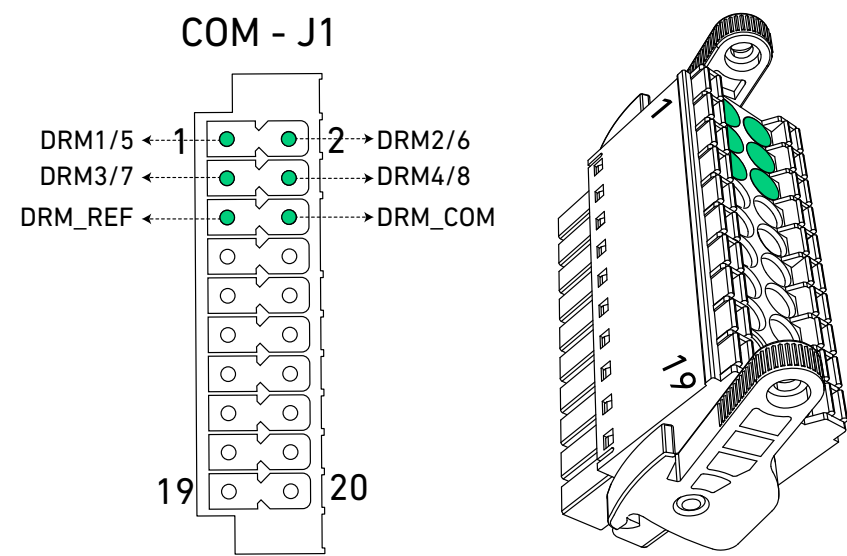


Model	DC Breaker (1)	AC Breaker (2)	AC Breaker (3/6)	AC Breaker (4)	AC Breaker (5)	RCD (7/8)
X1-H5K-S	1500V, 32A	32-40A / 230V, Type B	32-40A / 230V, Type B	230V 63A; Select based on home loads	Select based on home loads	230V, 300mA
X1-H6K-S	1500V, 32A	32-40A / 230V, Type B	32-40A / 230V, Type B	230V 63A; Select based on home loads	Select based on home loads	230V,300mA

6.8 Connect to the Power Control Device

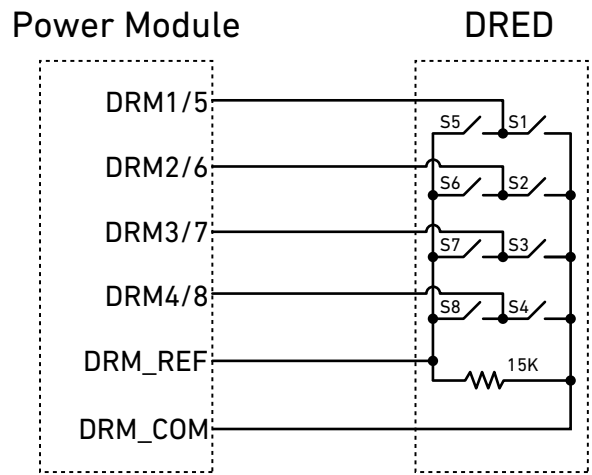
 Connect the power module to a power control device according to the local standard and requirements for grid stability and remote system control by the grid.

Connect the power module to a power control device using the DRM terminals and the 20-pin terminal block connector (included).



Refer to the appropriate wiring diagram and switch table to help connect.

Demand Response Enabling Device (DRED)

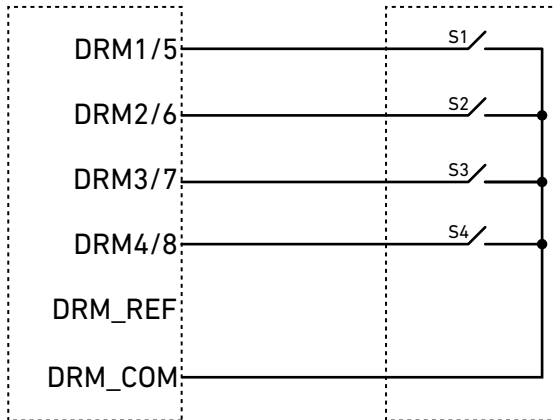


Demand Response Mode	Switch State
DRM0	Close S1 and S5
DRM1	Close S1
DRM2	Close S2
DRM3	Close S3
DRM4	Close S4
DRM5	Close S5
DRM6	Close S6
DRM7	Close S7
DRM8	Close S8

Ripple Control Receiver (RCR)

Power Module

RCR

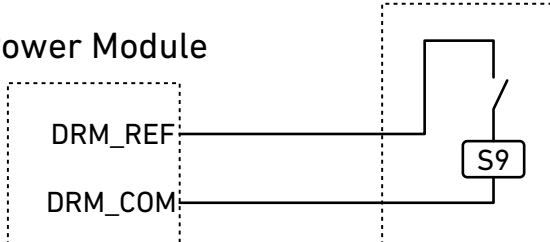


Output Power (in % of the Rated AC Output Power)	Switch State	S1	S2	S3	S4
100%	Close S1	1	0	0	0
60%	Close S2	0	1	0	0
30%	Close S3	0	0	1	0
0%	Close S4	0	0	0	1

Radio Ripple Control Receiver (RRCR)

Power Module

RRCR



Terminal	Description	Connected to (RRCR)
DRM_REF	GND	S9 - Relay 1 output
DRM_COM	Relay contact 1 input	S9 - Relay 1 output

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

6.9 Connect to the Heat Pump

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

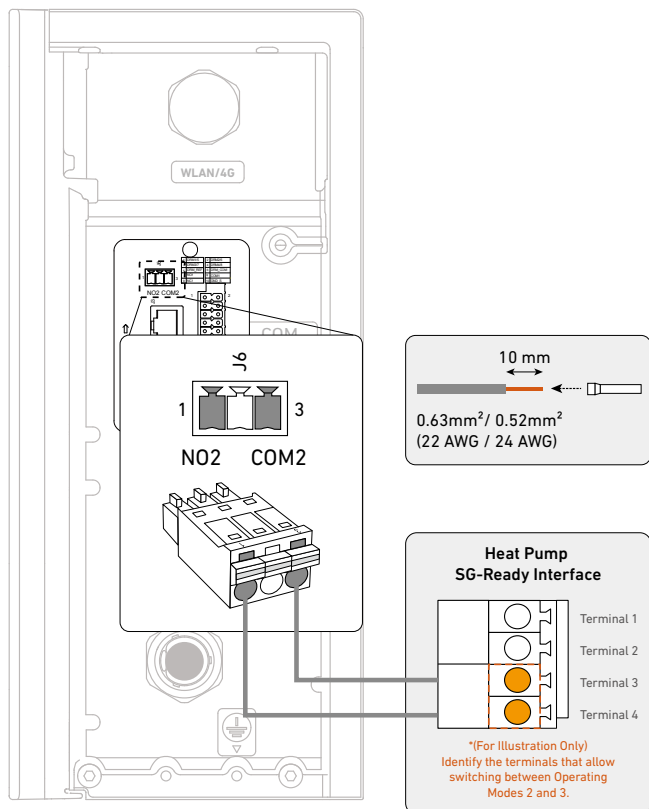
① Prepare the cables along with the tube terminals and terminal block connectors as specified below.

Terminal	Cable	Strip Length	Tube Terminal	Terminal Block Connector	Maximum Length
N02	Recommended: 0.63 mm ² (22 AWG), not included	10 mm	For 0.63 mm ² (22 AWG) cables, included	3-pin, included	20 m
COM2	*Optional: 0.52 mm ² (24 AWG), not included				

- ② 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.

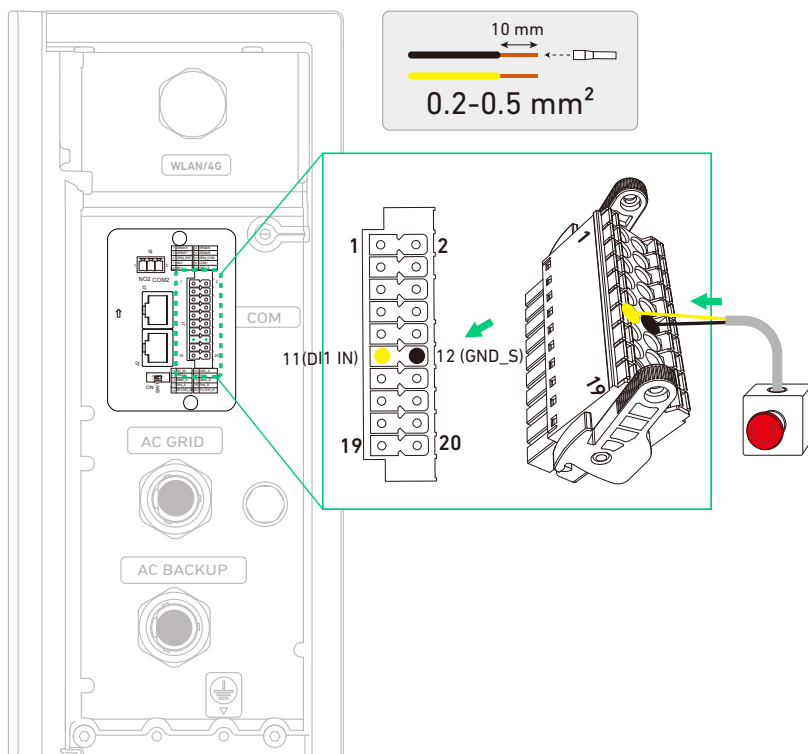
- ③ Connect the designated terminals on the heat pump to the NO2 and COM2 terminals on the power module.



- Once the electrical connections are completed, the heat pump must be configured either by the installer using the Anker SOLIX Professional app or by the user using the Anker app.
- To set up the heat pump in the Anker SOLIX Professional app, refer to Post Commissioning [Post Commissioning \(Step 4: Configure External Device\)](#) in 7.3 Use the Anker SOLIX Professional App.

6.10 Connect to the Control Unit / Emergency Stop Switch

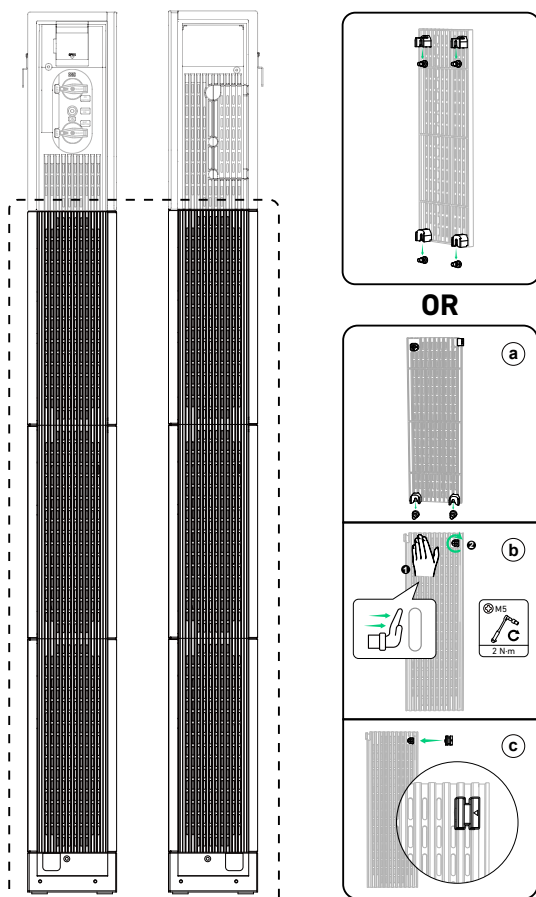
In compliance with local codes, the power module can be connected to a control unit (for Germany) or an emergency stop switch. Wire the 11 and 12 terminals on the power module to the control unit or the emergency stop switch.



6.11 Attach Side Covers and Baffles

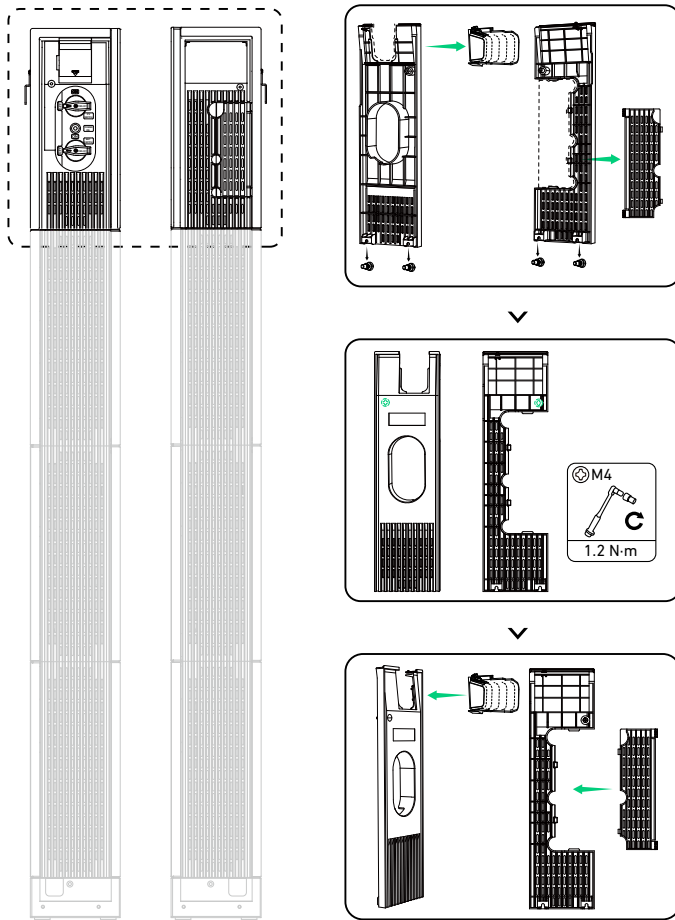
1. Install the side covers* to the battery modules from the bottom up.

*The side covers may vary due to batch variations.



2. Install the side covers to the power module.

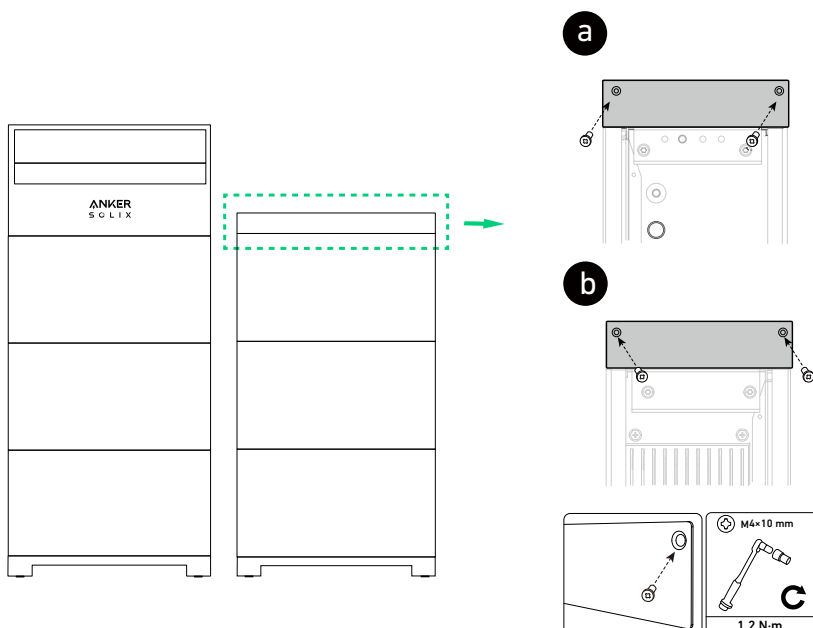
- ① Remove the left-side and right-side wire covers from the side covers. Align the side cover notches with the protruding parts of the power module, and push the covers down to click in place.
- ② Fasten the captive screws (M4) on the top of both side covers.
- ③ Attach the wire covers to the slots of the side covers.



3. Attach the baffles to the modules.

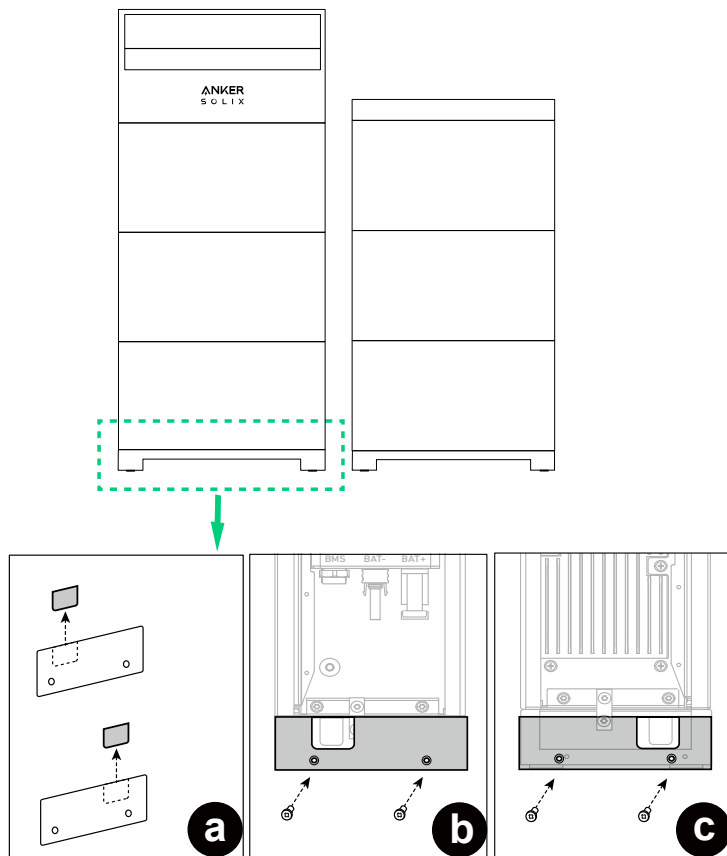
If you are installing two columns of modules, attach the baffles for a clean aesthetic.

- ① Attach the top cover baffles to the top battery module in the second column. Make sure the baffle side with the countersunk holes face outward and tighten the screws.

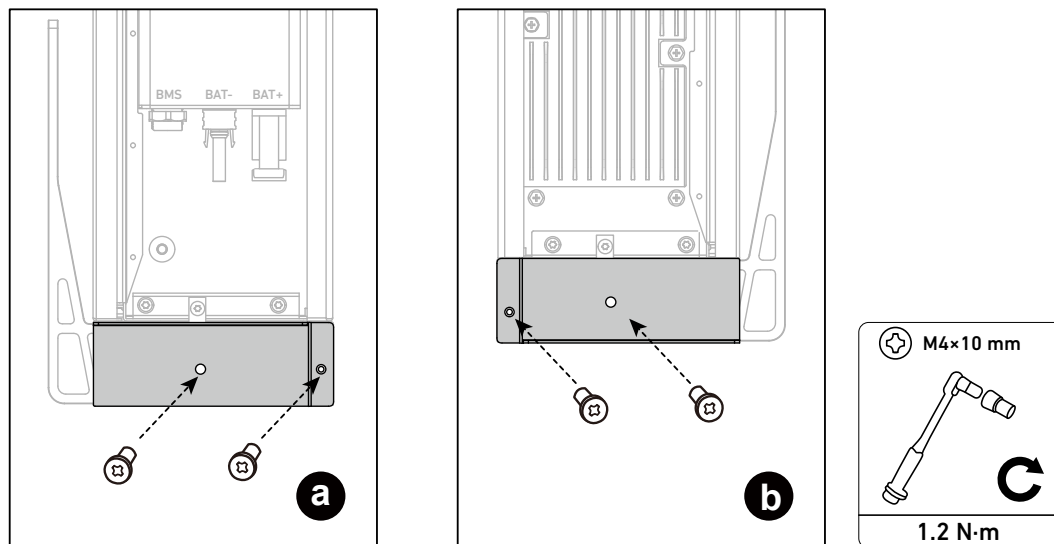


- ② Attach the base baffles to the base in the first column. Make sure the baffle side with the countersunk holes face outward and tighten the screws.

Floor-Mounted Modules



Wall-Mounted Modules



7. Commissioning

7.1 Verify Hardware Installation

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 DC 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 BAT switch and the PV switch are off. • All switches connected to the energy storage system are off.

7.2 Power On the System

Power on the system before commissioning in the Anker SOLIX Professional app.

1. Toggle the BAT switch of the power module to ON.
2. Close the circuit breaker between the power module and the grid.
3. Toggle the PV switch of the power module to ON.

7.3 Use the Anker SOLIX Professional App



The UI images shown are for illustration only and may not match the actual display, which can vary depending on the software version.

Download and Install the App

The Anker SOLIX Professional app will guide you through the commissioning process.

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



2. Log into the app using the installer's account. Please check your email to get the account name and initial password. If you do not have an account, follow the in-app instructions to sign up.

For installers with a registered company

The first screenshot shows the 'Sign Up' screen with the 'Account Type' section. The 'Installer' option, described as 'Users with registered companies', is selected with a blue checkmark. The 'Electrician' option, described as 'Users without registered companies', is not selected. A blue 'Next' button is at the bottom.

The second screenshot shows the 'Account Details' form. It includes sections for 'Company Details' and 'Admin Details'. The 'Company Details' section has fields for 'Country/Region*', 'Company Name*', and 'Company Address*', each with a 'Please Enter >' prompt. The 'Admin Details' section has fields for 'First Name*', 'Last Name*', 'Email*', and 'Verification Code*', each with a 'Please Enter >' prompt. Below these fields is a checkbox for 'I agree to the Terms of Use and Privacy Policy.' and a 'Send' link for the verification code. At the bottom, it says 'Last Step' and has a greyed-out 'Next' button.

For electricians without a registered company

The first screenshot shows the 'Sign Up' screen with the 'Account type' section. The 'Electrician' option, described as 'Users without registered companies', is selected with a blue checkmark. The 'Installer' option is not selected. A blue 'Next' button is at the bottom.

The second screenshot shows the 'Admin Details' form. It includes fields for 'Country/Region*', 'First Name*', 'Last Name*', 'Email*', 'Verification Code*', and 'Electrician License*', each with a 'Please Enter >' prompt. Below these fields is a checkbox for 'I agree to the Terms of Use and Privacy Policy.' and a 'Send' link for the verification code. At the bottom, it says 'Last Step' and has a greyed-out 'Next' button.

Build System

Step 1: Collect Owner Details

- 1 On the Home screen, tap **Create System** or the plus icon on the top right.
- 2 Go to **System Build**.
- 3 Input the system and owner information.

The first screenshot shows the Home screen of the Anker SOLIX app. At the top, there is a plus icon in a square. Below it, a house icon is shown with the text 'No system created yet'. At the bottom, there is a 'Create System' button. A red circle with the number '1' is placed over the button.

The second screenshot shows the 'Create System' screen. It has a back arrow at the top left. Below it, the title 'Create System' is displayed. A vertical progress bar on the left has four steps: '01 System Build' (selected), '02 Storage Settings', '03 System Configuration', and '04 Post Commissioning'. Each step has a right arrow. Below the progress bar, there are four buttons: '01 System Build' (selected), '02 Storage Settings', '03 System Configuration', and '04 Post Commissioning'. A red circle with the number '2' is placed over the '01 System Build' button.

The third screenshot shows the 'System Build' screen. It has a back arrow at the top left. Below it, the title 'System Build' is displayed. A progress bar at the top shows three steps: 'Collect Owner Details' (selected), 'System Details', and 'Owner Details'. Below the progress bar, there are three sections: 'System Details' (with fields for 'System Name*' and 'Installer Reference Name'), 'Owner Details' (with fields for 'First Name', 'Last Name', 'Email*', 'Mobile', 'Location*', and 'Address'), and a 'Next' button at the bottom. A red circle with the number '3' is placed over the 'System Details' section.

Step 2: Select System Type

Select a system type based on the installation of the energy storage system.

System Type	Does System Include Solar Inverter	Inverter Brand
Anker Energy Storage	No	/
Anker Energy Storage & Anker Solar Inverter	Yes	Anker SOLIX
Anker Energy Storage & Third-Party Solar Inverter	Yes	Others

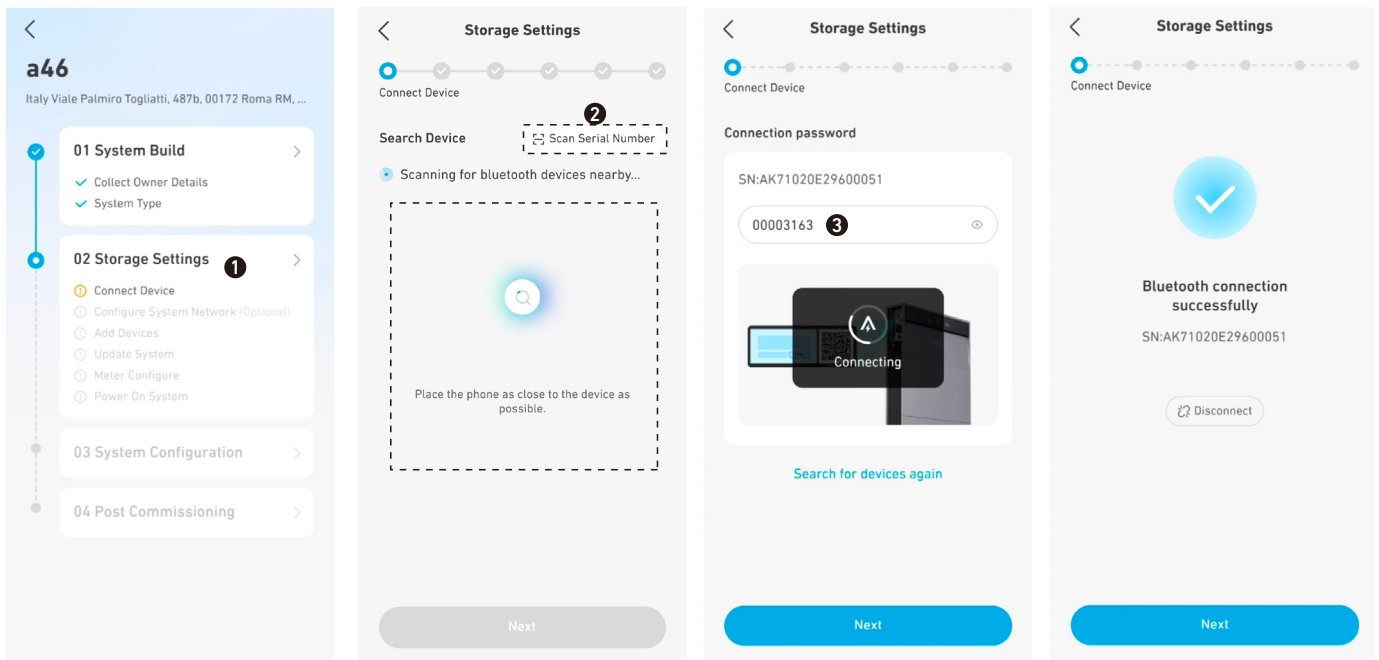
The screenshot shows the 'System Build' screen with a back arrow at the top left. Below it, the title 'System Build' is displayed. A progress bar at the top shows three steps: 'Collect Owner Details', 'System Type' (selected), and 'System Details'. Below the progress bar, there is a section titled 'System' with the subtitle 'Select the customer's system type.' Below this, there are three radio button options: 'Anker Energy Storage', 'Anker Energy Storage & Anker Solar Inverter' (selected), and 'Anker Energy Storage & Third-Party Solar Inverter'. Each option has a corresponding icon. At the bottom, there is a 'Next' button.

Configure Storage

Step 1: Connect Device

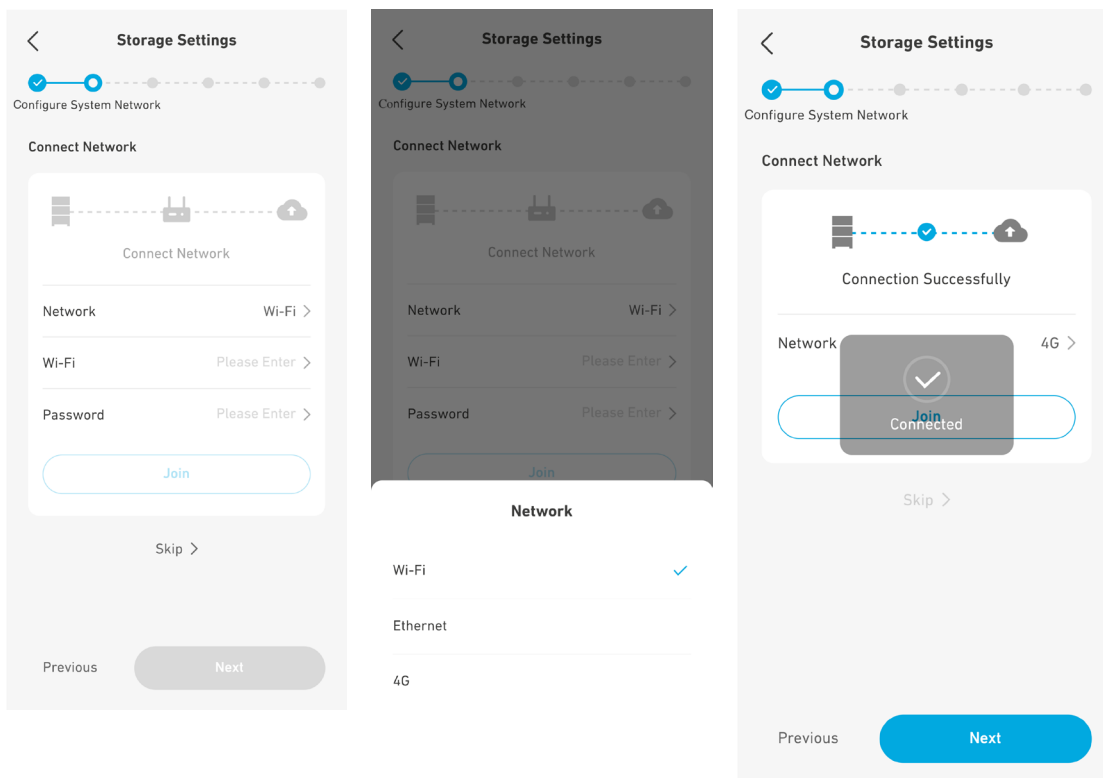
Connect the power module to the Anker SOLIX Professional app via Bluetooth.

- 1 Go to **Storage Settings**.
- 2 Select the power module from the Bluetooth device list or scan the barcode on the power module's label.
- 3 Enter the password located below the barcode.



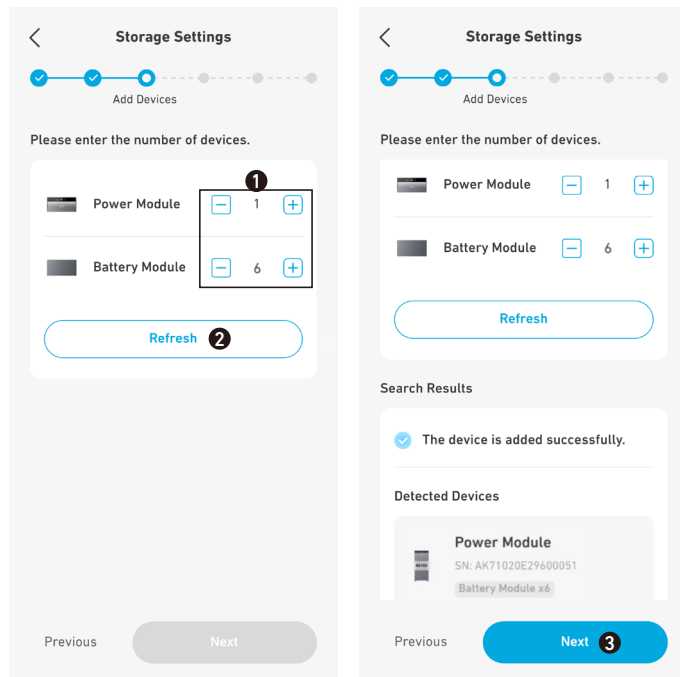
Step 2: Configure System Network

Configure the Internet connection using Wi-Fi, Ethernet, or 4G.



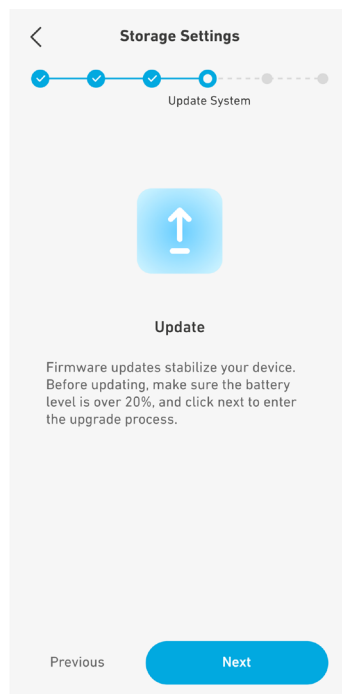
Step 3: Add Devices

- 1 Manually input the numbers of the power modules and battery modules.
- 2 Tap **Refresh** to search for the devices automatically.
- 3 Select **Next** to move on when you see the message "The device is added successfully." If the detected numbers do not match the input numbers, change the input numbers and tap **Refresh** again.



Step 4: Update Firmware

Update the firmware to the latest version.



Step 5: Configure Meter

Configure the meter address, and then check whether the meters are correctly connected and configured onsite.

The screenshot shows the 'Storage Settings' app interface. At the top, there is a progress bar with five steps: four completed (blue circles with checkmarks) and one active (blue circle with a dot). The active step is labeled 'Meter Configure'. Below the progress bar, the title 'Meter Configure' is displayed. The main content area contains two input fields: 'Grid side meter address' with the value '001' and 'Photovoltaic side meter address' with the value '002'. A note below the second field states: 'Configure this parameter only when an external PV module is connected.' At the bottom, there are two buttons: 'Previous' and 'Next'.

Step 6: Power On System

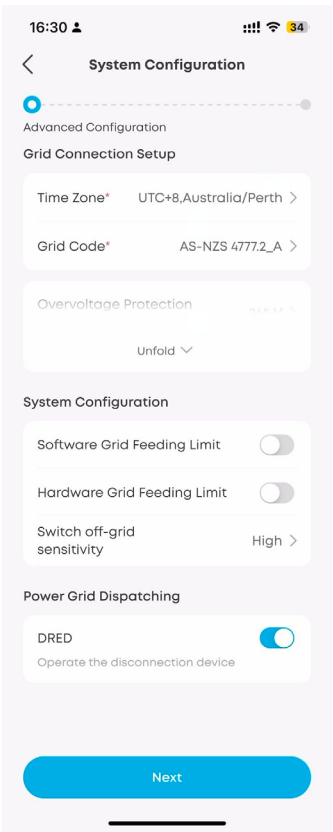
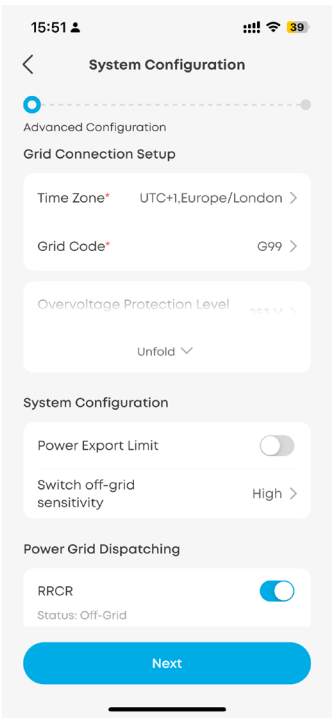
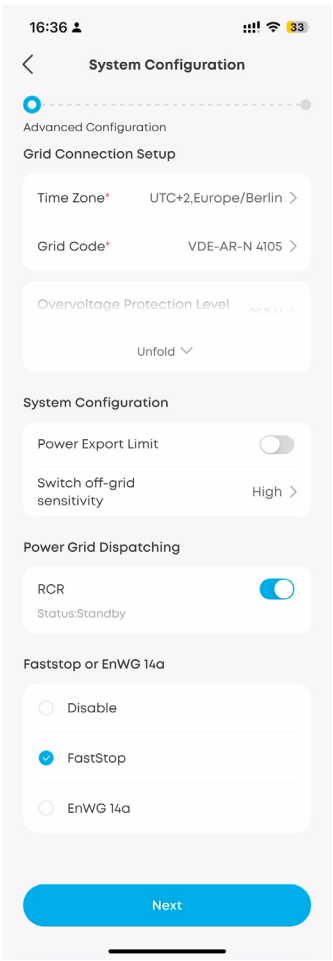
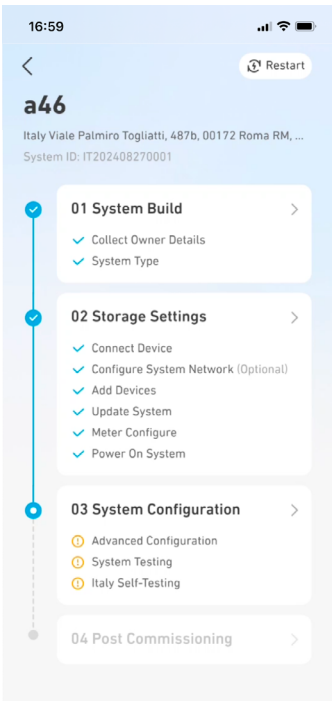
Tap to power on the system, and tap **Next**. If the system is already on, tap **Next** directly.

The screenshot shows the 'Storage Settings' app interface. At the top, there is a progress bar with six steps: five completed (blue circles with checkmarks) and one active (blue circle with a dot). The active step is labeled 'Power On System'. Below the progress bar, there is an image of an Anker PowerCore battery pack. Below the image, there is a button labeled 'Power On System' with a power icon. At the bottom, there are two buttons: 'Previous' and 'Next'.

Configure System

Step 1: Advanced Configuration

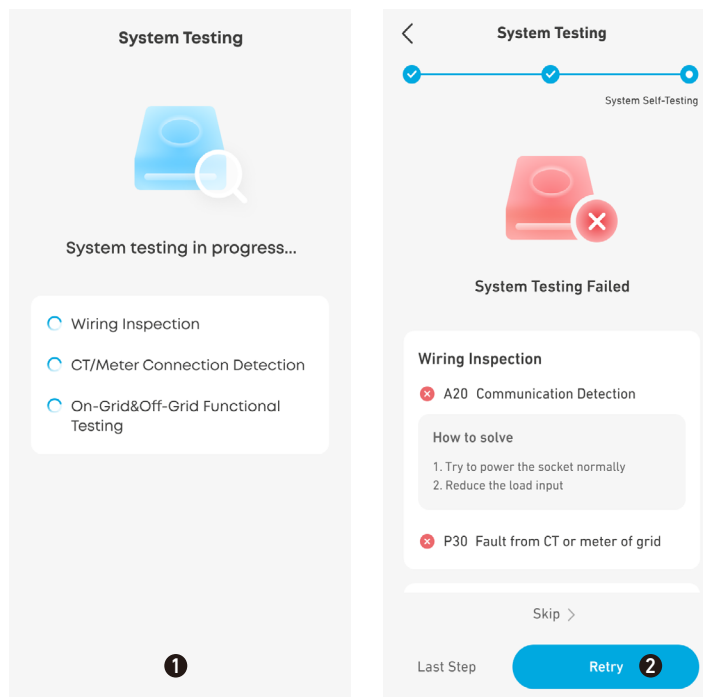
Tap **System Configuration** and complete the settings.



Grid Connection Setup	Time Zone: Set the local time zone.
	Grid Code: Select the grid code of the country or region where the power module is used. When the time zone is set to Australia, select the applicable grid code. Please contact your electricity grid operator for which region to use. • AS-NZS 4777.2_A: Australia A • AS-NZS 4777.2_B: Australia B • AS-NZS 4777.2_C: Australia C • AS-NZS 4777.2_NZ: Australia and New Zealand
Overvoltage and Undervoltage Protection	Specify thresholds and duration for level-1 and level-2 voltage protection.
System Configuration	Soft Grid Feeding Limit: When the feed-in power reaches the set limit, the system will continue feeding at the set limit. Set the feed-in power limit as a percentage of the system rating. For example, if the system rating is 6 kW and the percentage is set to 20%, the feed-in power limit is $6 \times 20\% = 1.2$ kW. When the feed-in power reaches 1.2 kW, the system will continuously feed power to the grid at 1.2 kW. Hard Grid Feeding Limit: When the feed-in power reaches the set limit, the system will stop feeding and go off-grid. Set the feed-in power limit as a percentage of the system rating. For example, if the system rating is 6 kW and the percentage is set to 20%, the feed-in power limit is $6 \times 20\% = 1.2$ kW. When the feed-in power reaches 1.2 kW, the system will stop feeding power to the grid and go off-grid.
	Switch Off-Grid Sensitivity: Set the sensitivity level for switching between On-Grid and Off-Grid modes. • Select High (default) for optimal user experience. It takes no more than 10 ms for the system to switch between On-Grid and Off-Grid modes. During this process, the loads operate normally. • Select Low when performing Low Voltage Ride-Through (LVRT) or High Voltage Ride-Through (HVRT) detection according to local codes. It takes several seconds for the system to switch between On-Grid and Off-Grid modes. During this process, the backup loads will turn off. They may need to be manually turned on when the system reconnects to the grid.
Power Grid Dispatching	This feature enables the flow of electricity between the system and the grid, allowing for both import and export. The toggle switch is off by default. Turn it on if the power module is connected to the appropriate power control device. The power control device may vary by country. • DRED (Australia)
Faststop	Fast Stop This feature allows users to quickly shut down the Anker SOLIX X1 system in emergencies. • Condition: Before enabling this feature, ensure that the emergency stop switch is properly connected to the power module. • Activation: Once this feature is enabled in the app, users can manually turn on the emergency stop switch. • Effect: The system will disconnect all power outputs, shutting off PV, battery, grid, and backup ports. The grid can still supply power to the system. The communication module remains operational. • Restart: After the emergency shutdown, the system cannot be restarted through the app. To power it back on, press the external button. For further instructions, refer to "7.2 Power On the System".

Step 2: Perform System Test

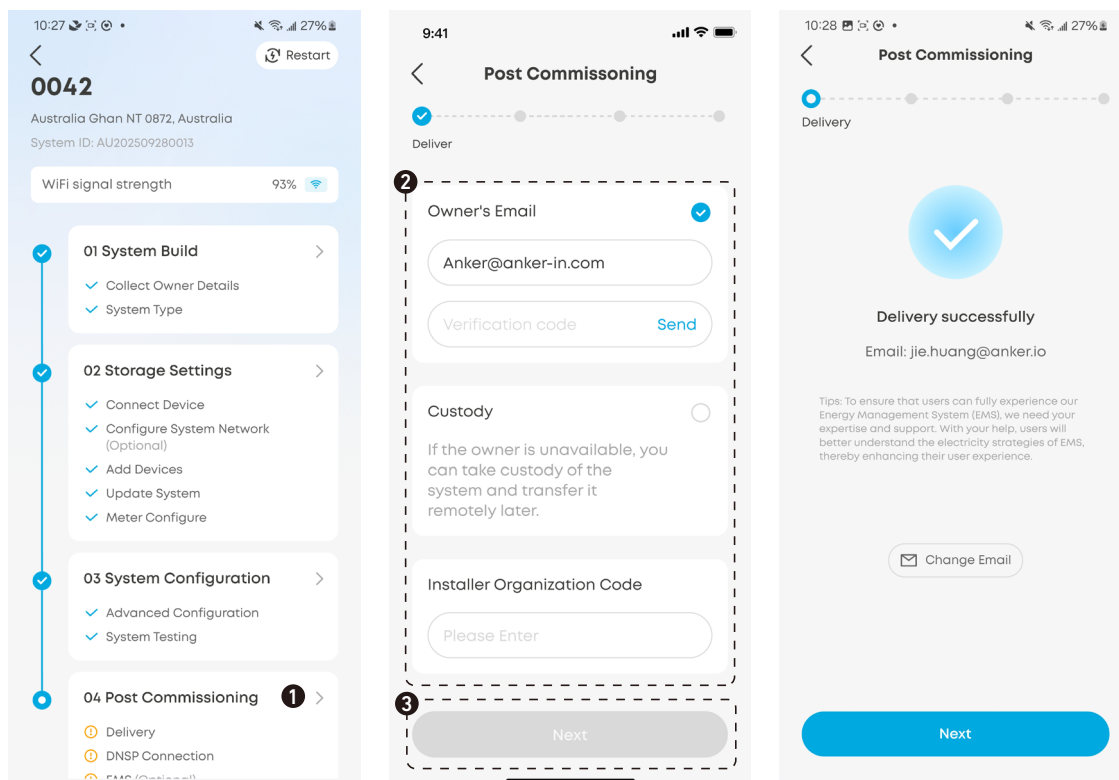
- 1 Select **Start** to perform the system test.
- 2 If system testing is successful, tap **Next** to proceed. If system testing fails, follow the on-screen troubleshooting instructions and tap **Retry** or **Skip**.



Post Commissioning

Step 1: Delivery

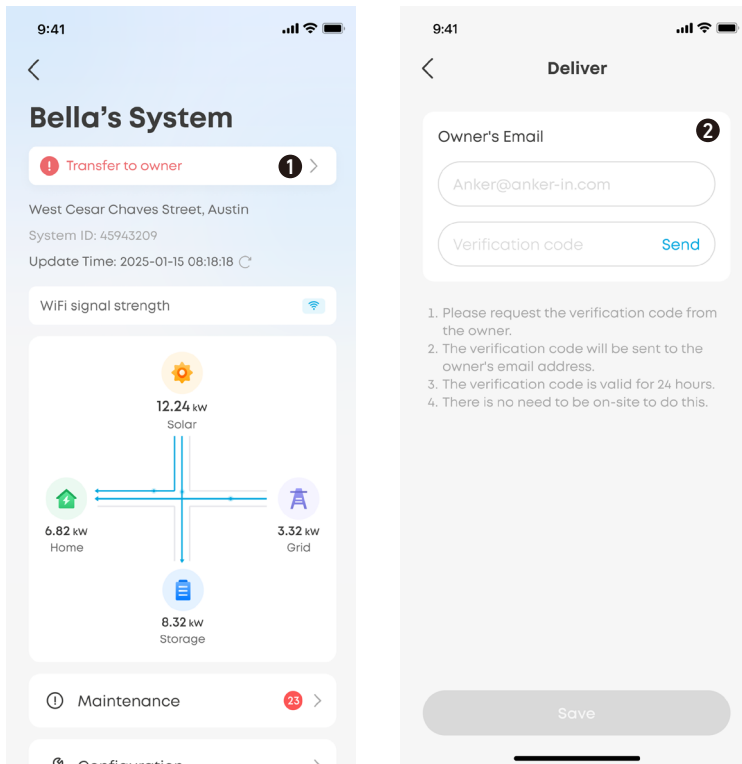
- 1 Tap **Post Commissioning**.
- 2 Enter the owner's e-mail and the verification code. Or you can select **Custody** if the owner's email is unavailable. Note: If you are an electrician without registered companies, you should enter an installer organization code for selecting Custody.
- 3 Tap **Next** to proceed.





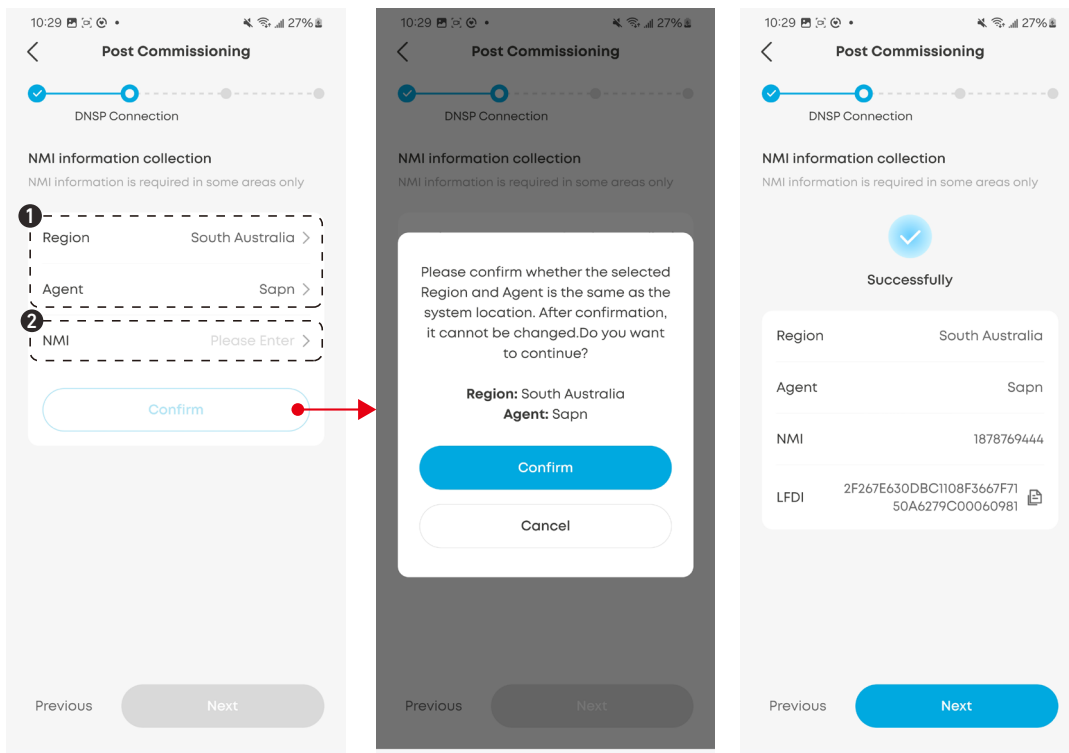
How can I change the email to the owner's email if I have selected Custody?

Access the main page of the power system, and then tap Transfer to owner to enter the owner's email and verification code.



Step 2: DNSP Connection

- 1 Select your **Region** and **Agent**.
- 2 Fill in **NMI** (National Metering Identifier) numbers.
- 3 The information is submitted when the "Successful" message is prompted. Tap **Next** to proceed to the next step.



Step 3: Energy Management

❶ Choose one work mode from the following.

- **Self-Consumption:** Maximize the use of solar power and reduce grid power consumption.

Note: This mode requires a PV system.

- **Time of Use:** The battery will charge during low-cost electricity hours and discharge during high-cost electricity hours.

- **Off-Grid:** Power your home with solar energy and the stored battery energy when the grid goes down.

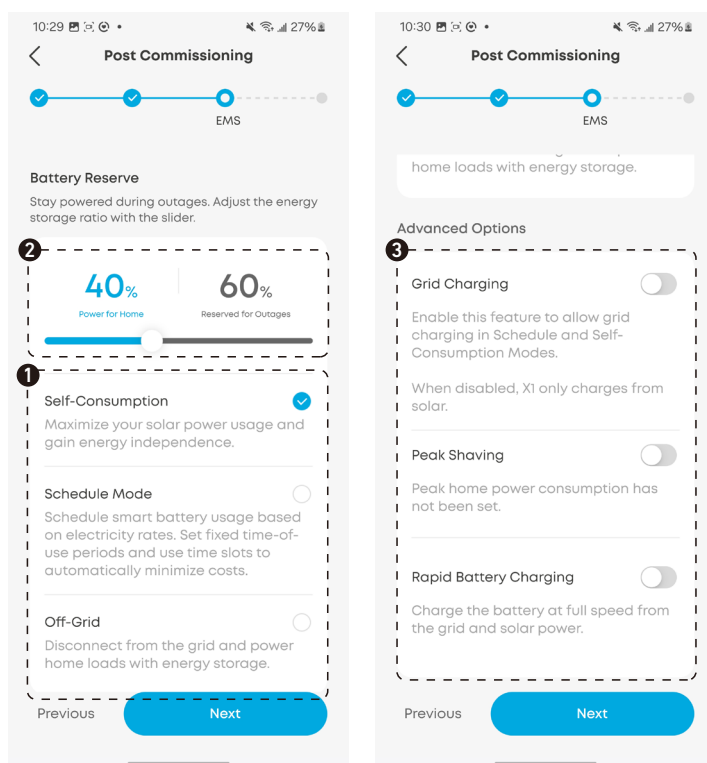
Note: The Anker SOLIX X1's off-grid mode is incompatible with the Sunlight Backup mode of the Enphase microinverter. It is necessary to disable the Sunlight Backup mode of the Enphase microinverter before using the Anker SOLIX X1's off-grid mode.

❷ Set backup reserve by adjusting the slider.

- To allow more capacity for the **Self-Consumption** mode or **Time of Use** mode, set a lower reserve percentage.
- To reserve more energy for outages or if they are frequent in the user's area, set a higher reserve percentage.

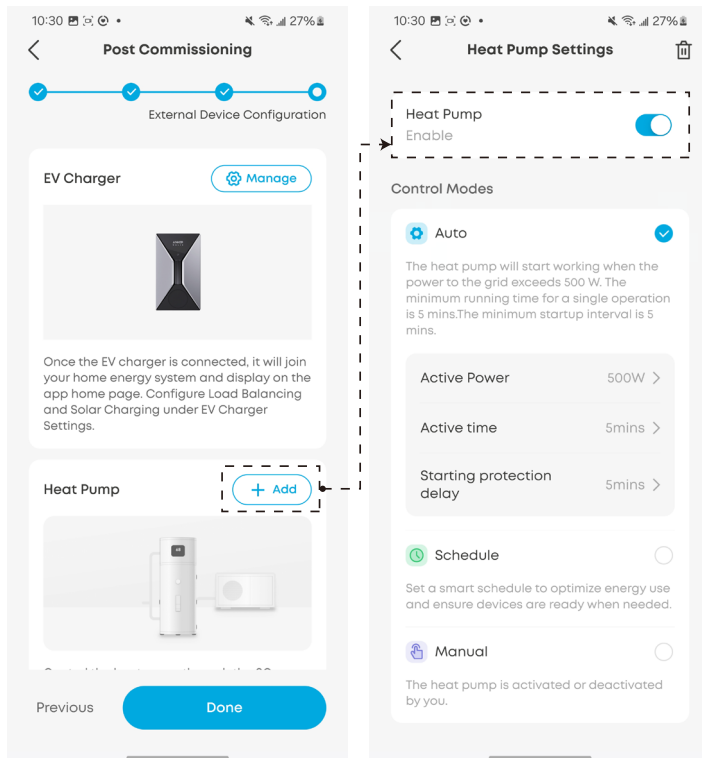
❸ Select advanced options.

- **Grid Charging:** Turn on to charge battery modules from the grid. Turn off to charge battery modules only from solar power.
- **Peak Shaving:** Set the peak power to prevent tripping or an increase in grid charges (in some areas).
- **Rapid Battery Charging:** Charge the battery modules at full speed using both grid and solar power.



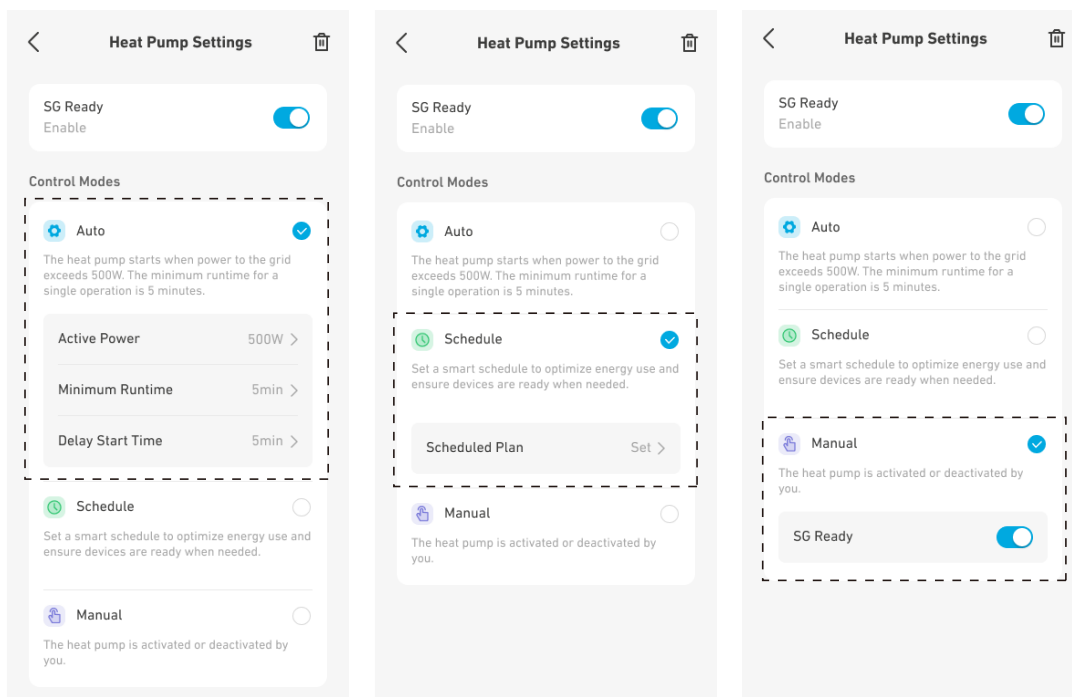
Step 4-1: Configure External Device (Heat Pump)

❶ If necessary, add the heat pump to the system and enable the heat pump function.



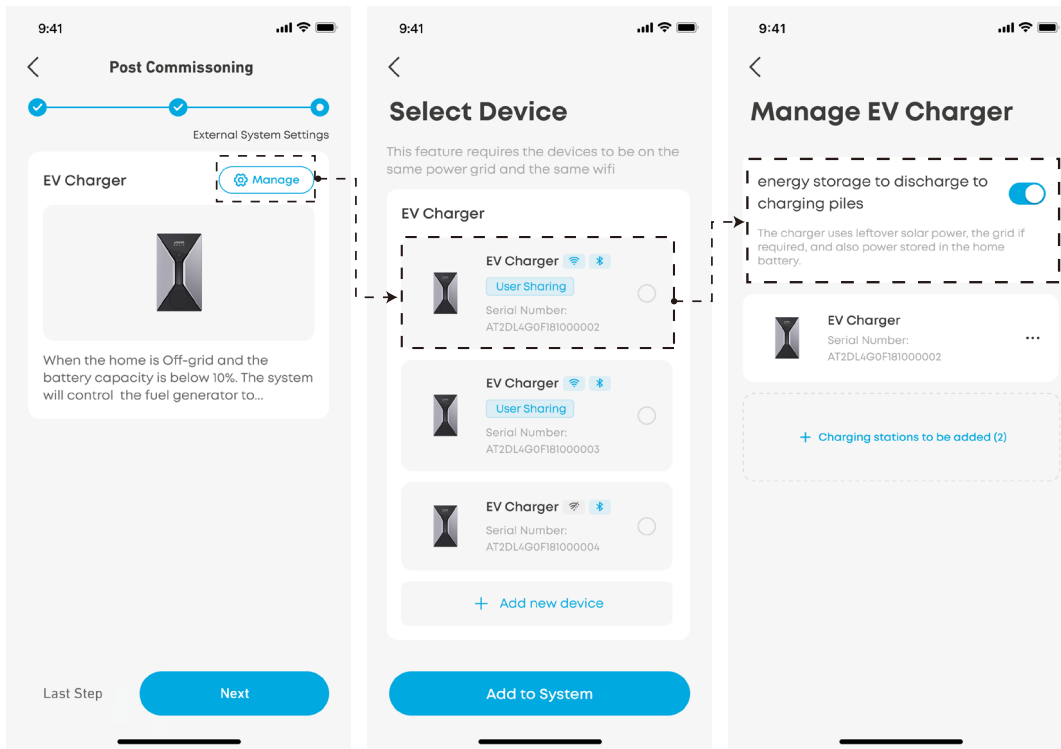
❷ Select a control mode from the options below.

- **Auto Mode:** The heat pump starts up when the solar power supplied to the grid exceeds the rated power of the heat pump.
 - Active Power: Enter the rated power of the heat pump.
 - Minimum Runtime: Set the minimum ON duration of the heat pump to avoid rapid ON/OFF cycles.
 - Delay Start Time: Set the minimum OFF duration of the heat pump to avoid rapid ON/OFF cycles.
- **Schedule Mode:** The heat pump operates according to a predefined schedule. You can customize up to four time periods for weekdays and weekends respectively.
- **Manual Mode:** Enable this mode to manually turn the heat pump on or off.

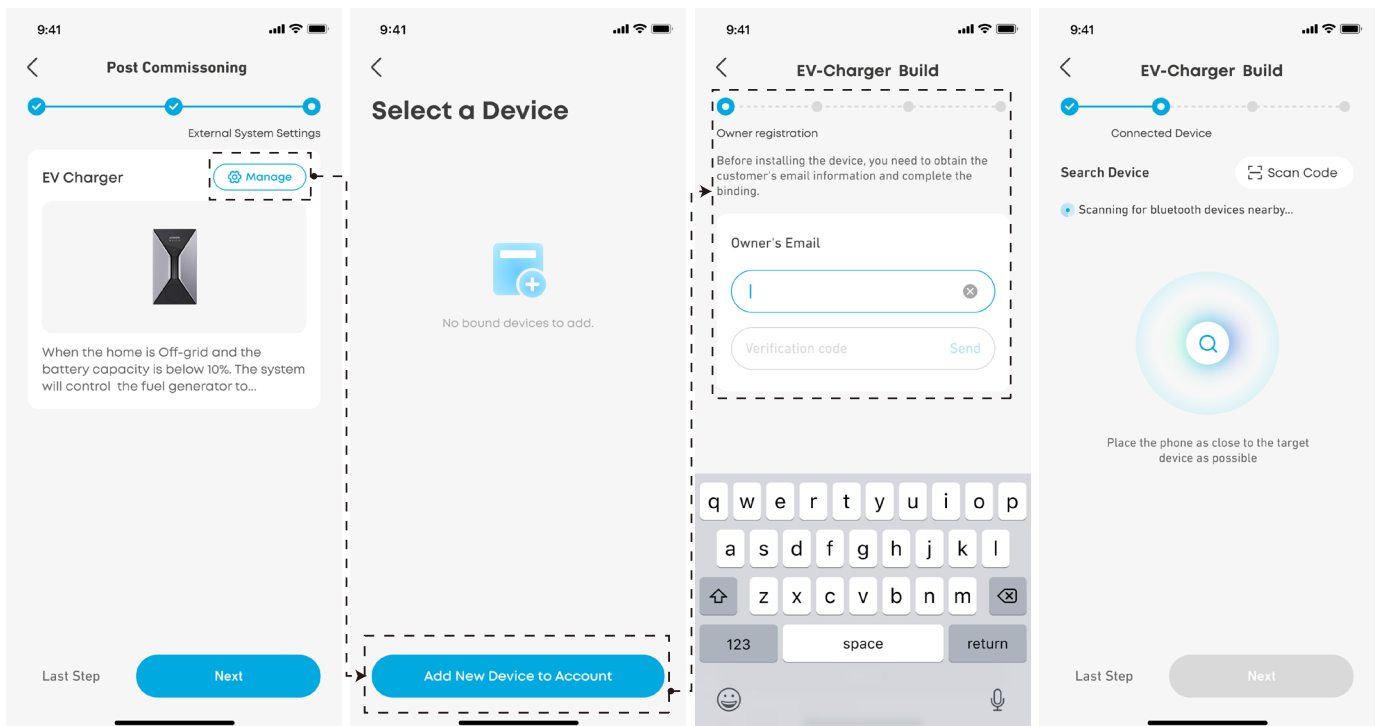


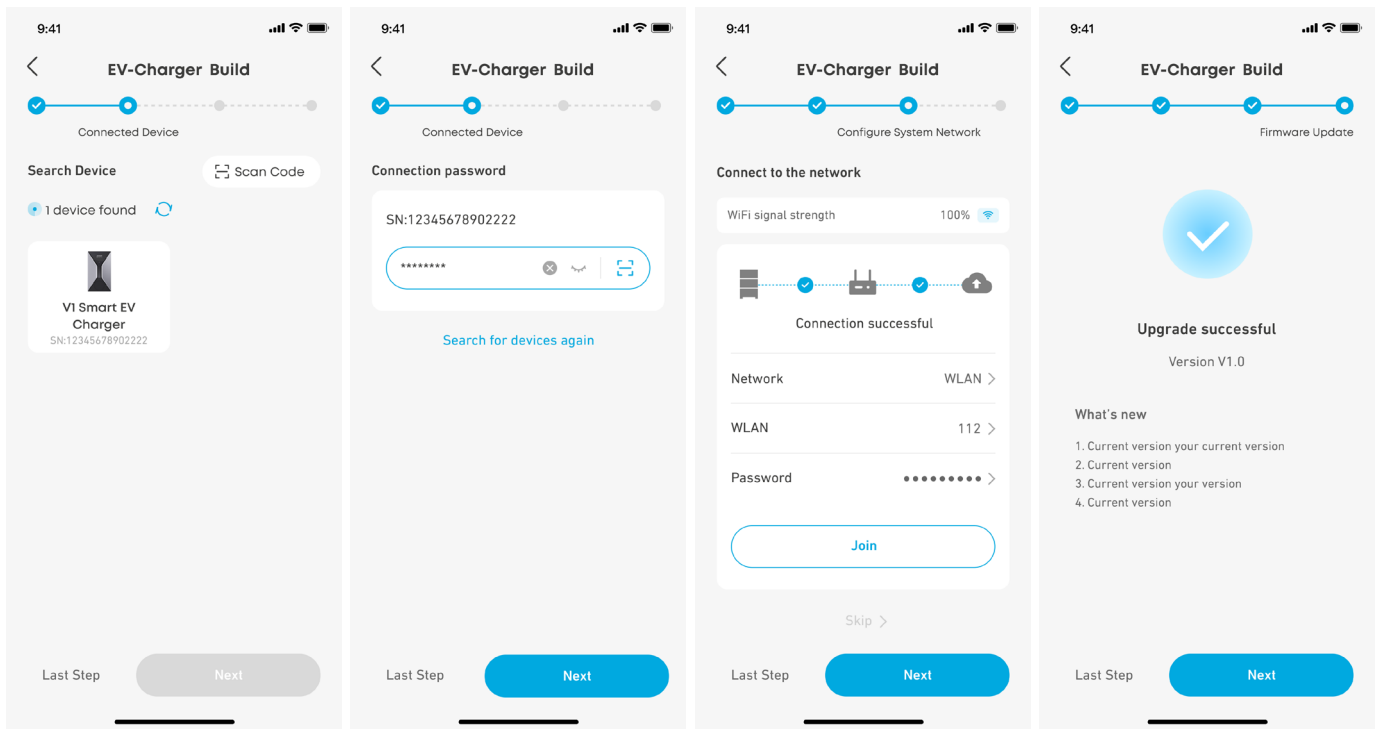
Step 4-2: Configure External Device (EV Charger)

You can also add EV chargers into the energy system to enable Anker SOLIX X1 battery discharging to EV chargers.



If you have not bound any EV chargers to the account, follow the in-app instructions to add an EV charger first.

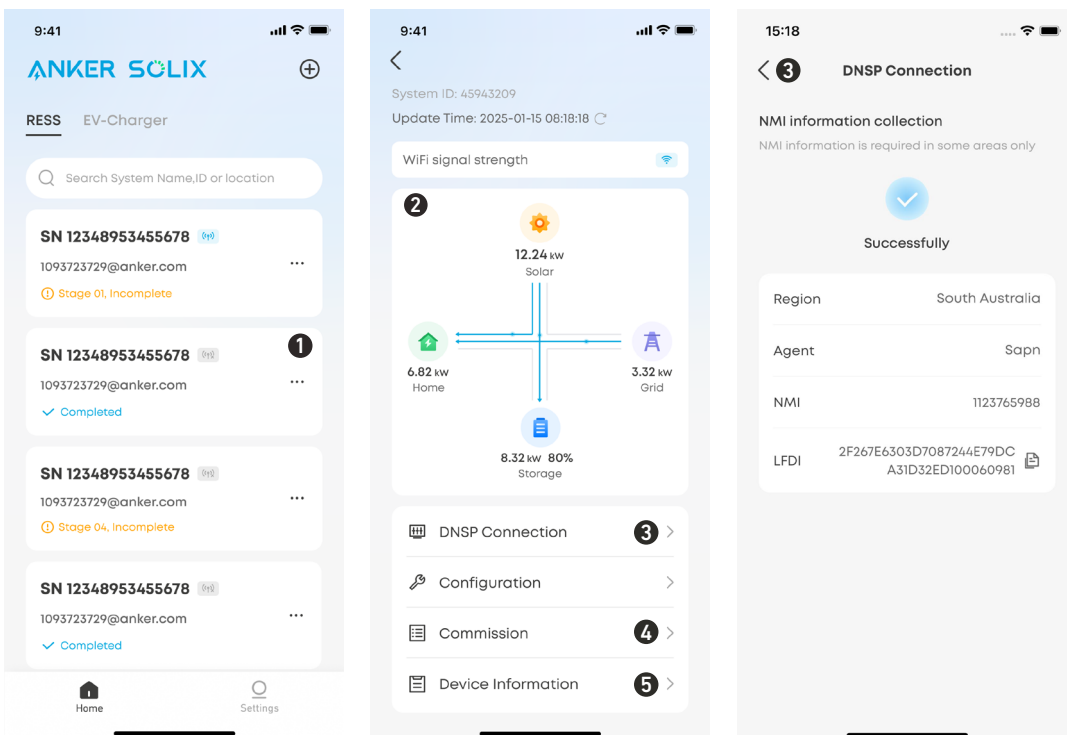


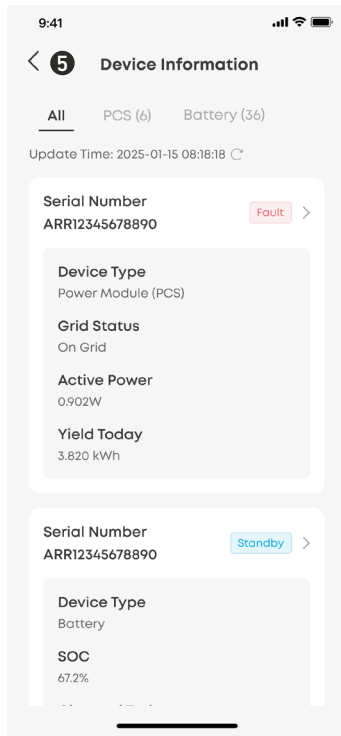
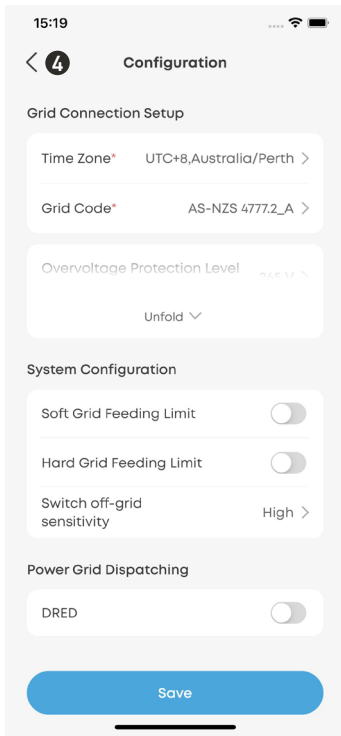


Manage System

Monitor System Status

1. Tap the system name from the home screen to access the **Monitor** screen.
2. The diagram shows the energy flows between the household loads, photovoltaic power, the grid, and the energy storage system.
3. Tap **DNSP Connection** to view NMI information.
4. Tap **Configuration** to configure the system settings.
5. Tap **Device Information** to view device status.

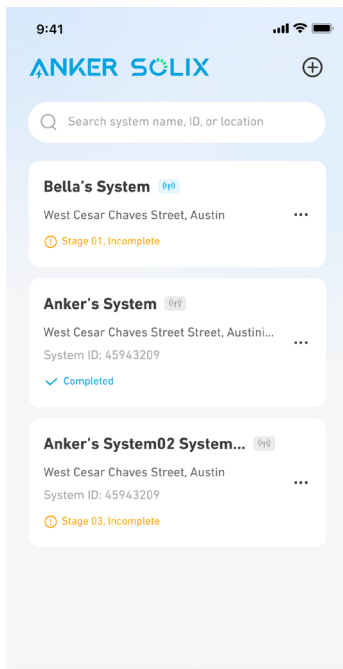




Check Commissioning Status

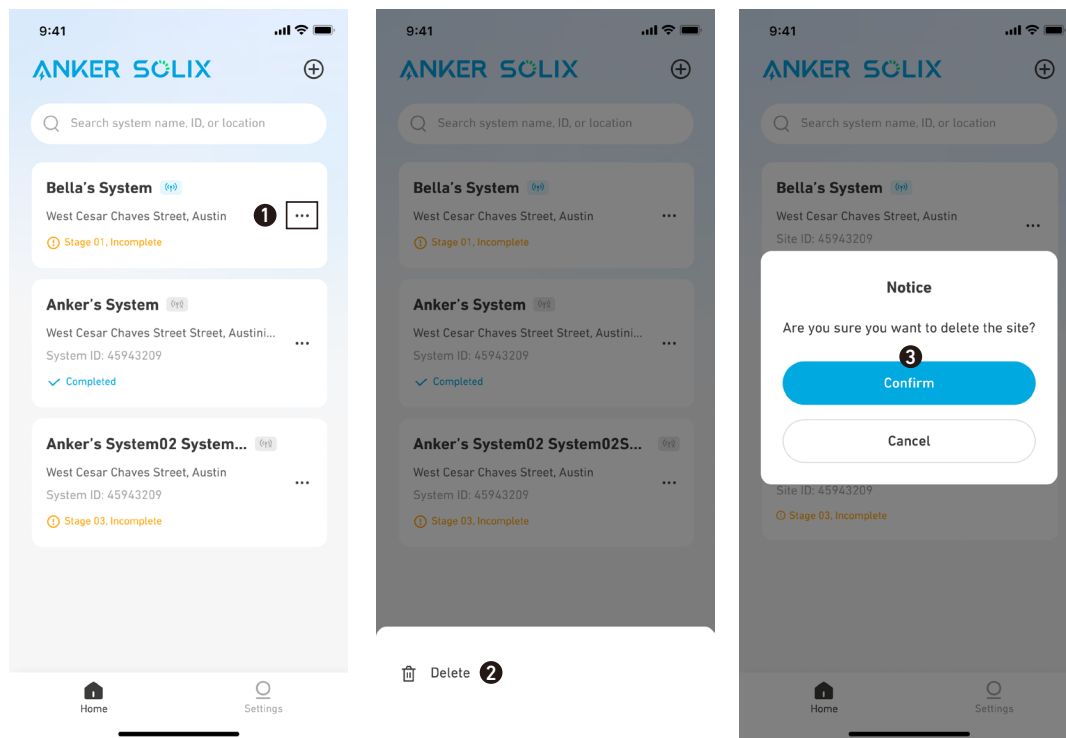
Check the commissioning status under the system name on the home screen.

- **Incomplete:** Tap the corresponding system name to continue with the commissioning process.
- **Completed:** The system commissioning has been completed.



Delete System

If necessary, delete a system that has not completed commissioning.

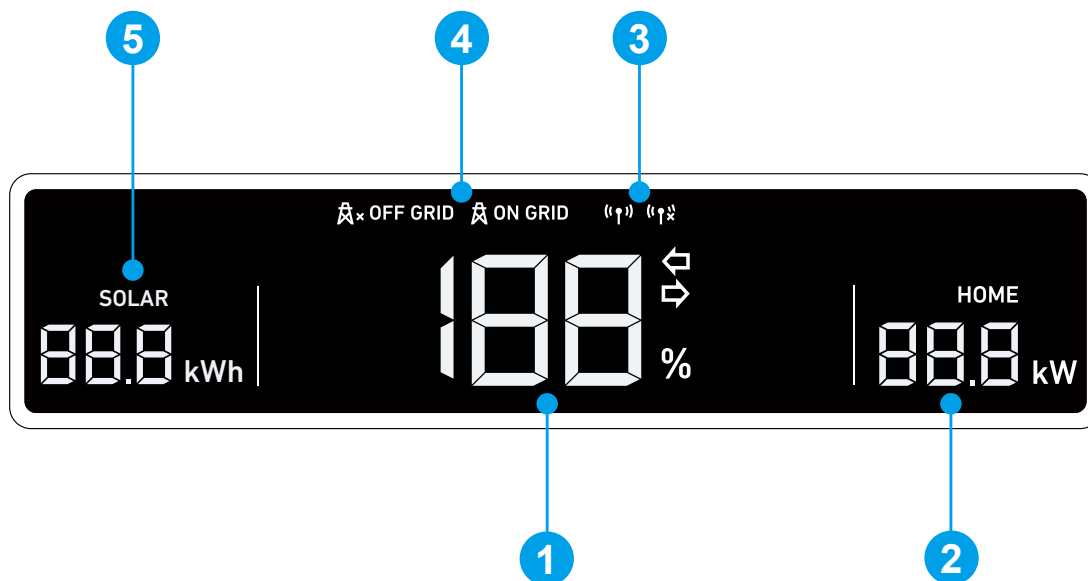


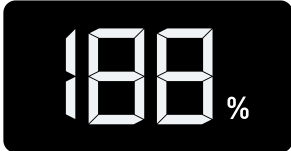
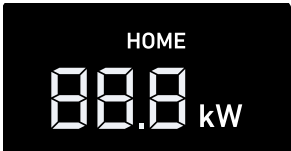
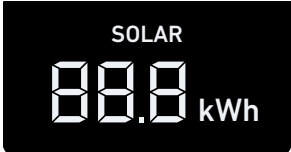
After commissioning, please inform the owner that the equipment can only be turned off using the Anker app until grid connection approval is granted. Once approval is complete, the equipment can be turned on and off using the Anker app.

8. Screen and Light Guide

8.1 LED Screen Guide

The LED screen of the power module will show you the working status of the system.



❶ Battery	 Overall Battery Level	
	 Recharging	 Discharging
❷ Home Loads	 Home Load Power	
❸ Internet	 Connected to the Internet	 Disconnected from the Internet
	 ON GRID	 OFF GRID
❹ Grid	On Grid	Off Grid
❺ Solar	 Cumulative Solar Energy for the Day	

8.2 Status Light Indication

The power module's light bar will indicate the system status.

	Light Bar	Status
	Flashing white once, and then steady white	Powered on
	Flashing white	Configuring or connecting to the Internet
	Steady white	On-Grid mode
	Steady blue	Off-Grid mode
	Flashing blue	Battery low in Off-Grid mode
	Flashing red	Malfunction
	Flashing white in sequence	Firmware upgrading

9. System Maintenance

9.1 Power Off the System

To power off the system:

1. Toggle the PV switch of the power module to OFF.
2. Press the black start button of the power module for 8 seconds.
3. Disconnect the circuit breaker between the power module and the grid.
4. Toggle the BAT switch of the power module to OFF.



- After the system powers off, residual electricity and heat may still cause electric shocks and burns. Wait for at least 2 minutes after powering off the system before performing any operations.
- Only qualified professionals or trained personnel are allowed to operate and maintain the equipment.
- To force a startup of the power module, press the black start button for 3 seconds. To force a shutdown of the power module, press the same button for 8 seconds.

9.2 Routine Maintenance

To ensure the energy storage system operates properly for an extended period, it is recommended to perform routine maintenance.



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

Check Item	Check Method	Maintenance Interval
System cleanliness	Check periodically that the heat sinks are free from obstacles and dust.	Once every 6 to 12 months
System running status	• Check that the battery is not damaged or deformed. • Check that the battery does not produce abnormal sound during operation. • Check that the battery parameters are correctly set when the battery is running.	Once 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 locked by waterproof or dustproof caps.	The first inspection is 6 months after the initial commissioning. From then on, the interval can be 6 to 12 months.
Grounding reliability	Check that ground cables are securely connected.	The first inspection is 6 months after the initial commissioning. From then on, the interval can be 6 to 12 months.
Firmware version	Check that the firmware is updated to the latest version via the app.	Once every 6 months

9.3 Troubleshooting

Once a system fault is detected, you will receive push notifications via the Anker SOLIX Professional app, Anker SOLIX Professional (O&M Portal), or email.

Please refer to the notifications for troubleshooting measures. If you require further assistance, please contact Anker Customer Service.

10. Customer Service

✉ support@ankersolix.com

☎ (AU) +61 1800 929 112

👤 10-Year Limited Warranty

11. Specifications

Specifications are subject to change without notice.

Model	X1-H3.68K-S	X1-H4.6K-S	X1-H5K-S	X1-H6K-S
Battery Input				
Battery Type	LFP			
Charge Voltage Range	390 - 550 VDC			
Discharge Voltage Range	370 - 500 VDC			
Battery Capacity	5 - 30 kWh			
PV Input				
Max. Input Power	7.36 kW	9.2 kW	10 kW	12 kW
Max. Input Voltage	600 VDC			
Operating Voltage Range	80 - 550 VDC			
Start-Up Voltage	100 VDC			
MPPT Voltage Range	80 - 550 VDC			
Rated Input Voltage	360 VDC			
Max. Input Current	16 / 16 ADC			
Isc PV Array Short Circuit Current	20 / 20 ADC			
Number of MPPTs	2			
Number of Strings per MPPT	1			
AC Output (On-Grid)				
Rated Output Power	3.68 kW	4.6 kW	5 kW	6 kW
Rated Output Current	16 A	20 A	21.7 A	26 A
Max. Output Apparent Power	4 kVA	5 kVA	5.5 kVA	6.6 kVA
Max. Output Current	18.1 A	22.7 A	25.0 A	30.0 A
Rated Output Voltage	220 / 230 / 240 VAC			
Rated Frequency	50 / 60 Hz			
Max. Units in Parrallel	2			
Power Factor	0.8 ind - 0.8 cap			
THDU (@Linear Load)	< 3%			
AC Output (Off-Grid)				
Rated Output Power	3.68 kW	4.6 kW	5 kW	6 kW
Rated Output Current	16 A	20 A	21.7 A	26 A
Max. Output Apparent Power	4 kVA	5 kVA	5.5 kVA	6.6 kVA
Max. Output Current	18.1 A	22.7 A	25.0 A	30.0 A
Peak Output Apparent Power (Duration)	7.2 kVA (10s)	10 kVA (10s)	10 kVA (10s)	10 kVA (10s)

Rated Output Voltage	220 / 230 / 240 VAC			
Rated Frequency	50 / 60 Hz			
Max. Units in Parrallel	1			
THDU (@Linear Load)	< 2%			
Switch Time	< 10 ms			
AC Input				
Max. Input Apparent Power	7.2 kVA	10 kVA	10 kVA	10 kVA
Max. Input Current	31.3 A	40 A	40 A	40 A
Protection				
Anti-Isoation Protection	Yes			
Over Current Protection	Yes			
AC Short-Circuit Protection	Yes			
Over Voltage Protection	Yes			
DC Surge Protection	Type II			
AC Surge Protection	Type III			
Over Temperature Protection	Yes			
PV Input Reverse Polarity Protection	Yes			
Battery Input Reverse Polarity Protection	Yes			
Insulation Impedance Detection	Yes			
Residual Current Detection	Yes			
Efficiency				
Max. Efficiency	97.4%	97.5%	97.4%	97.6%
Connectivity				
Internet Connectivity	Wi-Fi, Bluetooth, Ethernet, 4G (Optional)			
Other				
Weight	19 kg			
Dimensions (W × H × D)	670 × 335 × 150			
Noise	≤ 30 dB ¹			
Operation Temperature	-20°C to 55°C ²			
Relative Humidity	0 to 100%			
Max. Operating Altitude	Up to 4000 m. Power derates from 2000 m.			
Ingress Protection Rating	IP66			

¹ Tested in Anker laboratory at 1 m distance and typical scenarios.

² Power derates once ambient temperature exceeds 45°C.

Note: For battery supply (no matter how many battery modules in one system or parallel systems), the max. short circuit current is 970 A, and the max. D.C. voltage is 550 V.

12. Safety Information

IMPORTANT SAFETY INSTRUCTIONS

Symbols

Symbol	Description
 CAUTION	Caution Indicates a low-risk hazard. Failure to avoid this hazard could result in minor or moderate injury.
 WARNING	Warning Indicates a hazard with a moderate level of risk. Failure to avoid this hazard could result in death or serious injury.
 DANGER	Danger Indicates a highly risky hazard. Failure to avoid this hazard could result in death or serious injury.
	Refer to Operating Instructions Indicates that users should refer to operating or installation instructions before proceeding.
	Risk of Electric Shock from Stored Energy Indicates discharge time is 2 minutes from de-energization.
	Risk of Electric Shock Indicates components that present risk of electrical shock.
	Caution, Hot Surface Indicates that equipment surfaces may be hot and pose a burn risk.
	PE Conductor Terminal Indicates a terminal that allows the electrical connection of conductors for earthing or grounding purposes.

General Information

SAVE THESE INSTRUCTIONS - This document contains important instructions that must be followed during installation, use, and maintenance.

**CAUTION**

Read instructions carefully before performing any operation on the equipment.

Do not make any changes or create settings that are not described in this document. If physical injury, loss of data, or damage is caused by failure to follow instructions, the warranty does not apply.

Personal Safety

**WARNING**

To reduce the risk of burns, do not touch the equipment surfaces as they may be hot.

**WARNING**

Never touch the enclosure of operating equipment.

- Ensure that power is off during installation. Do not install or remove a cable with the power on.
- Non-standard and improper operations on the energized equipment may cause fire, electric shocks, or explosion, resulting in property damage, personal injury, or even death.
- Before operations, remove conductive objects such as watches, bracelets, bangles, rings, and necklaces to prevent electric shocks.
- During operations, use dedicated insulated tools to prevent electric shocks or short circuits.
- Do not make contact with other conductors, or indirect contact with power supply equipment through damp objects.
- Do not power on the equipment until it has been installed or confirmed by a professional.
- Only qualified professionals or trained personnel are allowed to install, operate, and maintain the equipment.
- If there is a probability of personal injury or equipment damage during operations on the equipment, immediately stop the operation, report the case to the supervisor, and take feasible protective measures.
- Do not touch the energized equipment, as the enclosure may be hot.

Electrical Safety



CAUTION

Do not disconnect under load!



WARNING

Use conductors with insulation rated for at least 90°C / 194 °F .



WARNING

Do not wire when energized.



WARNING

Risk of electric shock. Terminals on the line and load sides may be energized when circuit breakers are in the open position.



DANGER

Risk of electric shock from stored energy. Start maintaining the equipment at least 2 minutes after the equipment disconnects from all external power supplies.

- Before installation, ensure that the equipment is intact. Otherwise, electric shocks or fires may occur.
- Non-standard and improper operations may result in fire or electric shocks.
- Prevent foreign matter from entering the equipment during operations.
- Do not route cables behind the air intake and exhaust vents of the equipment.
- For the equipment that needs to be grounded, install the ground cables first when installing the equipment and remove the ground cables last when removing the equipment.
- Before installing or removing power cables, the equipment and its switches must be disconnected.
- Do not damage the grounding conductors.
- The equipment terminals are used for electrical connections only.
- Ensure that the power module is connected to external breakers for the AC output circuit and the battery circuit.
- Ensure that all electrical connections comply with local electrical standards.
- Obtain approval from the local electric utility company before using the equipment in grid-tied mode.
- Ensure that the cables you prepared meet local regulations.
- The maximum operating temperature for the included cables is 221 °F / 105°C.
- Use dedicated insulated tools when performing high-voltage operations.
- Before making electrical connections, switch off the disconnecter on the upstream device to cut off the power supply if people may come into contact with energized components.
- Before connecting a power cable, check that the label on the power cable is correct.
- If the equipment has multiple inputs, disconnect all the inputs before operating the equipment.

Environmental Requirements

- Do not expose the equipment to flammable or explosive gas or smoke. Do not perform any operation on the equipment in such environments.
- Do not store any flammable or explosive materials near the equipment.
- Install the equipment in an area far away from liquids and in a well ventilated environment.
- To prevent fire due to high temperature, ensure that the ventilation vents or heat dissipation system are not blocked when the equipment is running.

Mechanical Safety

- Do not drill holes into the equipment.
- Wear goggles and protective gloves when drilling holes.
- When moving the equipment by hand, wear protective gloves to prevent injuries.
- Clean up any debris that may have accumulated within or around the equipment after drilling.
- Be cautious to avoid injury when moving heavy objects.

Commissioning

- When the equipment is powered on for the first time, ensure that professional personnel set parameters correctly. Incorrect settings may result in inconsistency with local certification and affect the normal operation of the equipment.

Maintenance and Replacement



WARNING

Disconnect all sources of supply before servicing.

**WARNING**

Replace only with the same ratings and type of a fuse.

**WARNING**

Disconnect supply before changing a fuse.

**DANGER**

Only certified professionals are allowed to install and maintain the battery and external power supplies. Establish secure earth connections to mitigate high touch current before connecting to the power supply.

**WARRANTY VOID IF REMOVED**

Do not disassemble the equipment without authorization. Tampering with the equipment will invalidate the warranty.

- High voltage generated by the equipment during operation may cause an electric shock, which could result in death, serious injury, or serious property damage.
- Prior to maintenance, power off the equipment and strictly comply with the safety precautions in this document and relevant documents.
- After powering off the equipment, wait at least 2 minutes before disassembling any cables or components.
- Maintain the equipment with proper tools, testing equipment, and sufficient knowledge of this document.
- Turn off the equipment switches when maintaining the electric devices or power distribution devices connected to the equipment.
- Place temporary warning signs or erect fences to prevent unauthorized access to the maintenance site.
- If the equipment is faulty, contact your supplier.
- The equipment can be powered on only after all faults are rectified. Failing to do so may escalate faults or damage the equipment.

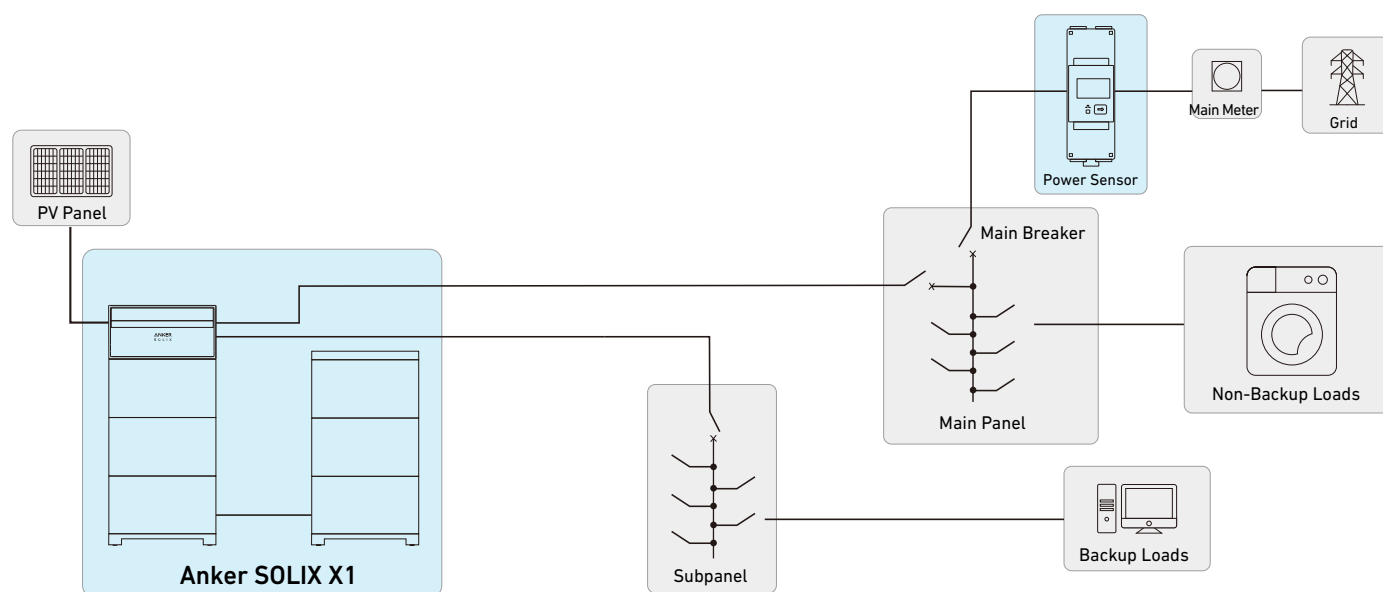
Appendix A. System Wiring



These diagrams are for illustration purposes only and represent sample site layouts to show system layout and metering. Please note that they depict common configurations and are not the only allowable ones. They should not be considered complete plan sets.

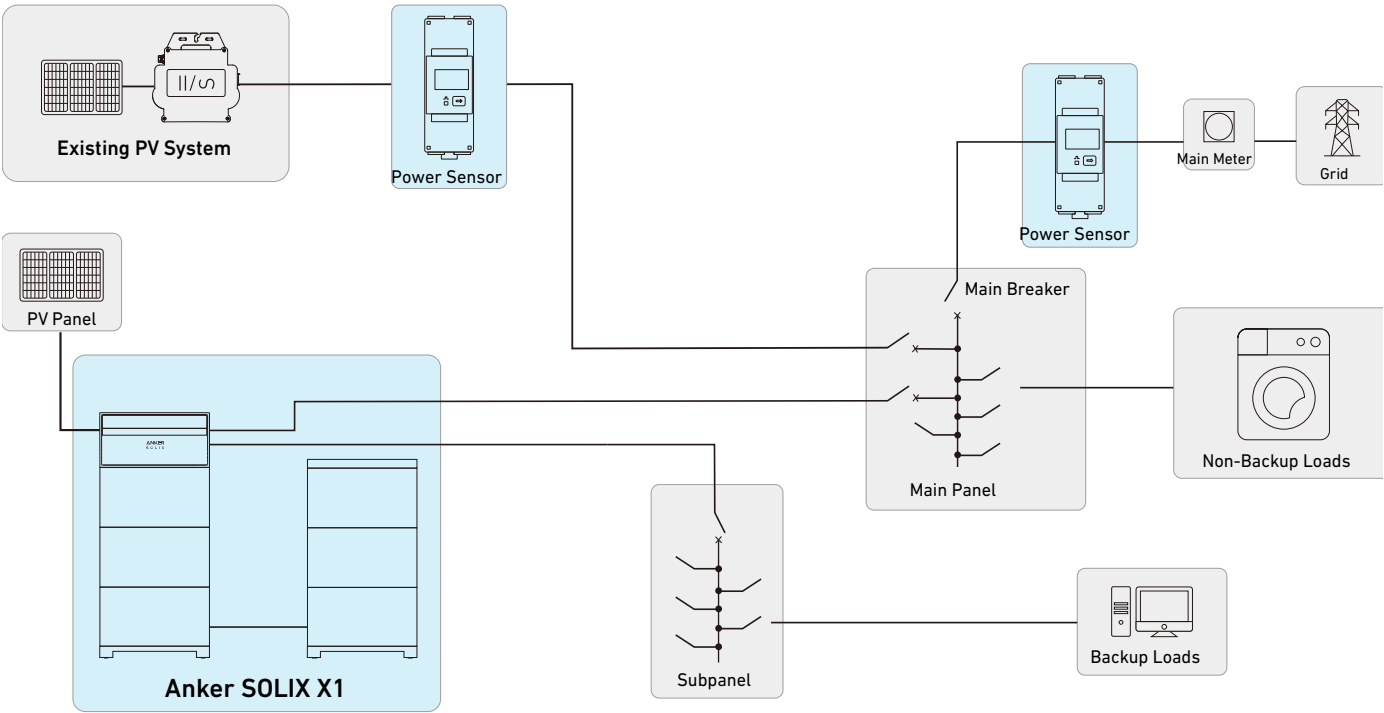
New-Build Scenario

The following diagram shows the wiring for installation without an existing PV system.

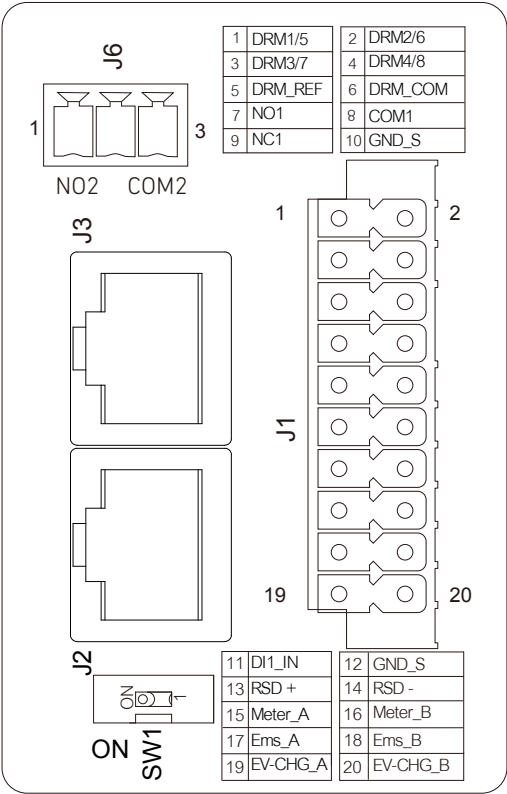


Retrofit Scenario

The following diagram shows the wiring for installation with an existing PV system.



Appendix B. Communication Ports and Terminals



Terminal/Port			Definition
J1	1	DRM1/5	DRM Terminals
	2	DRM2/6	
	3	DRM3/7	
	4	DRM4/8	
	5	DRM REF	
	6	DRM COM	
	7	NC1	Dry Contacts for Heat Pump 1
	8	COM1	
	9	NC1	
	10	GND_S	Shield Grounding
	11	DI1 IN	Emergency Stop Digital Input
	12	GND_S	Shield Grounding
	13	RSD_+	Rapid Shutdown Devices
	14	RSD_-	
	15	Meter_A	Communication for Power Sensors
	16	Meter_B	
	17	Ems_A	Communication for Energy Management Systems
	18	Ems_B	
	19	EV-CHG_A	Communication for EV Charging
	20	EV-CHG_B	
J2	/	RJ45	Parallel Connection of Power Modules
J3	/	RJ45	
J6	/	NO2	Dry Contacts for Generators, Loads, and Heat Pump 2
	/	COM2	

Appendix C. Power Sensor Wiring Diagrams

[Anker SOLIX X1-H5/6K-S Meter Wiring Diagrams \(AU\)](#)

Appendix D. Power Module Parallel Instructions

[AC Grid Port Parallel \(Two Power Modules\)](#)

[AC Grid Port Parallel \(More Than Two Power Modules\)](#)

Appendix E. Modbus Protocol Guide

[Anker SOLIX X1 Series Modbus Protocol](#)

Appendix F. Enable Time-of-Use (TOU) Mode in Anker App

What is TOU Mode

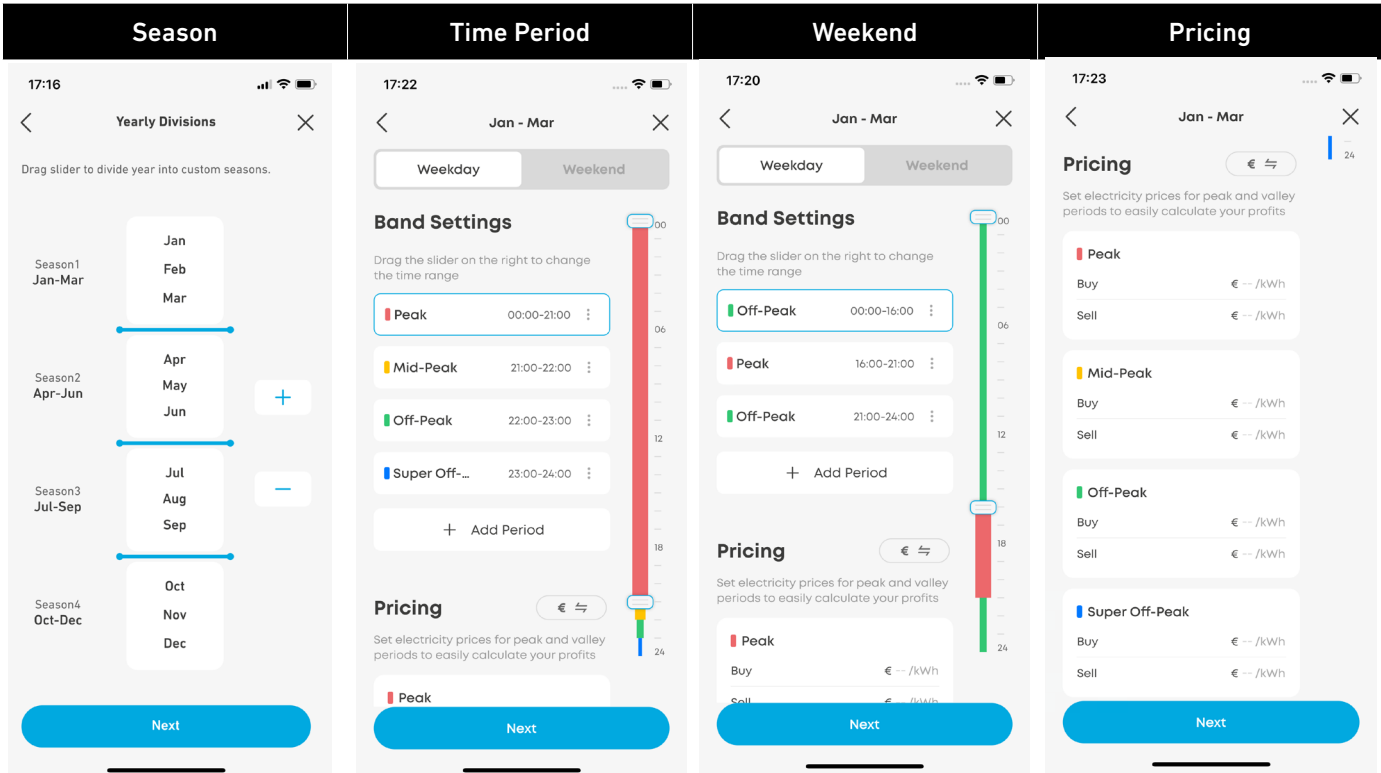
Time-of-Use (TOU) mode is an energy optimization feature designed to maximize savings. It works by managing charging and discharging cycles intelligently. When this mode is enabled, your system charges during periods of the lowest utility rates and powers your home during high-rate periods. This approach helps reduce your overall energy costs.

How TOU Mode Works

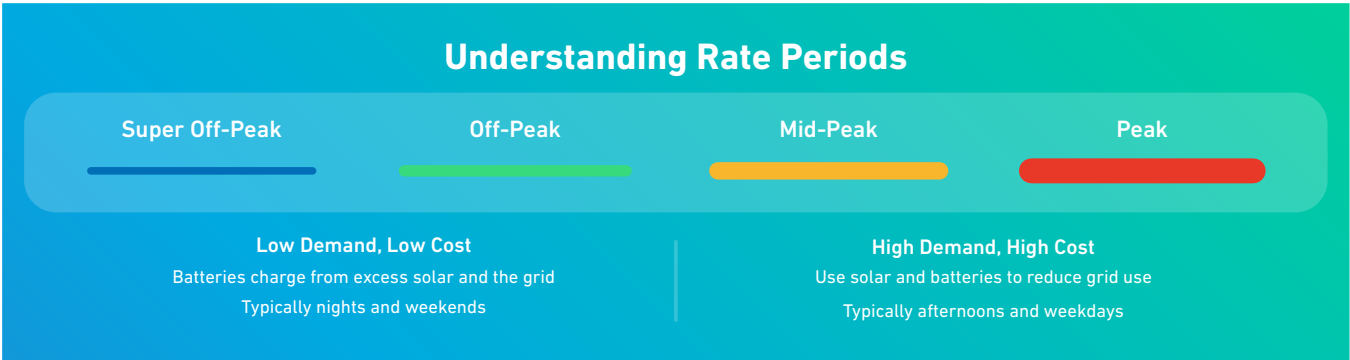
TOU mode optimizes energy usage based on your utility rate plan. The plan determines the cost of electricity based on:

- Time of day
- Day of the week
- Season

Key Elements of TOU Mode



- **Season:** Energy prices vary by season due to supply and demand changes.
- **Time Period:** Energy prices fluctuate throughout the day, categorized into:
 - Off-Peak
 - Super Off-Peak
 - Mid-Peak
 - Peak



- **Weekend:** Special rates may apply on weekends, often featuring super off-peak periods.
- **Pricing:** Includes costs for importing (buying) and exporting (selling) energy.

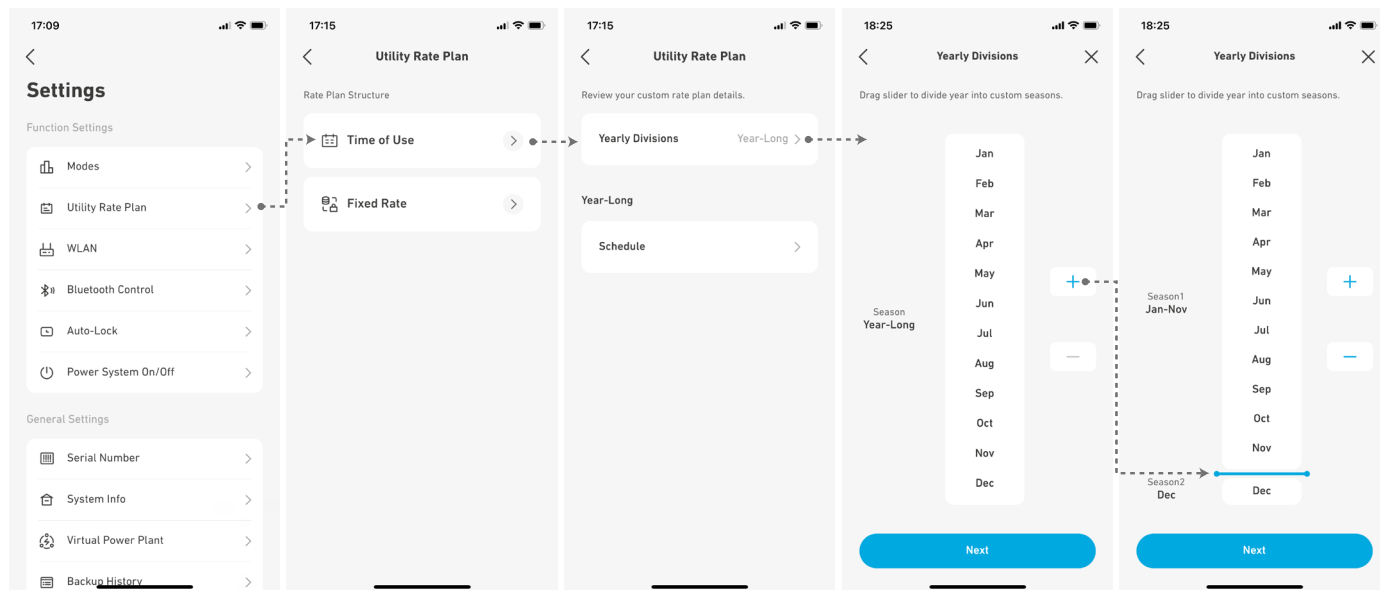
Setting Up TOU Mode



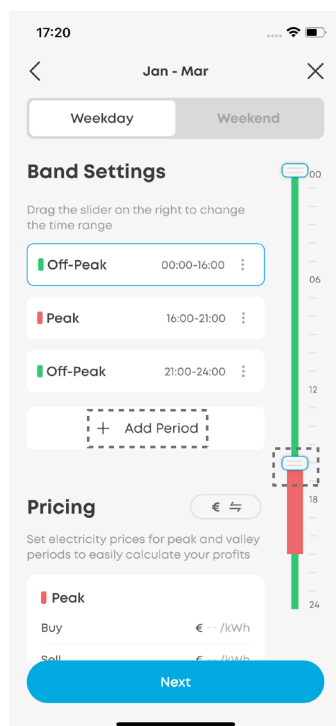
Before activating TOU mode in the Anker app, configure your utility rate plan. This information is typically available on your electric bill or the utility website. You can also contact your utility provider for assistance.

To set up TOU mode, follow these steps:

1. Open the Anker app.
2. Navigate to the **Settings** menu from the home screen.
3. Tap **Utility Rate Plan** and select **Time of Use**.
4. Choose either **Seasons** or **Year-Long** based on your rate structure.
 - If using **Year-Long**, proceed to the next step.
 - If using **Seasons**, set your season with the handles. You can add or remove seasons using the + or –. Up to five seasons are supported.



5. Edit time periods by dragging the slider. Tap **Add Period** to include additional periods. Repeat this for weekends if necessary.



6. Enter the rate pricing. Set unique "buy" and "sell" prices for each time period.

Pricing

Set electricity prices for peak and valley periods to easily calculate your profits

Time Period	Buy Price (€/kWh)	Sell Price (€/kWh)
Peak	€ -- /kWh	€ -- /kWh
Mid-Peak	€ -- /kWh	€ -- /kWh
Off-Peak	€ -- /kWh	€ -- /kWh
Super Off-Peak	€ -- /kWh	€ -- /kWh

Next

7. Repeat steps 5 and 6 for all time periods and seasons.

8. Review the summary screen and tap **Save**.

9. Return to **Settings** and select **Modes > Time of Use**.

Settings

Function Settings

- Modes
- Utility Rate Plan
- WLAN
- Bluetooth Control
- Auto-Lock
- Power System On/Off
- Grid Dispatch

General Settings

- Serial Number
- System Info
- Backup History

Modes

Battery Reserve

Stay powered during outages. Adjust the energy storage ratio with the slider.

80% Power for Home | 20% Reserved for Outages

Self-Consumption

Maximize your solar power usage and gain energy independence.

Time of Use

Minimizes electricity bill.

Utility Rate Plan

Time of Use

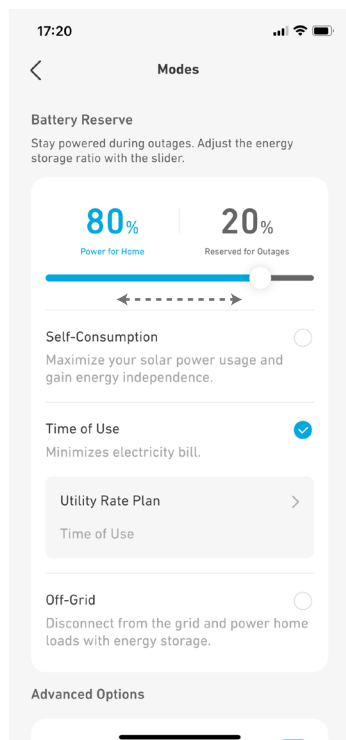
Off-Grid

Disconnect from the grid and power home loads with energy storage.

Advanced Options

10. Adjust the slider to set your preferred reserve.

- A lower reserve percentage allows more battery capacity for daily use.
- A higher reserve percentage saves more energy for grid outages.



💡 Once enabled, you can monitor your system's performance through the visuals on the Anker app home screen.

Revisions

Version	Release Time	Major Changes
V1.0	23 July 2024	First release.
V2.0	25 September 2024	1. Updated the installation environment requirements about the distance from coast. 2. Updated the steps of Configuring System (including Advanced Configuration) using the Anker SOLIX professional app.
V3.0	6 March 2025	1. Updated the size of AC power cable. 2. Added the scenario of connecting to the Power Sensor with CT connected. 3. Updated specifications.
V4.0	30 September 2025	1. Revised the spacing requirements in <i>Chapter 4 Pre-Installation</i> . 2. Updated the size of DC power cable. 3. Updated the appearance of the baseboard. 4. Added the step of "DNSP Connection" in Post Commissioning using the Anker SOLIX professional app. 5. Updated specifications. 6. Added <i>Appendix "Power Sensor Wiring Diagrams"</i> . 7. Added <i>Appendix "Power Module Parallel Instructions"</i> . 8. Added <i>Appendix "Modbus Protocol Guide"</i> . 9. Added <i>Appendix "Enable Time-of-Use (TOU) Mode in Anker App"</i> .
V5.0	31 December 2025	1. Added requirements for inclined walls in <i>Section 4.1 Select Installation Site</i> . 2. Updated the stacking requirements described in <i>Section 4.3 Measure Distance</i> . 3. Added notes about installation markings in <i>Chapter 5 Installation</i> . 4. Updated Customer Service information. 5. Anker SOLIX Professional App new functions: - Installer sign up - "Custody" in the Delivery of Post Commissioning - EV Charger management in the Configure External Device of Post Commissioning 6. Updated <i>Appendix "Power Module Parallel Instructions"</i> .