

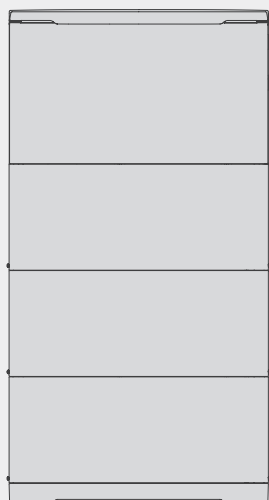
ECOFLOW

en

Installation Guide

V1.2

EcoFlow OCEAN 2 Plus Single-Phase
Solar Battery Storage Solution



User Manual

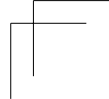
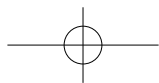
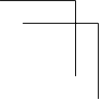
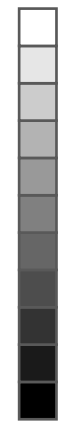
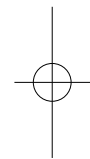
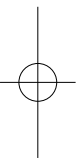
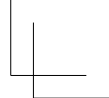
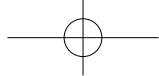
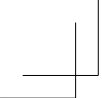


Installation Guide

For the latest documents, scan the QR code.

Contents

1	Disclaimer	
1	Safety Instructions	
1	Symbol Conventions	
1	Safety Symbols	
1	Important Safety Instructions	
3	Technical Specification	
5	Unpacking and Preparation	
5	What's in the Box	
6	Prepare Tools and Instruments	
7	System Installation	
7	Installation Environment Requirements	
8	Installation Clearance Requirements	
9	Install Battery	
11	Install Inverter	
12	Application Scenarios	
12	Single Inverter Setup	
15	Electrical Connection	
16	Wiring Diagram	
17	Description of Inverter and Battery Stacking Interfaces	
18	Connect PV Input Cables	
21	Connect GRID/BACKUP Cables	
23	Cascade Batteries	
24	Install COM Terminal With Shorting Wire	
26	Connect to Internet	
27	Installing Earth Fault Alarm (Required for Australia)	
27	Installing Demand Response Enabling Device (Required for Australia)	
28	(Optional) Install an EPO	
28	(Optional) Connect Ecosystem Appliances	
29	(Optional) Install Energy Meter for Partial Backup System	
31	(Optional) Install Energy Meter for System with Third-Party PV Integration	
33	Install trim covers	
34	System Commissioning	
34	Checking before Power-On	
34	System Power-On	
34	System Power-Off	
35	LED Indicators Introduction	
35	EcoFlow APP Setup (For Installer)	
40	How Users	
40	Add Devices	
44	Routine Maintenance	
44	Troubleshooting	
45	Inverter Storage	
45	Battery Storage and Recharge	
45	Replacement	
46	Decommissioning	



Disclaimer

Read this user manual carefully before using the product to ensure that you completely understand the product and can correctly use it. After reading this user manual, keep it properly for future reference. Improper use of this product may cause serious injury to yourself or others, or cause product damage and property loss. Once you use this product, it is deemed that you understand, approve and accept all the terms and content in this document. EcoFlow is not liable for any loss caused by the user's failure to use this product in compliance with this user manual.

In compliance with laws and regulations, EcoFlow reserves the right to final interpretation of this document and all documents related to this product. This document is subject to changes (updates, revisions, or termination) without prior notice. Please visit EcoFlow's official website to obtain the latest product information.

Safety Instructions

I Symbol Conventions

Symbol	Description
	Indicates a hazard with a high level of risk which, if not avoided, will result in death or serious injury.
	Indicates a risk of electric shock.
	Indicates a hazard with a medium level of risk which, if not avoided, could result in death or serious injury.
	Indicates a hazard with a low level of risk which, if not avoided, could result in minor or moderate injury.
	Indicates a potential hazard which, if not avoided, could result in equipment damage, data loss, performance deterioration, or unanticipated results. NOTICE is used to address practices not related to personal injury.
	Indicates additional information that promotes understanding of the product or a topic.

I Safety Symbols

Icon	Name	Meaning
	Caution	Caution, risk of danger.
	Electric shock warning	Caution, risk of electric shock.
	Delayed discharge	Danger to life due to high voltages in the inverter; observe a waiting time of 5 minutes. High voltages that can cause lethal electric shocks are present in the live components of the inverter. Prior to performing any work on the inverter, disconnect it from all voltage sources as described in this document.
	Burn warning	Do not touch a running equipment because the enclosure is hot when the equipment is running.
	Refer to documentation	Reminds operators to refer to the documents delivered with the equipment.
	Grounding	Indicates the position for connecting the protective earthing (PE) cable.
	Symbol of a crossed-out trash can	WEEE designation Do not dispose of the product together with the household waste but in accordance with the disposal regulations for electronic waste applicable at the installation site.
	CE marking	The product complies with the requirements of the applicable EU directives.

I Important Safety Instructions

• General Requirements

DANGER

1. Do not work with power on during installation.
2. Before installing, operating, and maintaining the equipment, read and follow up the installation guide and safety instructions.
3. Personnel who plan to install or maintain EcoFlow equipment must receive thorough training, understand all necessary safety precautions, and be able to correctly perform all operations.
4. Installation, operation and maintenance must be carried out by trained and qualified personnel who understand all safety precautions, are capable of performing all operations correctly, and hold all legally required national qualifications for special operations, such as high-voltage operation, working at heights, and the operation of special equipment.
5. Before installing, operating, and maintaining the equipment, always disconnect it from all power sources.
6. Wear proper PPE (Personal protective equipment) before any operations.

WARNING

When the photovoltaic array is exposed to light, it supplies a d.c. voltage to the PCE.

CAUTION

The product must only be operated with PV modules of protection class II in accordance with IEC 61730, application class A. The PV modules must be compatible with this product. Do not ground the PV array positive/negative hole.

1. If the power cord of this equipment is damaged, it must be replaced by the manufacturer, customer service department or qualified personnel to prevent a safety hazard.
2. Do not touch the exposed cable with your hands.
3. Make sure the cables, connectors and ports are dry before starting up the equipment. Make sure all three are connected securely.
4. Do not install, use, or operate outdoor equipment and cables in harsh weather conditions such as lightning, rain, snow, and level 6 or stronger wind.
5. Tighten the screws to the specified torque using tools when installing the equipment.
6. After installing the equipment, remove the remnants of the device installation area, such as cardboard boxes, foam, plastic, wire ties, stripped insulation materials, etc.
7. All warning label and nameplates on the equipment should be visible after installation is complete. Do not scrawl, damage, or block any warning label on the device.
8. Understand the components and functioning of a grid-tied PV power system and relevant local standards.
9. Do not reverse engineer, decompile, disassemble, adapt, add code to the device software or alter the device software in any other way. Any other operation that violates the original design specifications of the device hardware and software is not allowed.
10. If there is a probability of personal injury or equipment damage during operations on the equipment, immediately stop the operations, take feasible protective measures.
11. Do not touch the energized equipment, as the enclosure is hot.
12. Use insulated tools when operating equipment and wear personal protective equipment to ensure personal safety. Wear anti-static gloves, clothing and wristbands when touching electronic devices to protect equipment from damage.
13. Prior to performing any work on the equipment, always disconnect it from all voltage sources as described in this document. Always adhere to the prescribed sequence.
14. Before installing PV modules, please read its user manual carefully.
15. The system is not suitable for power supplying life-sustaining medical devices. It cannot guarantee backup power in all circumstances.
16. Do not connect loads between the inverter and the AC switch that directly connects to the inverter.

• Personnel Requirements

1. Personnel who plan to install or maintain EcoFlow equipment must receive thorough training, understand all necessary safety precautions, and be able to correctly perform all operations.
2. Only qualified professionals are allowed to install, operate, and maintain the equipment.
3. Personnel who will operate the equipment, including operators, trained personnel, and professionals, should possess the local national required qualifications in special operations such as high-voltage operations, working at heights, and operations of special equipment.

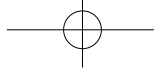


Professionals: personnel who are trained or experienced in equipment operations and are clear of the sources and degree of various potential hazards in equipment installation, operation, and maintenance.

• Electrical Safety Requirements

Grounding

1. For the equipment that needs to be grounded, install the ground cable first when installing the equipment and remove the ground cable last when removing the equipment.



2. Ground the PE hole of GRID connector, BACKUP connector and the equipment enclosure.
3. Do not damage the grounding conductor.
4. Do not operate the equipment in the absence of a properly installed grounding conductor.
5. Ensure that the equipment is connected permanently to the protective ground. Before operating the equipment, check its electrical connection to ensure that it is securely grounded.

General Requirements



Before connecting cables, ensure that the equipment is intact. Otherwise, electric shocks or fire may occur.

1. Ensure that all electrical connections comply with local electrical standards.
2. Obtain approval from the local electric utility company before using the equipment in grid-tied mode.
3. Ensure that the cables installer prepared meet local regulations.
4. Use dedicated insulated tools when performing high-voltage operations.
5. Before connecting a power cable, check that the label on the power cable is correct. When fabricating cables and installing connectors on site, follow the respective instructions in this manual and the requirements of local laws and regulations.
6. Before operating the equipment, disconnect all power to the equipment and wait for the corresponding delayed discharge time to ensure that the equipment is completely deenergized.

Cabling

1. The cabling path must avoid the equipment cooling system and parts.
2. When routing cables, ensure that a distance of at least 30 mm exists between the cables and heat-generating components or areas. This prevents damage to the insulation layer of the cables.
3. Bind cables of the same type together. Mutual entanglement or cross-deployment is not allowed.
4. Ensure that the cables used in a grid-tied PV power system are properly connected and insulated and meet specifications.

• Installation Environment Requirements

1. Ensure that the equipment is installed in a well ventilated environment.
2. To prevent fire due to high temperature, ensure that the ventilation vents or heat dissipation system are not blocked when the equipment is under operation.
3. Do not expose the equipment to flammable or explosive gas or smoke. Do not perform any operation on the equipment in such environments.
4. Do not place the equipment next to any heat source, fire source, or water source, and not to perform any operation on the equipment next to that heat source, fire source, or water source.

• Equipment And Personnel Safety Requirements

Move the inverter and battery

1. When moving the equipment by hand, wear protective gloves to prevent injuries.
2. Move the equipment with precaution as it is heavy. Two or more people are needed to assist in moving the equipment.
3. Always be aware of the weight of the inverter and the battery.
4. Avoid dropping the inverter or battery, or subjecting them to mechanical impact.
5. Do not place the inverter or battery directly on a hard surface. Place protective materials such as a sponge pad or foam cushion underneath to prevent damage to the metal enclosure.

6. Lift the inverter and the battery by holding both sides or its handles. Do not hold the terminals directly. Do not hold the terminals directly. Place protective materials, such as a sponge pad or foam cushion, underneath the terminals to prevent damage.
7. Move and install the battery in an upright position. Do not place the battery upside down or tilt it.
8. Do not release your the battery or inverter until it is placed securely and stably.

Drilling Holes

1. Wear goggles and protective gloves when drilling holes.
2. When drilling holes, protect the equipment from shavings or dust. After drilling, clean up any shavings or dust that have accumulated at the installation site in a timely manner, otherwise, it may block the drilled hole.

• Grounding Conductor Monitoring

1. The inverter is equipped with a grounding conductor monitoring device. This grounding conductor monitoring device detects when there is no grounding conductor connected and disconnects the inverter from the utility grid if this is the case. Depending on the installation site and grid configuration, it may be advisable to disable the grounding conductor monitoring. This can be necessary, if there is no neutral conductor present and you intend to install the inverter between two line conductors.
2. Grounding conductor monitoring must be disabled after initial start-up depending on the grid configuration. Safety in accordance with IEC 62109 when the grounding conductor monitoring is deactivated. In order to guarantee safety in accordance with IEC 62109 when the grounding conductor monitoring is deactivated, you have to connect an additional grounding conductor to the inverter.
3. Connect an additional grounding conductor that has an cross-section of at least 10 mm². Ground the PE hole of GRID connector and the equipment enclosure.



• Disposal

This marking indicates that this product should not be disposed of with other household waste within the EU. Recycle this product properly to prevent possible damage to the environment or a risk to human health via uncontrolled waste disposal and in order to promote the sustainable reuse of material resources. Please return your used product to an appropriate collection point or contact the retailer where you purchased this product. Your retailer will accept used products and return them to an environmentally-sound recycling facility. For information on the disposal of electrical and electronic equipment, please refer to the following website:

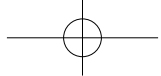
<https://eu.ecoflow.com/pages/electronic-devices-disposal>

• Setting the Rated Residual Current of the Residual-Current Device

RCDs (Type A) with a rated residual operating current are recommended to install, 300mA on the AC-GRID side, and 30 mA on the AC-BACKUP side, while the use of an RCD with a lower rated residual operating current is also permitted if it is required by the specific local electrical codes.

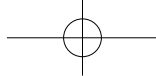
• EMC Protection Class

Class B



Technical Specification

Technical Specification		EF HD-P1-8K0-S2A	EF HD-P1-9K9-S2A	EF HD-P1-12K0-S2A
PV Input	PV Operating Voltage Range(V)	50-900		
	MPPT Voltage Range at Rated Power (V)	500-810		
	MPPT Start-up Voltage (V)	120		
	Max. Input Voltage ¹ (V)	900		
	Max. Input Current per MPPT (A)	16		
	Max. Short Circuit Current per MPPT (A)	20		
	Number of MPPT Trackers	3		
	Number of Strings per MPPT	1		
	Max. Input Power per MPPT(W)	8000		
	Max. Total Input Power (W)	16000	20000	24000
AC Input/ Output (On-grid)	Nominal Output Power (W)	8000	9999	12000
	Rated Output Apparent Power (VA)	8000	9999	12000
	Max. Output Apparent Power (VA)	8800	9999	12000
	Supported Power Grid Types	TN-S, TN-C, TN-C-S, TT systems		
	Nominal Voltage (V)	L-N: 220V AC/230V AC; L+N+PE		
	Nominal Frequency (Hz)	50/60		
	Nominal Output Current (A)	34.8 A@230 V 36.4 A@220 V	43.5 A@230 V 45.5 A@220 V	52.2 A@230 V 54.5 A@220 V
	Max. Output Current (A)	42.8	53.5	63
	Power Factor	0.8 leading~0.8 lagging		
	Max. Input Current (A)	63		
	Max. Short Circuit Current (A)	268		
AC Output (Off-Grid)	THDi at Full Load	Current Total Harmonic Distortion ≤3%		
	Nominal Output Power (W)	8000	9999	12000
	Rated Output Apparent Power (VA)	8000	9999	12000
	Max. Output Apparent Power (VA)	8800	9999	12000
	Nominal Output Current (A)	34.8 A@230 V 36.4 A@220 V	43.5 A@230 V 45.5 A@220 V	52.2 A@230 V 54.5 A@220 V
	Power Factor	0.8 leading~0.8 lagging		
	Nominal Voltage (V)	L-N: 220V AC/230V AC; L+N+PE		
	Nominal Frequency (Hz)	50/60		
	Off-grid THDu	≤2%		
	Rated Voltage (V)	800		
Battery Input/Output	Voltage Range (V)	720-900		
	Max. Short Circuit Current (A)	420		
	Battery Capacity	Up to 12 battery modules		
	Communication Method	CAN		
	Max. Charge Current of Stacking Terminal (A)	20.8		
	Max. Continuous Discharge Current of Stacking Terminal (A)	12	15	18
	Max. Charge Current of Expansion Terminal (A)	28		
	Max. Continuous Discharge Current of Expansion Terminal (A)	12	15	18
	Max. Efficiency	97.9%		
Efficiency	Deep Power Saving Mode (W) ³	15		
	Self Consumption (Light-load scenario) ⁴ (W)	50		
	Grid-to-Off-grid Switching Time ⁵ (ms)	0		
Protection	Off-grid-to-Grid Switching Time ⁵ (ms)	0		
	GFCI	Yes		
	AFCI	Yes		
	PV Insulation Resistance Detection	Yes		
	PV Reverse Polarity Protection	Yes		
	Emergency Power Off (EPO)	Yes		
	AC Overcurrent Protection	Yes		
	AC Short Circuit Protection	Yes		
	Anti-islanding protection	Yes		
	Protective class	I		
	AC Overvoltage Protection	Yes		
	DC Surge Protection	Type II		
	AC Surge Protection	Type II		



en

General	Operating Temperature Range (°C)	-20 to 60
	Storage Temperature (°C)	-30 to 60
	Relative Humidity	0 to 100%
	Operating Altitude (m)	3000 (>2000 derating)
	User Interface	LED & APP
	Communication Method	Bluetooth, WiFi, RS485, CAN
	Weight (kg)	Approx. 36.5
	Dimension (WxDxH mm)	Approx. 679.6 × 203.2 × 406.5
	Anti-Theft	Supported
	Ingress Protection Rating	IP66
	Wi-Fi Frequency Range (MHz)	2.4GHz: 2400-2483.5, 5GHz: 5150-5350, 5470-5725, 5725-5850
	Maximum Output Power (dBm)	<20
	Bluetooth Frequency Range (MHz)	2402-2480
	Maximum Output Power (dBm)	<20
	Mounting Method ⁶	Floor Stand / Wall Mounted
Compliance	Environmental Category	Outdoor / Indoor
	Overvoltage Category	OVC II(DC), OVC III(AC)
	Manufacture	Made in China
	Safety Standards	IEC/EN 62109-1, IEC/EN 62109-2, AS 60947.3, ISO4892-4
Compliance	Grid-tied Standards	EN 50549, G99, UNE, NTS, AS/NZS4777.2:2020
	EMC&RF	EN 301 489-1, EN 301 489-3, EN 301 489-17, EN 300 328, EN 301 893, EN 300 440, EN IEC 61000-6-1, EN IEC 61000-6-2, EN IEC 61000-6-3, EN IEC 61000-6-4, EN 61000-3-11, EN 61000-3-12, EN IEC 62311, EN 62311, EN 50665, EN62920, EN 55011

¹ PV input voltage should not exceed the specified maximum value. Exceeding this limit may trigger system protection or affect normal operation.

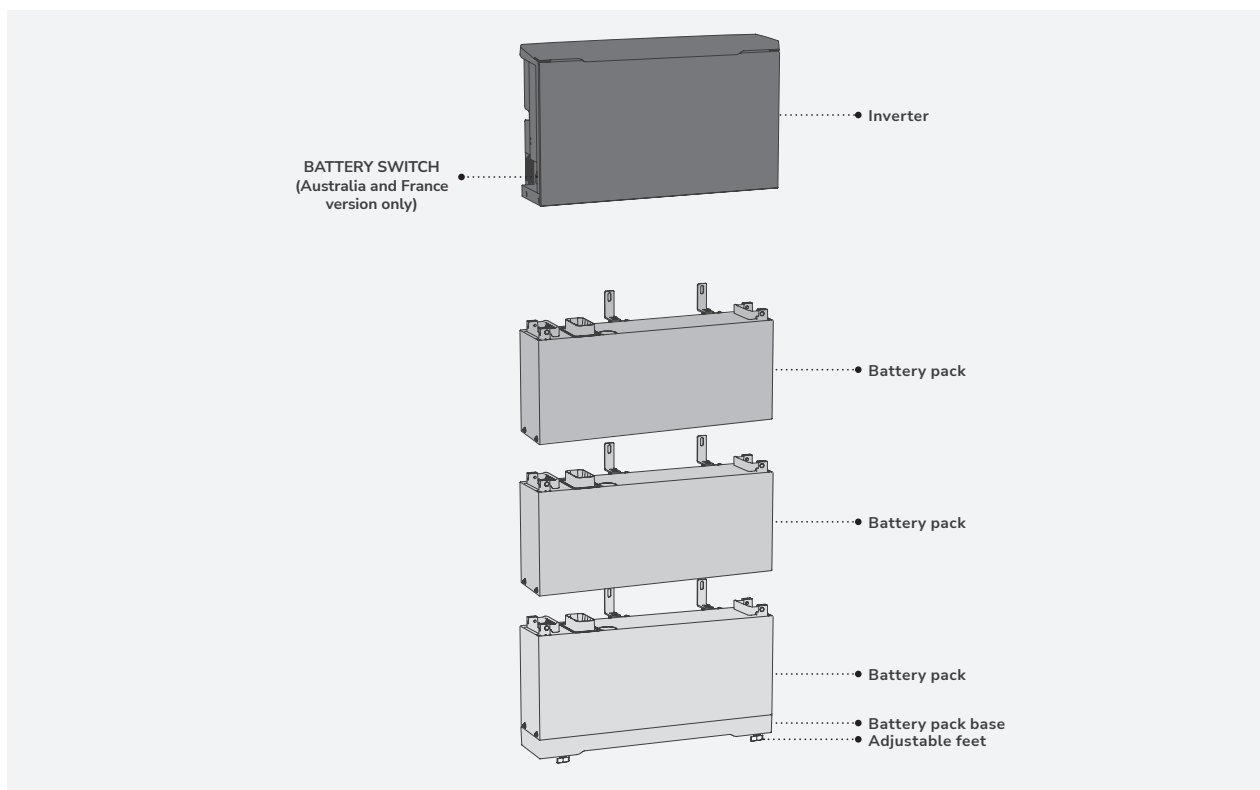
² In grid-connected parallel operation, load-side current is limited by the maximum input current rating of the grid port.

³ In Deep Power Saving Mode, the hybrid inverter consumes 15W, and loads draw power from the grid.

⁴ 50±1W indicates the system self-consumption measured under light-load conditions (<300W total load) in a laboratory environment for one OCEAN 2 Plus inverter and two OCEAN 2 5kWh Battery.

⁵ This specification refers to the disruption time on the BACKUP side. This function is available only when the system's maximum output exceeds the BACKUP side total load and grid-connection regulations are satisfied. The performance was validated under stable grid conditions, where a grid outage does not cause a sudden voltage drop.

⁶ For floor-stand installation, a maximum of 6 batteries is supported; for wall-mounted installation, a maximum of 3 batteries is supported.



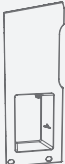
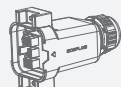
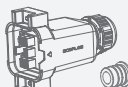
Unpacking and Preparation

I What's in the Box

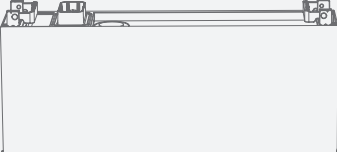
NOTICE

- Before unpacking, check the outer packaging for damage, such as holes and cracks, and verify the equipment model. If any damage is found or the model is incorrect, do not unpack the product and contact the supplier immediately.
- After unpacking, check that all items are present and intact. If any item is missing or damaged, contact the supplier immediately.
- It is recommended to keep the original packaging for future use.

• EcoFlow OCEAN 2 Plus Hybrid Inverter Single-Phase

A1 ×1  EcoFlow OCEAN 2 Plus Hybrid Inverter Single-Phase	A2 ×1  Top trim cover	A3 ×1  Side trim cover			
A4 ×1  WiFi module	A5 ×3  PV terminal (+)	A5 ×3  PV terminal (-)	A6 ×2  PV disassembly and assembly tool	A7 ×1  Communication terminal (20-pin)	A8 ×1  Communication terminal (16-pin)
A9 ×1  Grid connector	A10 ×1  Backup connector	A11 ×1  Marking-off template	A12 ×1  Expansion bolt (M6×60)	A13 ×3  Grounding screw (M5×12)	A14 ×2  OT terminal
A15 ×10  Wire ferrule (for wire gauge 6AWG/16mm²)	A16 ×18  Wire ferrule (for wire gauge 22AWG/0.5mm²)	A17 ×3  RJ45 modular plug	A18 ×1  Mounting bracket	A19 ×1  Termination resistor	

• EcoFlow OCEAN 2 LFP Battery

B1 ×1  EcoFlow OCEAN 2 LFP Battery	B2 ×2  Battery T-shaped/L-shaped mounting piece
B3 ×2  Expansion bolt (M6*60)	B4 ×4  Screw (M5*12)

• EcoFlow OCEAN 2 LFP Battery Base

en

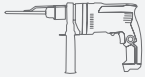
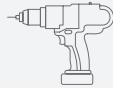
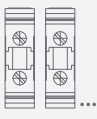
C1 ×1



Battery base

I Prepare Tools and Instruments

• Required tools

					
Hammer drill (with a drill bit of 8mm)	Electrical screwdriver	Torque socket of 10mm	Multimeter (DC voltage measurement range ≥ 1000 V DC)	Mallet	Screwdriver (PH3)
					
Cable cutter	Open barrel crimping tool (for PV terminals)	Wire strippers	RJ45 crimping tool	Square crimping tool (for tubular terminals 0.5, 10 or 16 mm ²)	Heat-shrink tubing
					
Marker	Steel measuring tape	Cable tie	Feed-through terminal blocks 6-8 pcs	Heat gun	

• Optional tools

					
Level	Vacuum cleaner	Safety goggles	Safety shoes	Safety gloves	Dust mask

• cables

				
16 mm ² grounding cable (copper conductor)	4-6 mm ² PV input cable (black, red)	16 mm ² UL10269 power cable (blue, brown)	Cat 5e or higher shielded network cable	2×0.5 mm ² twist pair cable

System Installation

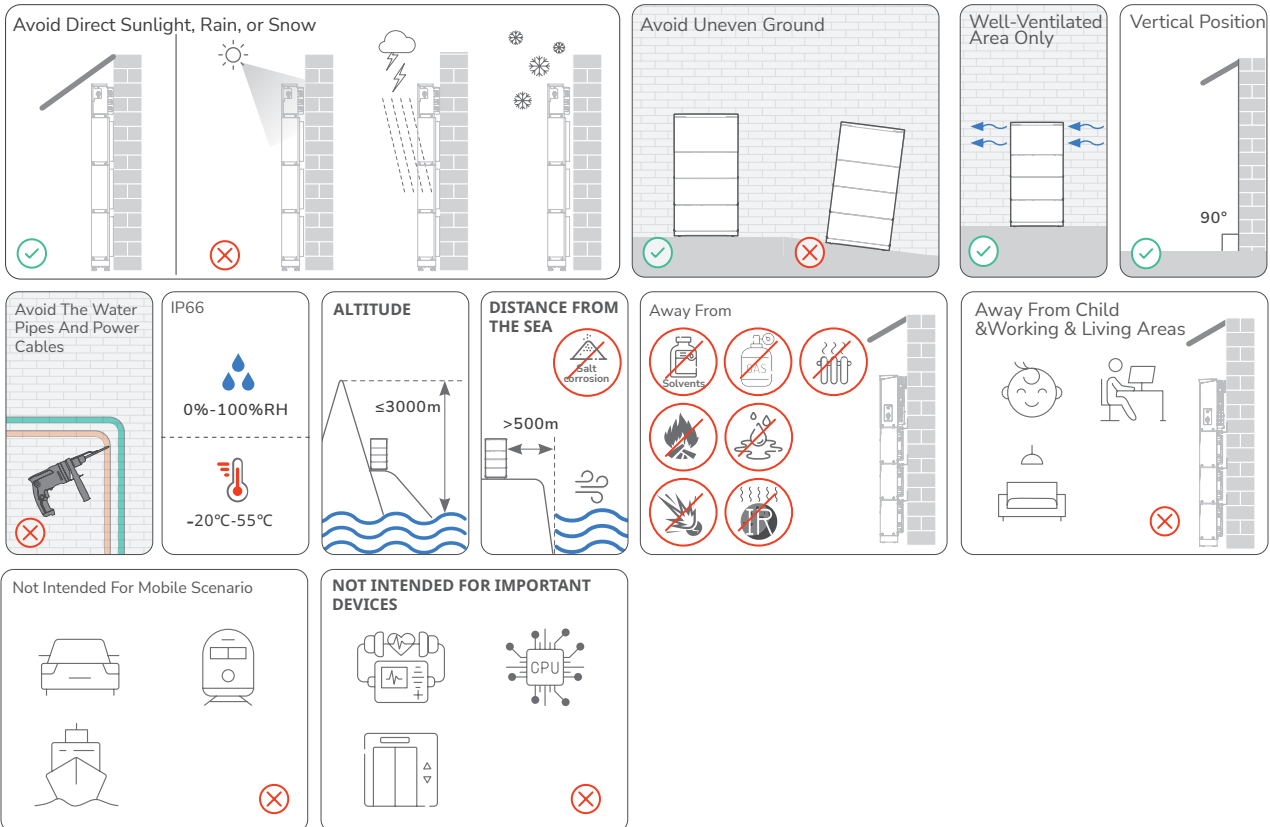
I Installation Environment Requirements

WARNING

The installation and operation environment must comply with applicable international, national, and local standards for lithium batteries and the inverter.

NOTICE

- When installing the equipment in a garage, keep it away from the driveway.
- The mounting structure for the equipment must be fire-resistant. Do not install the equipment on flammable building materials. Suitable non-combustible materials include brick, masonry block, or concrete.
- The mounting material must have no vents or perforations within the area covered by the barrier.
- Install the inverter on a solid, load-bearing wall or surface capable of supporting the equipment's weight. Suitable installation locations include garages, storage rooms, dedicated battery system rooms, and verandas.
- The system shall not be installed:
 - (a) in restricted locations, as defined for switchboards in AS/NZS 3000;
 - (b) within 600 mm of any exit;
 - (c) within 600 mm of any vertical side of a window or building ventilation that ventilates a habitable room;
 - (d) within 600 mm of any hot water unit, air conditioning unit or any other appliance not associated with the pre-assembled integrated BESS;
 - (e) within 900 mm below any of the items listed in Items (b), (c) and (d);
 - (f) in ceiling spaces;
 - (g) in wall cavities;
 - (h) on roofs, unless the installation location has been specifically approved as suitable;
 - (i) under stairways;
 - (j) under access walkways;
 - (k) in any evacuation or escape route.



I Installation Clearance Requirements

en

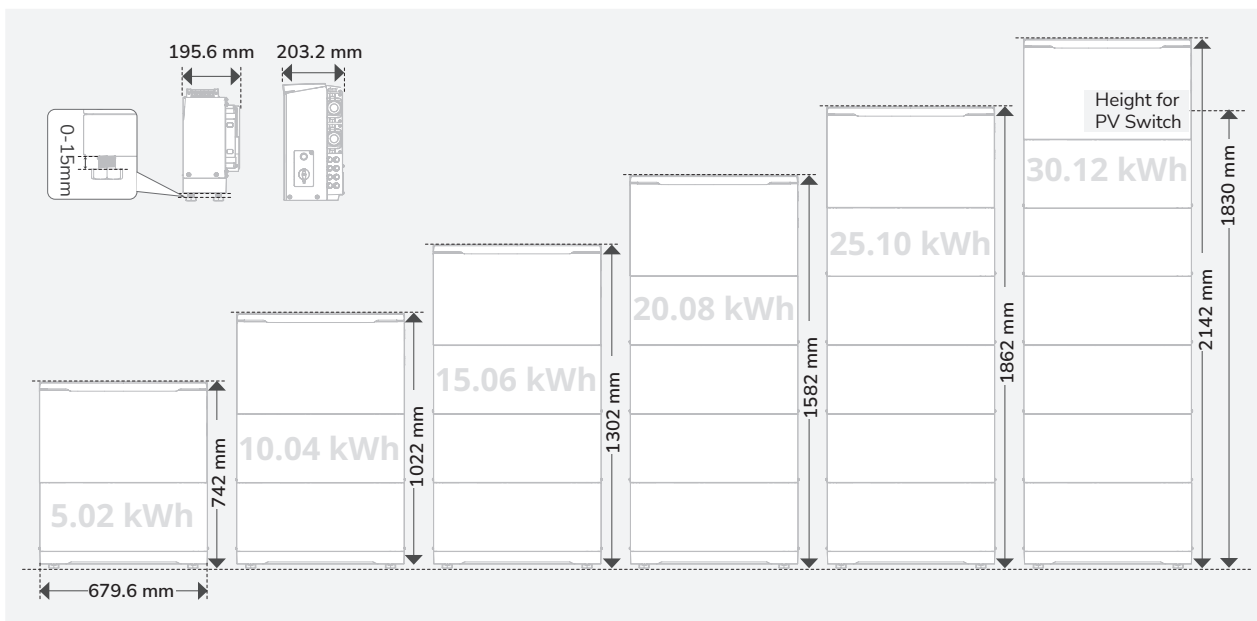
WARNING

- Reserve sufficient clearance around the equipment to ensure proper installation and heat dissipation.
- To prevent fire due to high temperature, ensure that the ventilation vents or heat dissipation system are not blocked.

NOTICE

- Reserve sufficient clearance on both sides of the battery to tighten the side mounting screws.
- If the battery system is installed in a corridor, hallway, or lobby, a minimum clearance of 1 m must be maintained to ensure safe egress.

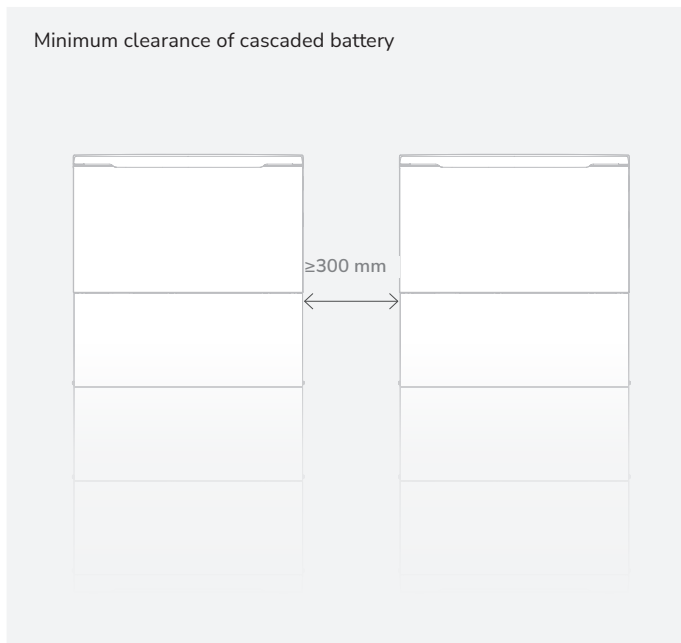
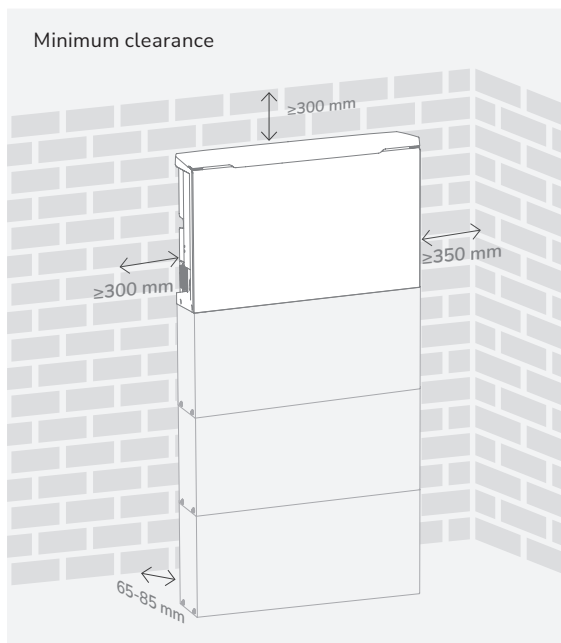
• Dimensions



• Clearance

WARNING

- Minimum clearance should be maintained for good ventilation.
- Do not block the air exhaust on the left side of the inverter during operation.



I Install Battery

DANGER

- When drilling holes, avoid the water pipes and power cables embedded in the wall and under the floor.
- When drilling holes, protect the battery base from shavings or dust.
- Before installing the battery, ensure that the click-on terminals on the top and bottom of the battery are free of foreign objects or any liquid.
- For outdoor installation, if the installation is not completed, protect the battery base from rain and moisture before leaving the site.

CAUTION

- Ensure the batteries are securely wall-mounted to avoid falling, tipping, or damage during seismic activity.
- Assign sufficient personnel (two or more) to move the battery, and ensure it is lifted using the handles on the top of the battery module to avoid personal injury or product damage.

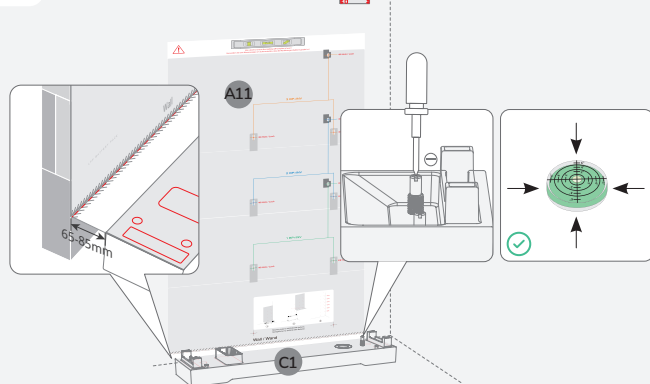
NOTICE

- The two M6×60 expansion bolts supplied with each battery may be used to secure either the battery or the battery base. A battery may be secured with one or two bolts. When two or more batteries are installed, any bolts not used to secure a battery can be allocated to secure the battery base. Decide on-site according to actual installation conditions.
- For mixed-stack installations combining newer model batteries (EF BD-5-S2) and previous model batteries (EF BD-5.1-S1), it is recommended to prioritize using the previous model base (EF BD-B-S1). It is best practice to stack the previous model batteries on the base first, then stack the newer model batteries on top.
- This inverter is only compatible with the EF BD-XX-S1 and EF BD-XX-S2 battery series.

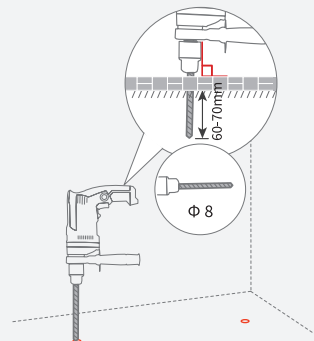
Method 1: Floor Mounted

1

C1 ×1 A11 ×1

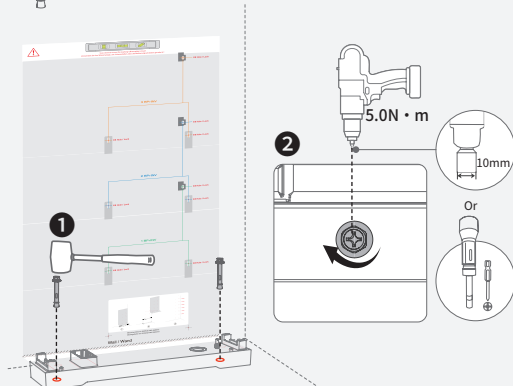


2



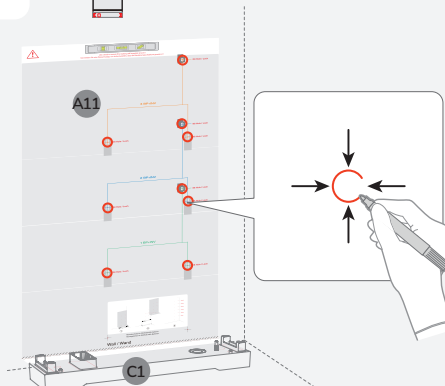
3

B3 ×2

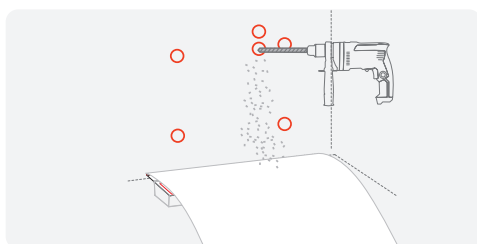


4

A11 ×1

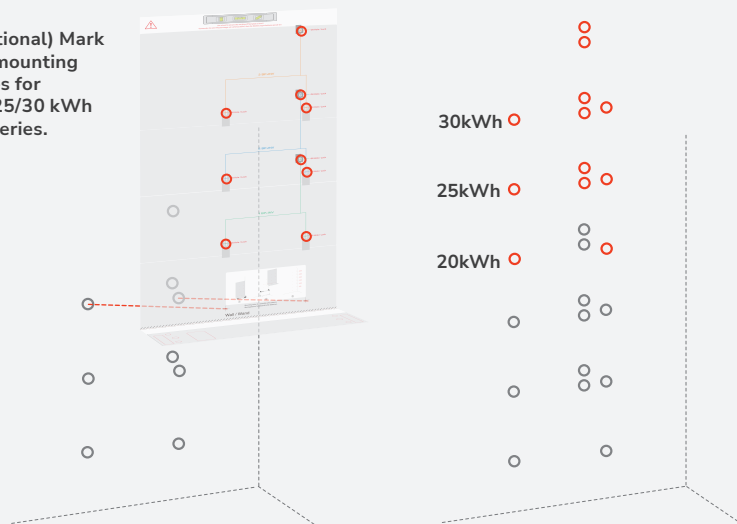
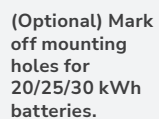


When drilling holes, protect the battery base from shavings or dust. You are advised to cover the base with the marking-off template for protection.





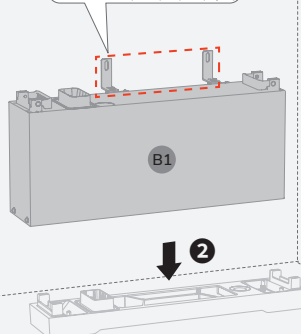
5



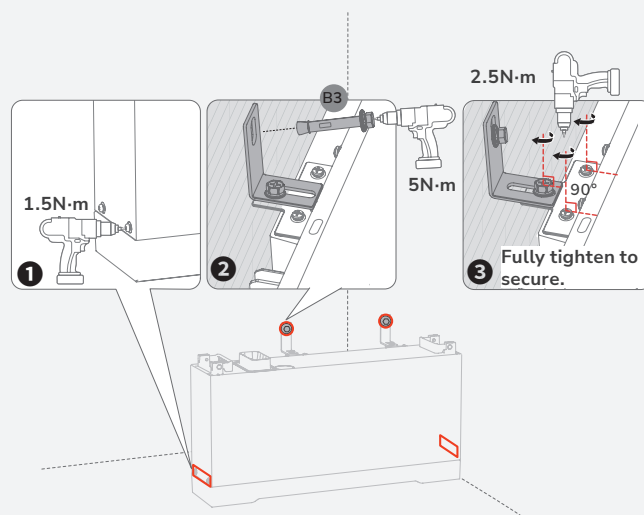
6



Do not f
tighten.



7

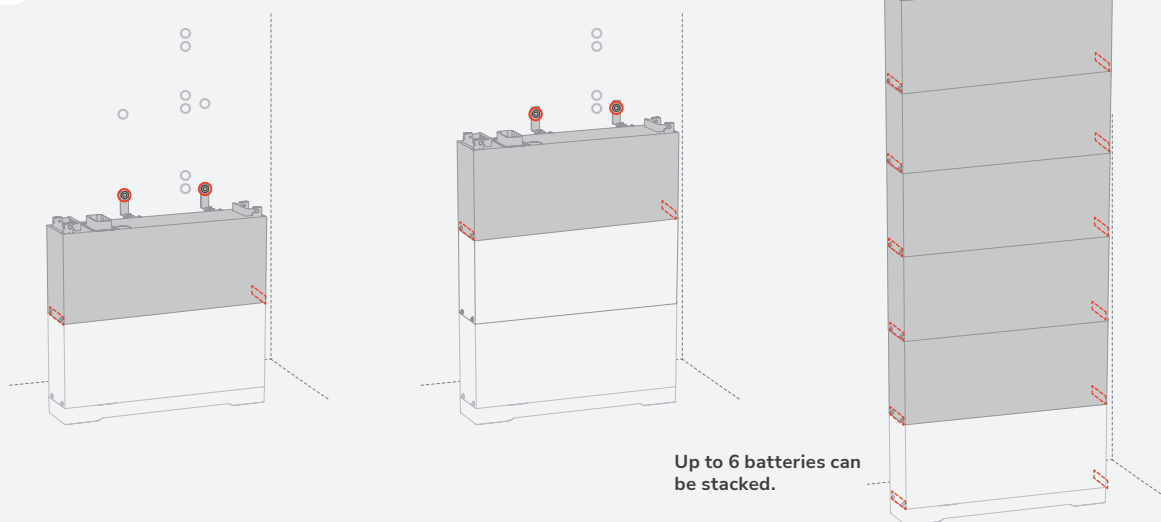


2.5N·m

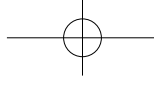
5N·m

3 Fully tighten to secure.

8



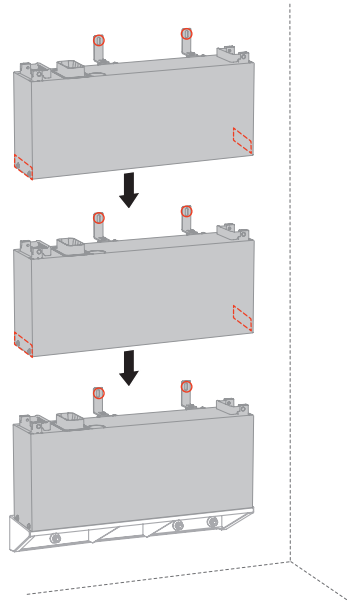
Up to 6 batteries can be stacked.



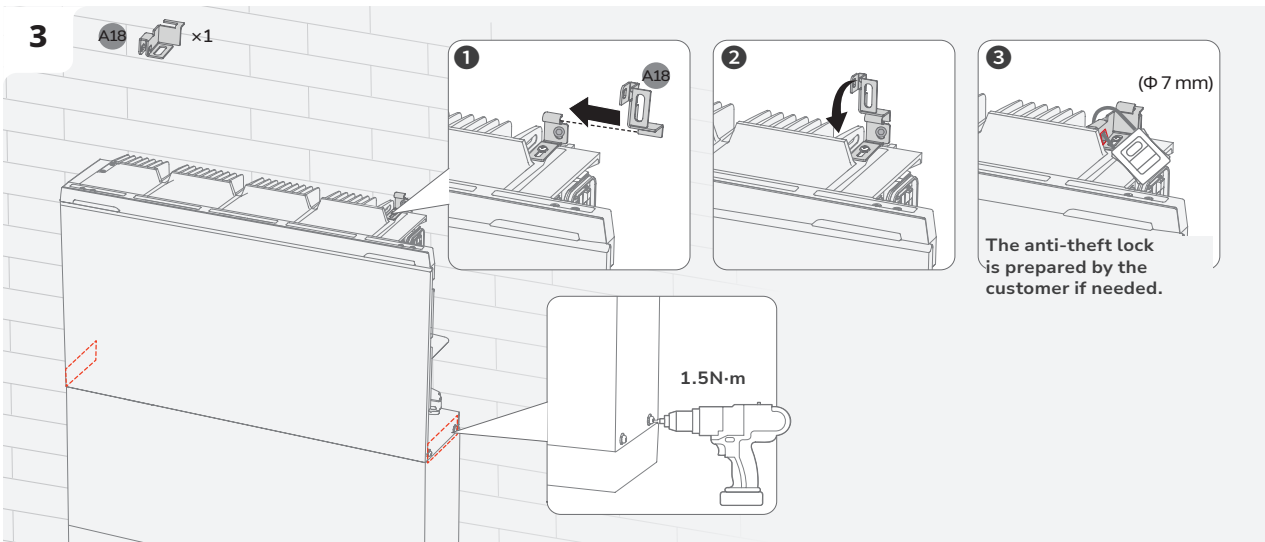
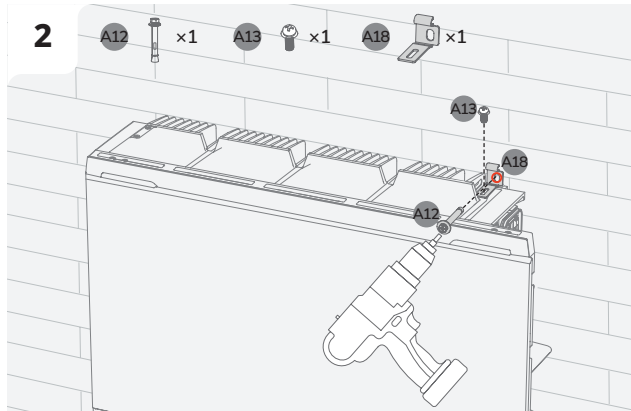
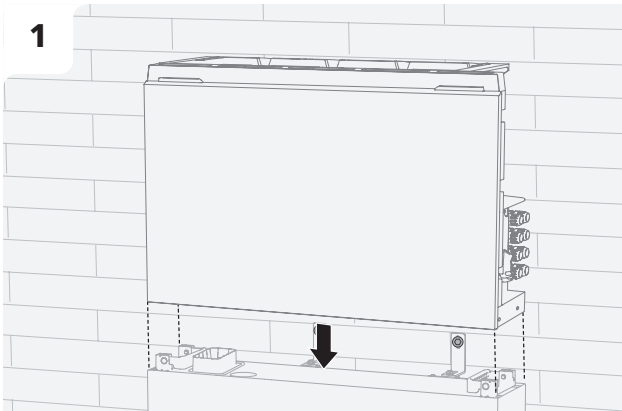
Method 2: Wall Mounted (Optional)

NOTICE

- For details about wall mounted installation, see the installation guide that comes together with the EcoFlow Wall-Mounted Battery Base. Then, install the remaining batteries and the inverter as shown in the method 1.
- The wall-mounted battery base (sold separately) supports stacking of up to three batteries.



I Install Inverter



Application Scenarios

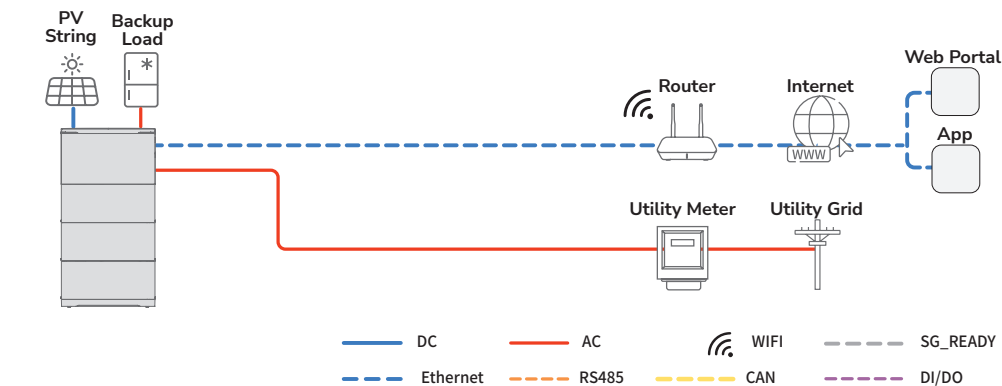
en



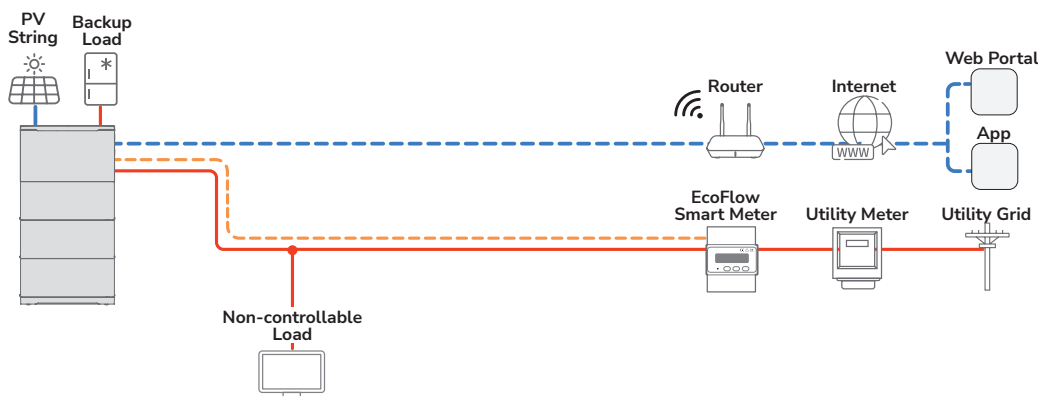
The wiring scheme described in this manual is based on the latest version of the APP software and firmware released in December 2025, which is subject to change with software updates. If you have any questions, please contact your local EcoFlow after-sales service.

I Single Inverter Setup

• Whole Home Backup System



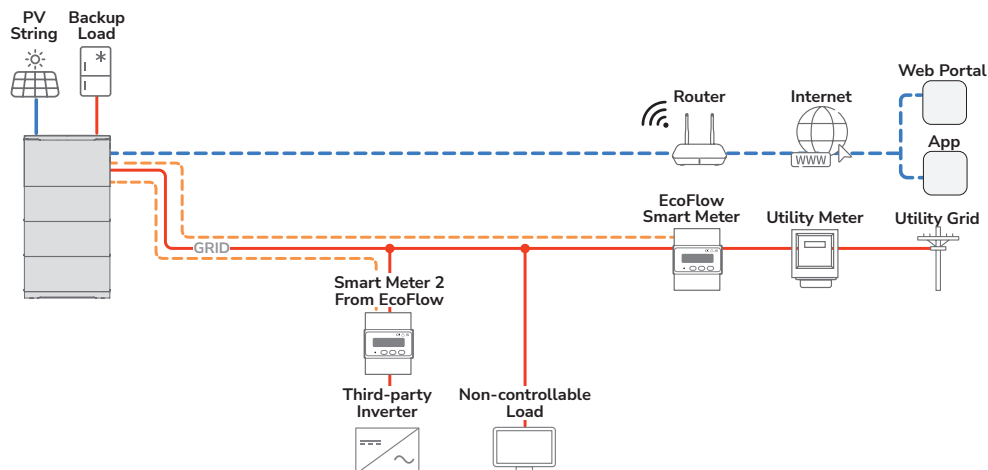
• Partial Home Backup System



• Use With Existing PV System

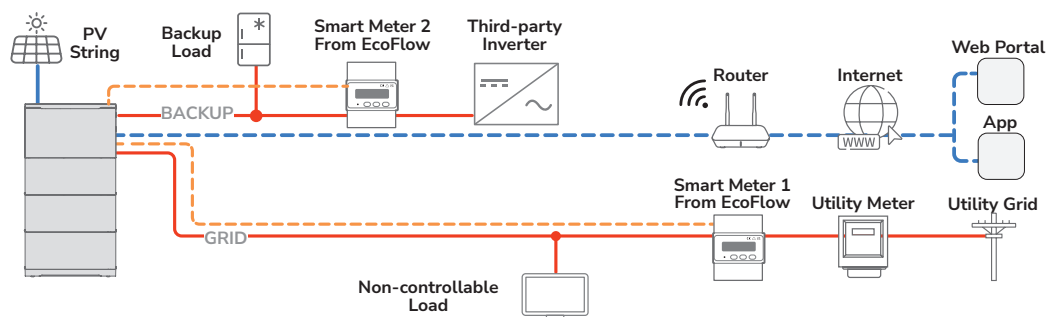
EcoFlow Ocean 2 Plus system is compatible with single-phase PV grid-tied system. For single-phase third-party inverter connection, its rated power shall not exceed the GRID port's rated power. The power generation from the existing PV inverter will be firstly provided to the loads and then charge the battery.

- Connect via GRID port



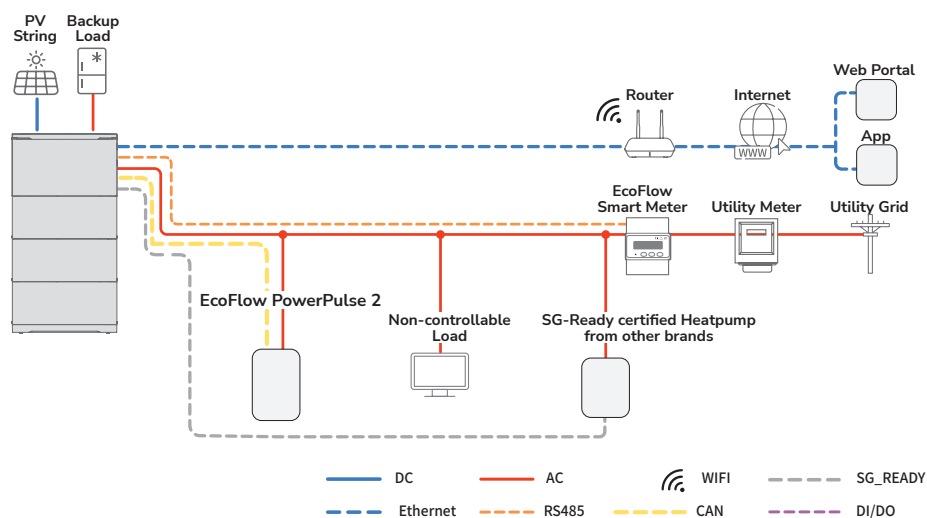
- Connect via BACKUP port (for Partial Home Backup)

- A third-party inverter connected must also support local safety regulations for over-frequency protection and over-frequency load reduction functions.
- In this setup, off-grid parallel operation is not supported.
- In this setup, via frequency regulation capability, the EcoFlow Ocean 2 plus system achieves derating control for third-party inverters in grid failure scenarios.



• Use With SG-Ready Certified Heatpump / EV Charger

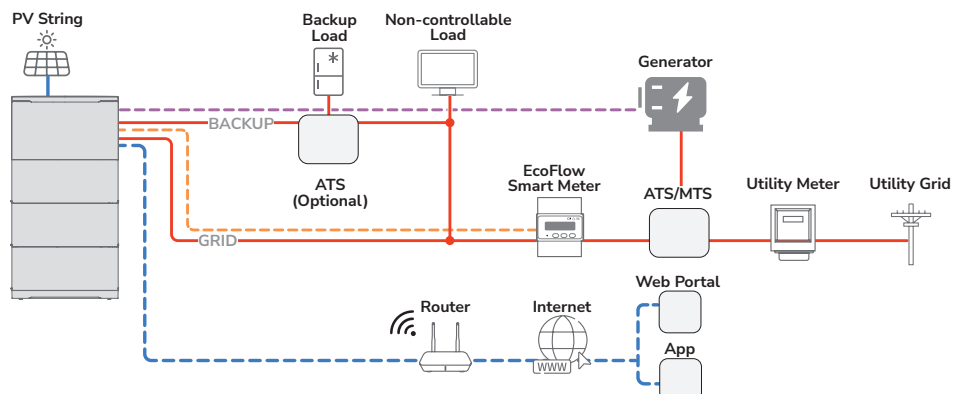
EcoFlow Ocean 2 Plus system is compatible with EcoFlow EV Charger (PowerPulse 2), Heatpump (PowerHeat), any other SG-Ready certified Heatpump. When connected, these devices will be powered by PV strings, battery and utility grid. With the self-powered mode of the EcoFlow Ocean 2 Plus system, the self-consumption rate of the new system will be greatly improved, reducing electricity costs.



• Use With Generator

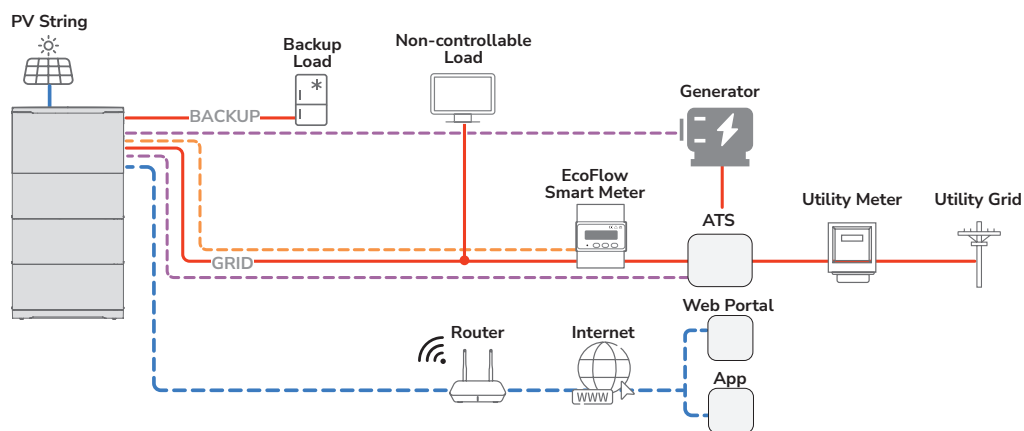
The EcoFlow Ocean 2 Plus system is compatible with generators, allowing users to build an instant backup power system and improve home energy efficiency.

- Without dry contact connection



- With dry contact connection

en



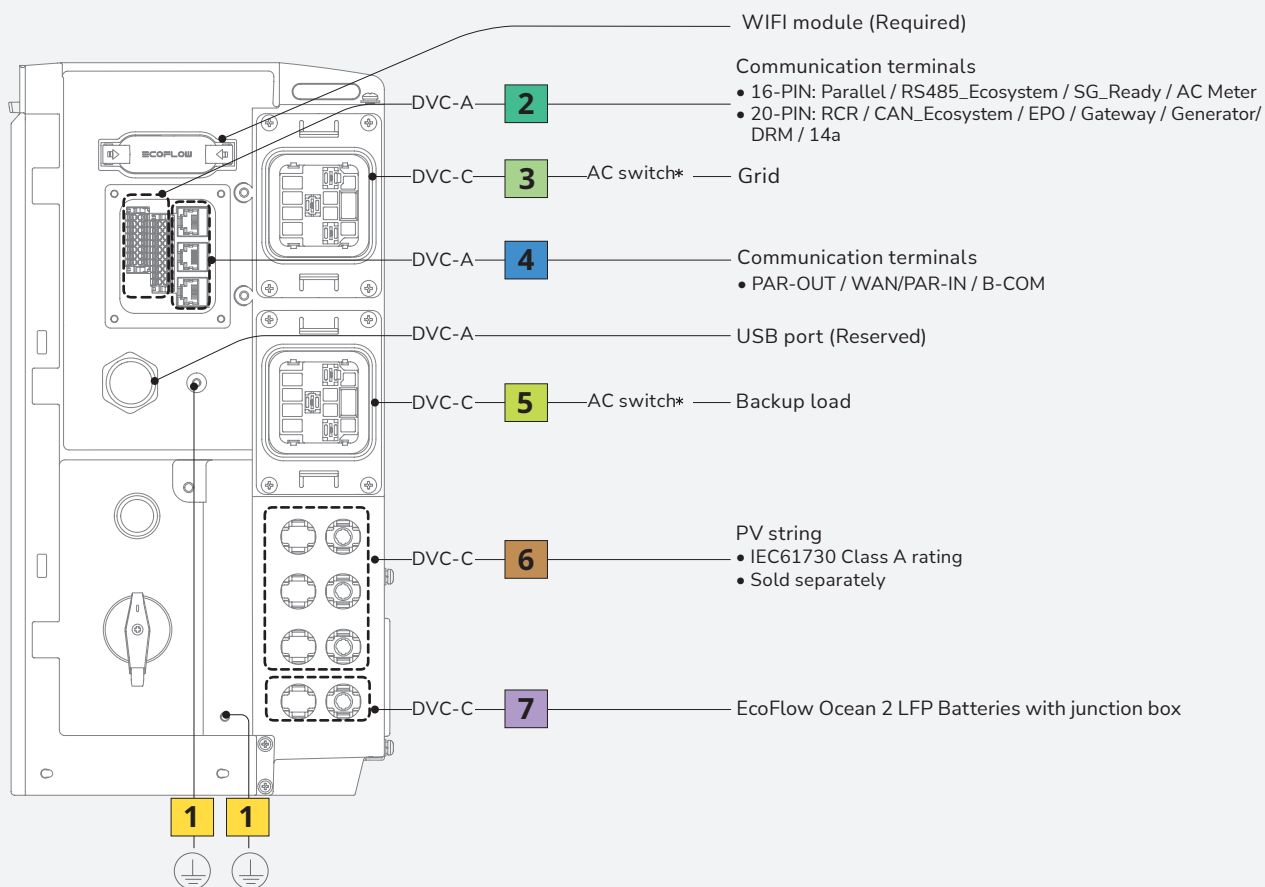
Electrical Connection

CAUTION

All electrical connections must be carried out by a professionally trained and certified electrician.

NOTICE

- Prepare cables that comply with local certification and safety standards.
- Do not remove the protective cap of unused terminals. Otherwise, the IP rating of the inverter will be affected.
- The cable colors shown in the figures are for reference only. Select an appropriate cable according to the local standards.
- Based on the installation environment and mechanical performance requirements, either rigid cables or flexible cables can be used.
- Install a terminating resistor to the unused B-COM terminal for proper communication.



Legend

- | | |
|---|--|
| 1 Ground cable
10 mm ² | 5 Backup load power cable
16 mm ² cable. Select the appropriate conductor size based on the grid service current, local electrical code, and inverter specifications. |
| 2 Shielded twisted pair cable
2×0.5mm ² | 6 PV input cable
4-6 mm ² with a rated voltage greater than or equal to 1000V DC |
| 3 Grid power cable
16 mm ² cable. Select the appropriate conductor size based on the grid service current, local electrical code, and inverter specifications. | 7 Battery power cable
6-10 mm ² with a rated voltage greater than or equal to 1000V DC |
| 4 Cat 5e or higher shielded network cable | |

* It is recommended to use a 63 A circuit breaker for Australia version and an 80 A circuit breaker for other versions.

I Wiring Diagram

en

NOTICE

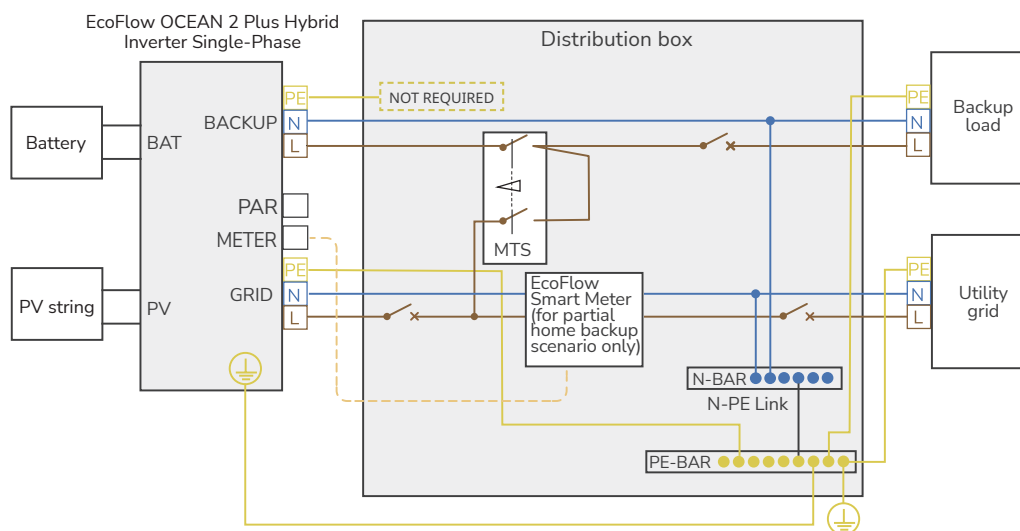
- The wiring of N and PE at the GRID and BACKUP terminals varies by region due to different regulatory requirements.
- A Manual Transfer Switch (MTS) is recommended for switching the power supply between the grid and the inverter in the whole-home backup system.
- A Manual Transfer Switch (MTS) is recommended for switching the power supply between the grid and the inverter in the whole-home backup system. Use a 63 A MTS for the Australia version and an 80 A MTS for other versions.
- RCD installation shall comply with local electrical codes.

• Single Inverter

N-PE Bonded at Main Panel (for Australia and New Zealand)

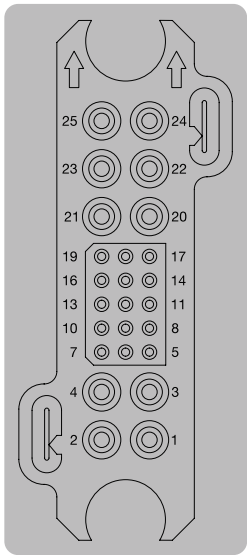
NOTICE

For Australia and New Zealand, the N conductors on the GRID side and the BACKUP side must be bonded according to AS/NZS 3000 wiring rules. Otherwise, abnormal BACKUP operation and potential safety risks may occur. Therefore, the following diagram applies to installations in Australia, New Zealand, and other regions with similar wiring requirements.



Description of Inverter and Battery Stacking Interfaces

Both the inverter and battery adopt integrated stackable designs, eliminating the need for external wiring between them. The pin definitions for their stacking interfaces are as follows.



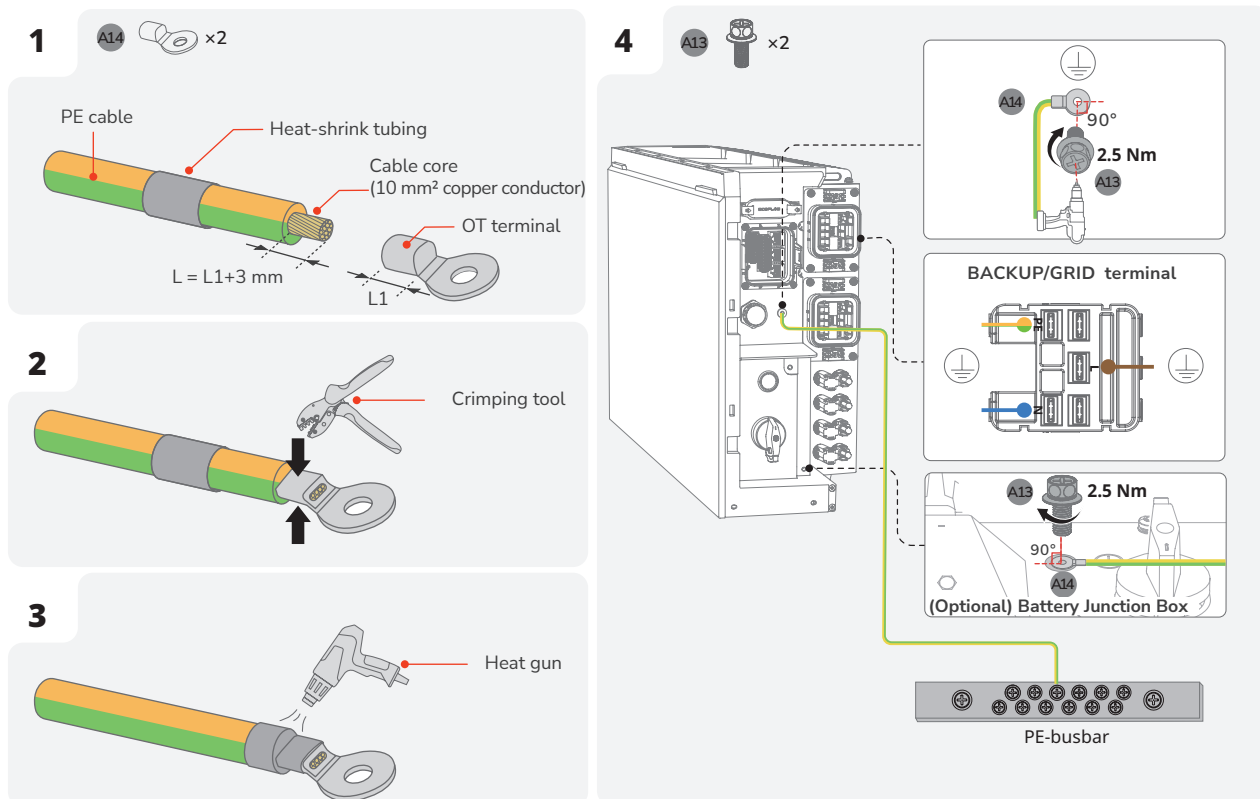
PIN	Description
1	Ground
5-10	Battery Communication
14-19	Battery Button Control Signals and Link Check
22-23	Battery Output

Connect PE Cables

en

NOTICE

- Ensure that the PE cable is connected securely.
- Cover the crimped area of the wire with heat shrink tubing or insulation tape. The heat shrink tubing is used as an example.
- When using a heat gun, protect the equipment from being scorched.
- It is recommended to apply silica gel or paint around the ground terminal after the PE cable is connected.
- The inverter features two grounding terminals. For single-stack installations, connect either terminal to the PE-busbar. In dual-stack configurations, connect one terminal to the PE-busbar and the other terminal to the junction box grounding terminal.



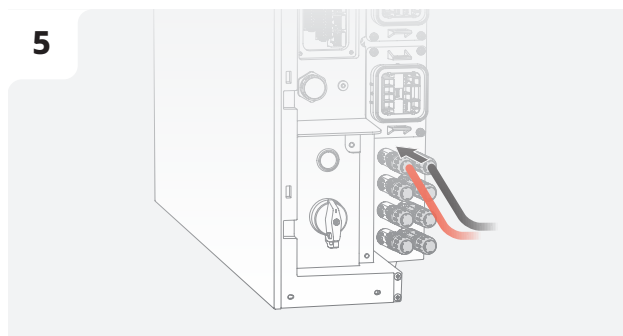
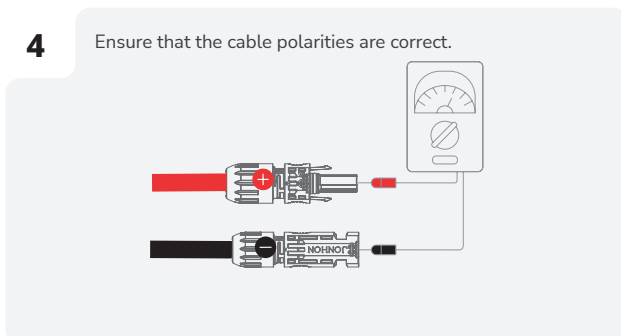
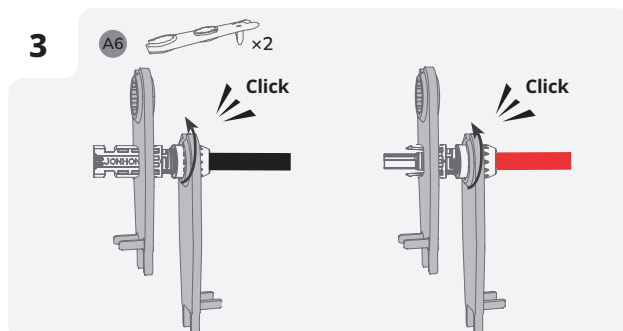
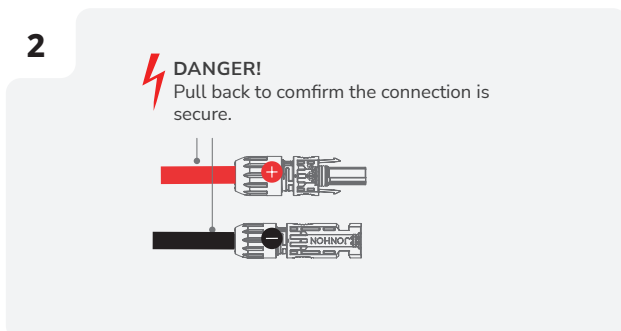
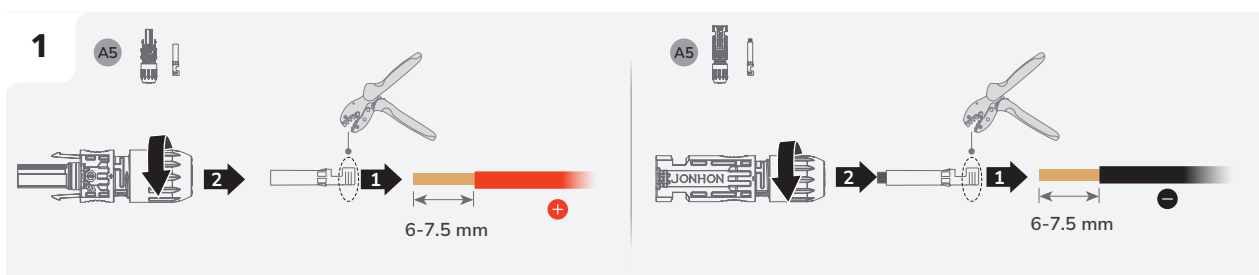
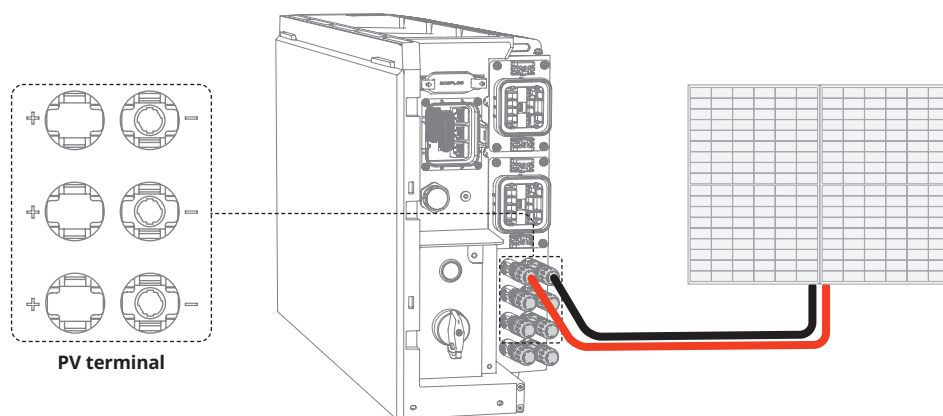
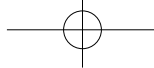
I Connect PV Input Cables

⚠ DANGER

- Before connecting the PV input cables, ensure AC switch connected to the inverter and the PV SWITCH on the inverter are OFF. Failure to do so may result in electric shock.
- The PV strings will generate lethal high voltage when exposed to sunlight. Disconnect the PV cable before connecting DC power.
- Ensure the PV array is connected with the correct polarity.
- Before connecting the PV input cables, ensure that the impedance between the positive/negative terminals of the PV string and earth exceeds 1 MΩ. Do not ground the PV array positive/negative terminals.
- When the inverter is operating, do not connect or disconnect PV strings or modules. Otherwise, this may cause electric shock.
- Do not remove the protective cap from the unused PV input terminal. Otherwise, the IP rating of the inverter will be affected.
- Ensure that the maximum DC voltage and the maximum short-circuit current of any PV string do not exceed the allowed range specified in the "Technical Parameters" of the User Manual.

NOTICE

- In order to avoid malfunction, do not connect any PV modules that have a risk of leakage current to the inverter.
- In order to avoid lightning damage to the inverter, it is recommended to install a surge protection switch at the PV junction box.
- After the positive and negative connectors are properly connected, slightly pull the PV input cables back to ensure that they are connected securely.
- Do not connect PV modules of different brands, models, orientations, or tilt angles to the same MPPT or PV string.



- Set the multimeter to DC gear to measure the voltage at the DC position. Wear appropriate PPE and use proper insulation during measurement. If the voltage is negative, the PV input polarity is incorrect and needs correction. If the voltage exceeds 1000 V, too many PV modules are configured to the same string. Remove some PV modules.
- If the PV input cables are connected in reverse while the PV SWITCH is ON, first turn the PV SWITCH OFF. Then disconnect the positive and negative connectors and correct the polarity of the PV input cables.

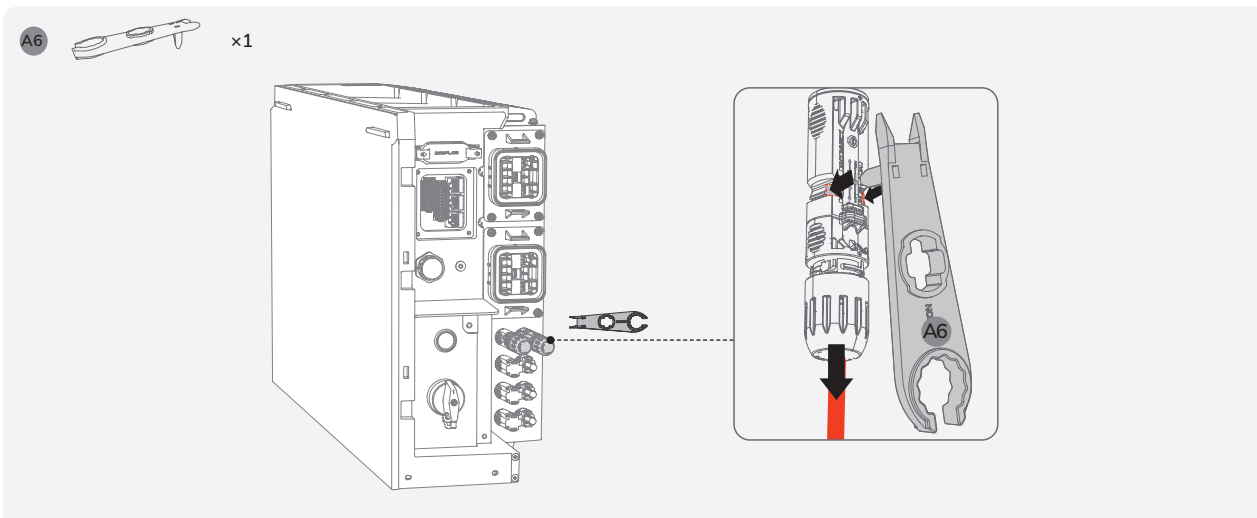
• Remove the PV Terminal



WARNING

Before removing the positive and negative connectors, ensure that the PV SWITCH is OFF.

en



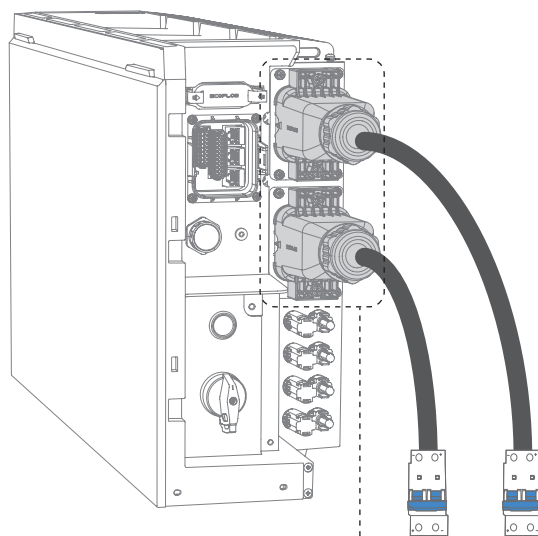
I Connect GRID/BACKUP Cables

DANGER

- Straighten the conductors. If any conductor is left outside the wire jacket, a short circuit may occur.
- After inserting the cable into the terminal block, gently pull back on the cable to ensure it is securely connected before fixing the terminal block in place.

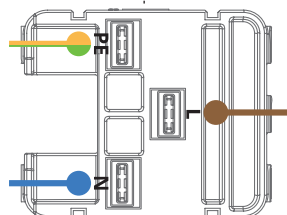
CAUTION

- Before installing, operating, and maintaining the equipment, always disconnect it from all power source.
- Do not connect any loads on the circuit between the inverter and the AC switch that is directly connected to the inverter.
- Ground the PE pole of GRID connector and the equipment enclosure.
- Do not connect the GRID conductors to the BACKUP load terminal of the inverter, and do not connect the BACKUP load conductors to the GRID terminal.
- Ensure all wiring is correct to prevent device malfunction or damage.



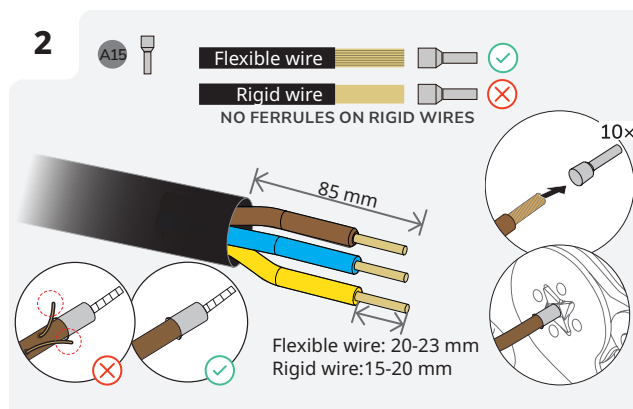
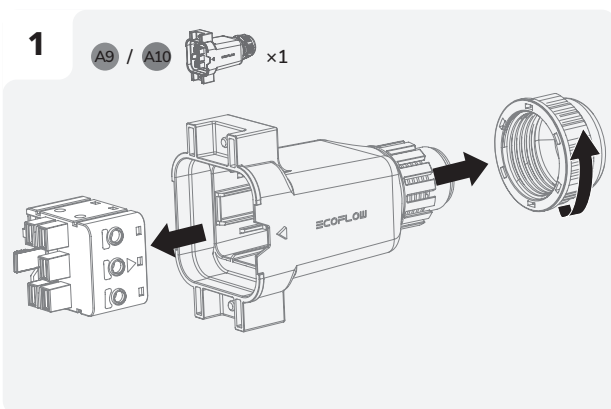
BACKUP load terminal

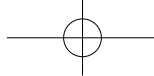
L · LOAD-L, live wire
N · LOAD-N, neutral wire
P · LOAD-PE, ground wire



GRID terminal

GL · GRID-L, live wire
GN · GRID-N, neutral wire
GP · GRID-PE, ground wire

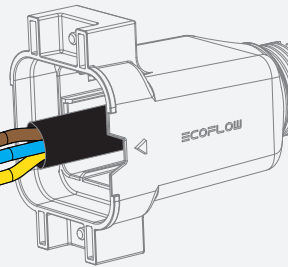
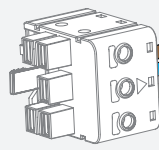




en

3

1.2~1.4N·m, M4



14.5-21mm

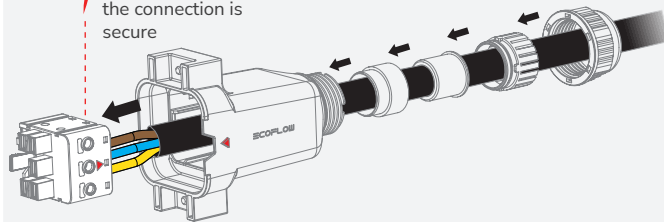
21-27.5mm

Select the needed size

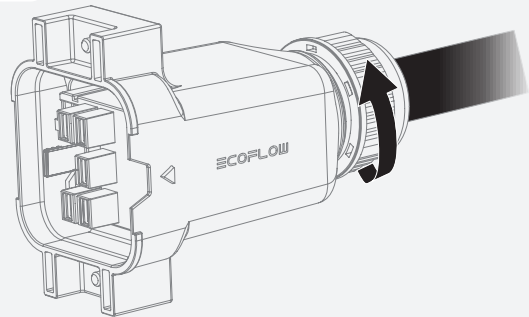
4



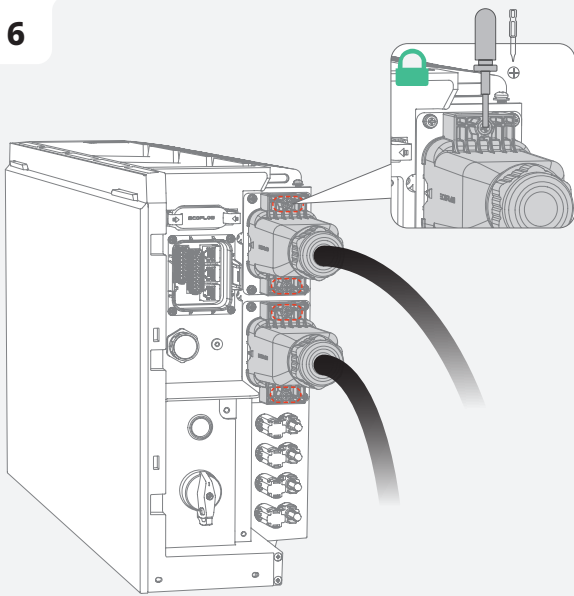
DANGER!
Pull back to confirm
the connection is
secure



5



6

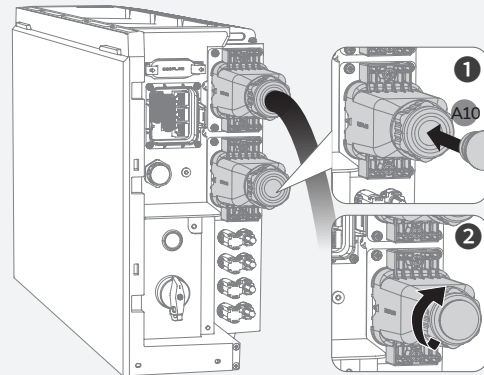


(Optional) Install the electrical safety plug for Backup terminal

A10 ×1

CAUTION

Even when not in use, the BACKUP terminal must be fitted with the BACKUP connector and an electrical safety plug (included) to completely isolate live parts, preventing personnel from electric shock or damage caused by incorrect external device connection.



I Cascade Batteries

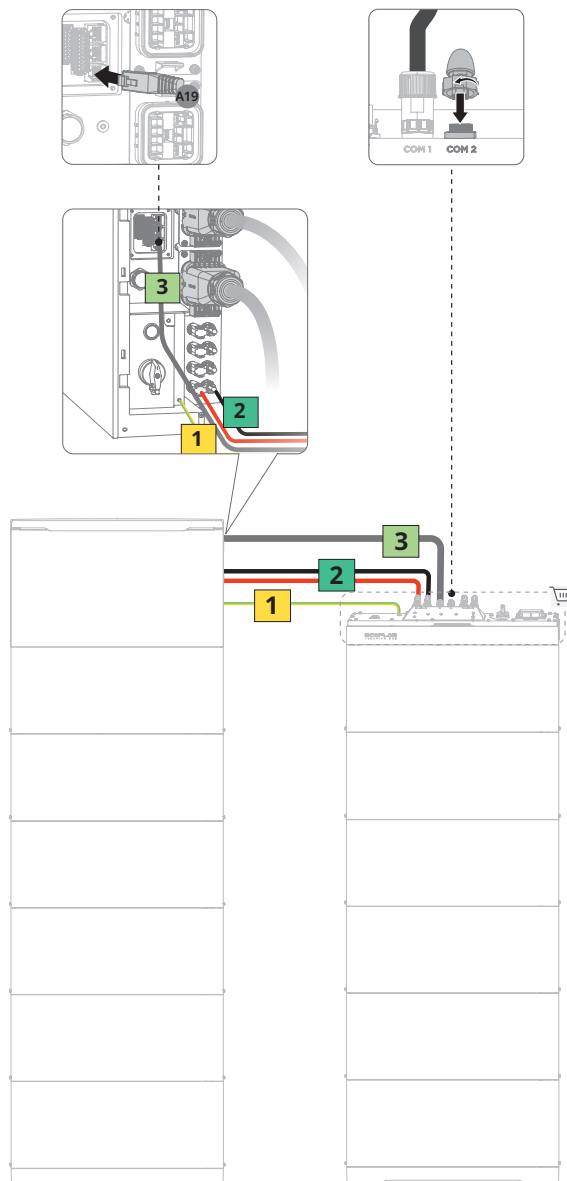
NOTICE

- For cascade battery configurations, the EcoFlow PowerOcean Plus Battery Junction Box (EF BD-JC-S2) is required to ensure proper connection of multiple battery stacks. One battery junction box supports a maximum of 6 battery packs.
- Up to 12 battery packs (maximum 60 kWh) can be cascaded.
- Do not remove the protective cap of unused DC input terminals. Otherwise, the IP rating of the inverter will be affected.
- For the battery clearance, see the "Installation Clearance Requirements" section in this guide.

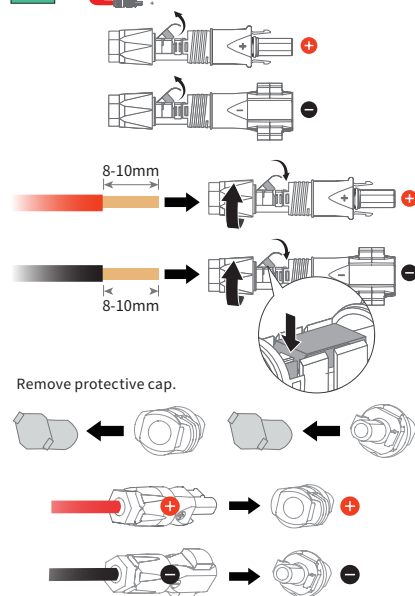
- 1** For details about connecting grounding terminals between the battery junction boxes, see the "Connect PE Cables" section in this guide.

CAUTION

A termination resistor must be installed on any unused B-COM terminal of the battery junction box; otherwise, the system may malfunction.

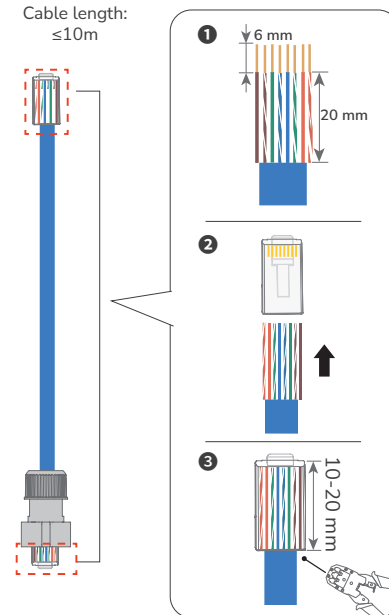


- 2** Battery power cable (included in battery junction box)



- 3** ×1 (included in battery junction box)

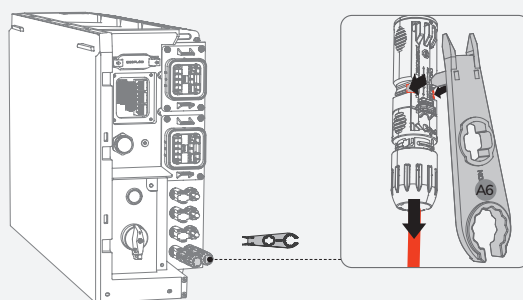
Cable length: ≤10m



• Remove the Battery Terminal

WARNING Before removing the positive and negative connectors, ensure that the PV SWITCH is OFF.

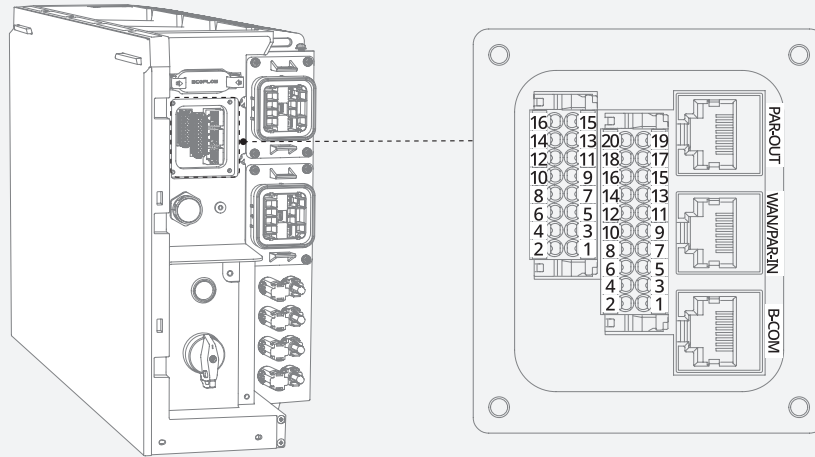
A6 ×1



I Install COM Terminal With Shorting Wire

NOTICE

- The COM terminal supports logic interface connection, which is required by certain local regulations. A logic interface is a simple control signal interface that can be operated by a simple switch or contactor.
- When the switch is turned on, the inverter can operate normally. When the switch is turned off, the inverter will reduce its active power to zero.
- DRM is only supported in Australia and New Zealand.
- Relay Contact rating of SG_Ready pins: 30V/2A. The recommended load should be rated $\leq 24V/2A$ for safe operation.

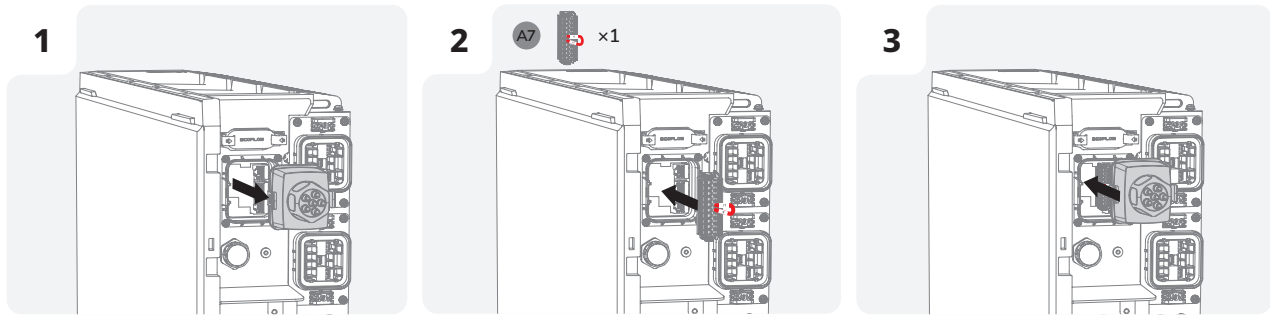
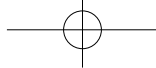


• 16-Pin COM Terminal Definition

Off-Grid Parallel Communication / Gateway Communication		RS485 Communication for Ecosystem Appliances	
1	CAN0_H	2	ECO_485_B1
3	CAN0_L	4	ECO_485_A1
5	SYN	6	ECO_485_B2
7	SYN_GND1	8	ECO_485_A2
SG_Ready / Earth Fault Alarm (EFA)		Smart Meter	
9	DO 2_1 (for SG_Ready 2)	10	METER_485_B3
11	DO 2_2 (for SG_Ready 2)	12	METER_485_A3
13	DO 1_1 (for SG_Ready 1 / EFA)	DC Output	
15	DO 1_2 (for SG_Ready 1 / EFA)	14	12V_OUT
		16	12V_GND1

• 20-Pin COM Terminal Definition

Signal Shield Grounding		DRM / RCR Communication	
1	PE	2	GND2 (for DRM/RCR)
3	Reserved	4	DRM0
RCR DI Communication			
5	RCR_DI3	6	RCR_DI1
7	RCR_DI4	8	RCR_DI2
CAN Communication for Ecosystem Appliances		Emergency Stop Input	
9	ECO_CAN3_H	10	EPO
11	ECO_CAN3_L	12	EPO_GND2
CAN Communication		DI Communication for Gateway / Generator	
13	CAN4_H	14	DI 2
15	CAN4_L	16	DI 2_GND1
DI Communication for Dry Contact Control (14a)		DO Communication for Generator	
17	DI 1	18	DO 3_1
19	DI 1_GND2	20	DO 3_2



Ripple control receiver (RCR)

Ripple control receiver (RCR) is an interface between a PV system and power grid company that enables the grid operator to reduce the feed-in power if necessary. Generally, if the grid is overloaded, the utility company will specify whether the PV system should reduce their feed-in power to 0%, 30%, 60% of their rated power. If the grid is not overloaded, the PV system will be allowed to input 100% of the power. These control commands will be directly sent to the installer and then realized by the RCR.

The RCR has four relays (K1-K4). The relays are potential-free make contacts. The relays are interlocked with each other. Furthermore, each of these relays represents one of the following control stages:

No.	K1	K2	K3	K4	System Setpoint
1	0	0	0	0	100%
2	0	0	0	ON	0%
3	0	0	ON	0	30%
4	0	0	ON	ON	0%
5	0	ON	0	0	60%
6	0	ON	0	ON	0%
7	0	ON	ON	0	30%
8	0	ON	ON	ON	0%
9	ON	0	0	0	100%
10	ON	0	0	ON	100%
11	ON	0	ON	0	100%
12	ON	0	ON	ON	100%
13	ON	ON	0	0	100%
14	ON	ON	0	ON	100%
15	ON	ON	ON	0	100%
16	ON	ON	ON	ON	100%

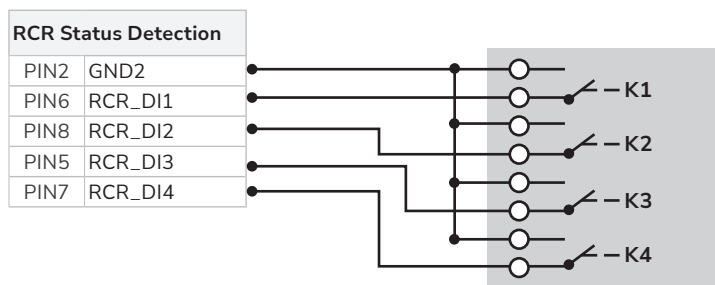
Enable the RCR via EcoFlow App, in this case, the feed-in power limitation will be enabled. The inverter is connected to the ripple control receiver as follows:

RCR_DI1 (PIN6): 100%

RCR_DI2 (PIN8): 60%

RCR_DI3 (PIN5): 30%

RCR_DI4 (PIN7): 0%



(Optional) To disconnect cables from PAR-OUT / WAN/ PAR-IN / B-COM ports, first remove the 16-pin/20-pin communication terminals.



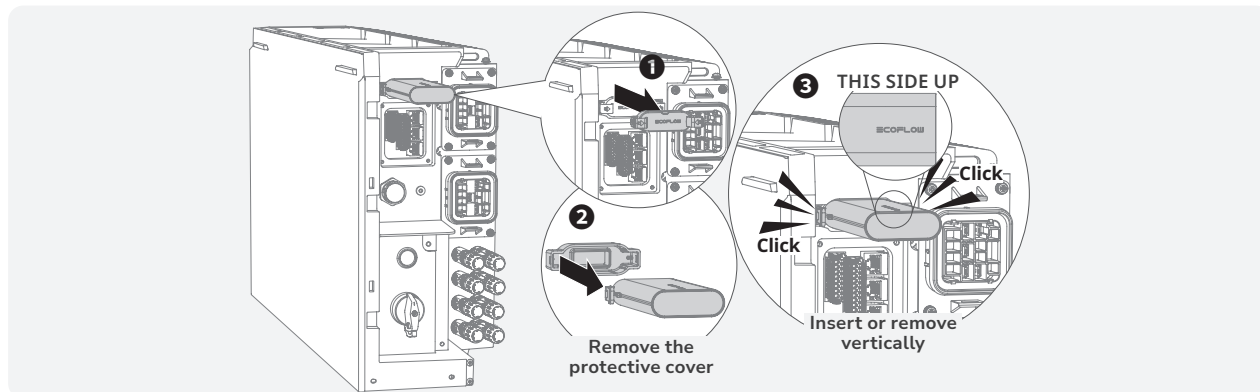
I Connect to Internet

en

NOTICE

- Use shielded CAT 5 or higher rating network cable for stable connection.
- For more details about EcoFlow OCEAN 2 Plus Dongle, visit following website to access user manual: <https://homebattery.ecoflow.com/documentation>.
- The WIFI dongle is used for communication between the inverter and the EcoFlow app via Bluetooth or via wired and wireless WLAN networking, which is required for a single inverter.
- For maximum reliability, use a wired connection. If wireless is necessary, select the 2.4GHz frequency band (avoid 5GHz) and maintain a clear line of sight between the router and OCEAN 2 Dongle.

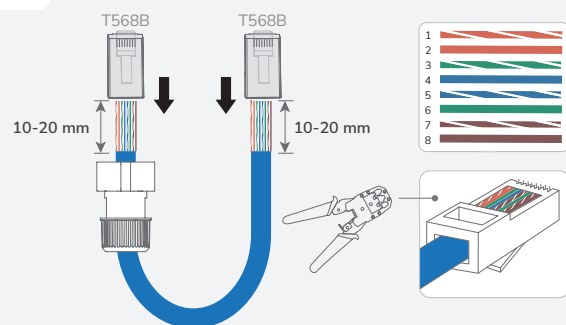
• Method 1: Via a Wireless Network



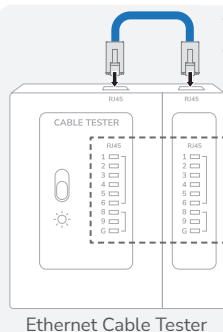
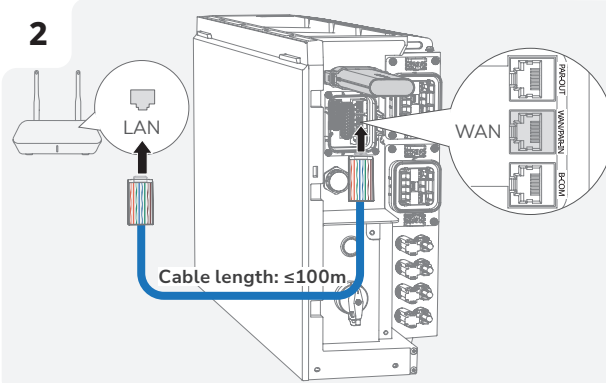
• Method 2: Via a Wired Network

1

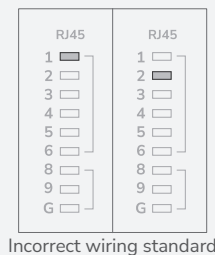
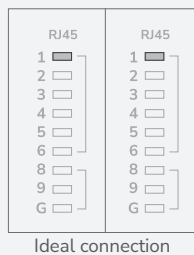
Both ends of the network cable use the T568B wiring standard.



2



Test network cable connection. If the LEDs of the two RJ45 ports light up in sequence, it indicates that the network cable is correctly wired and should be fully operational.

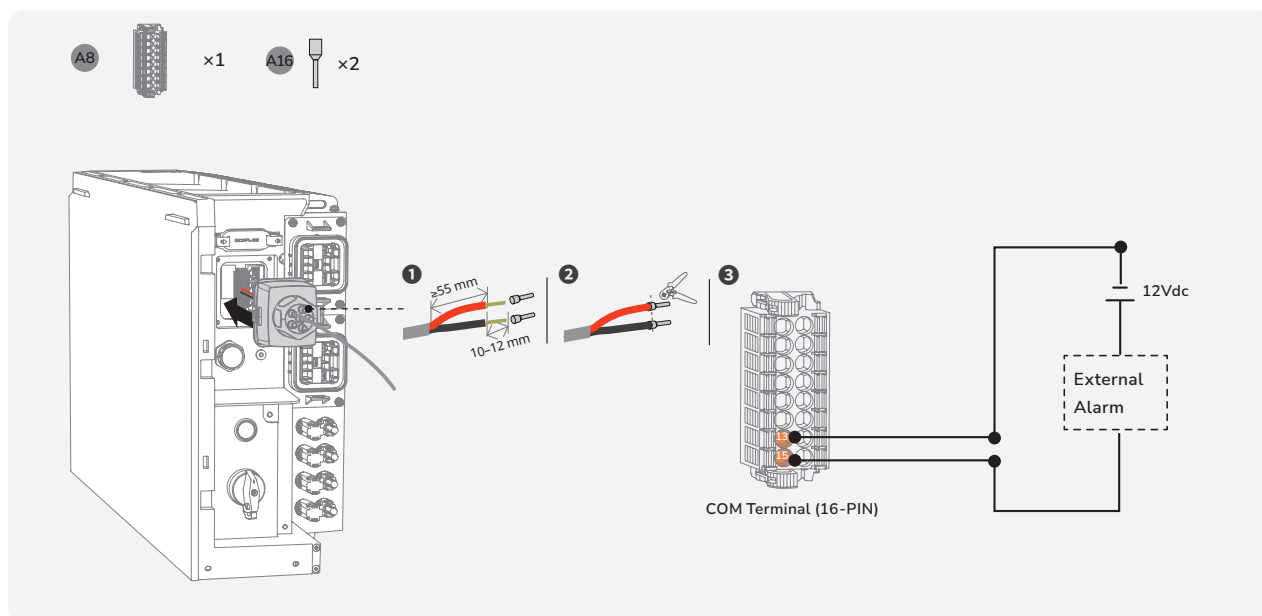


I Installing Earth Fault Alarm (Required for Australia)

The inverter provides terminals for connecting to an external alarm for earth fault. The additional equipment required is a light indicator and/or a buzzer. The external alarm needs to be powered by an external power supply less than 24V.

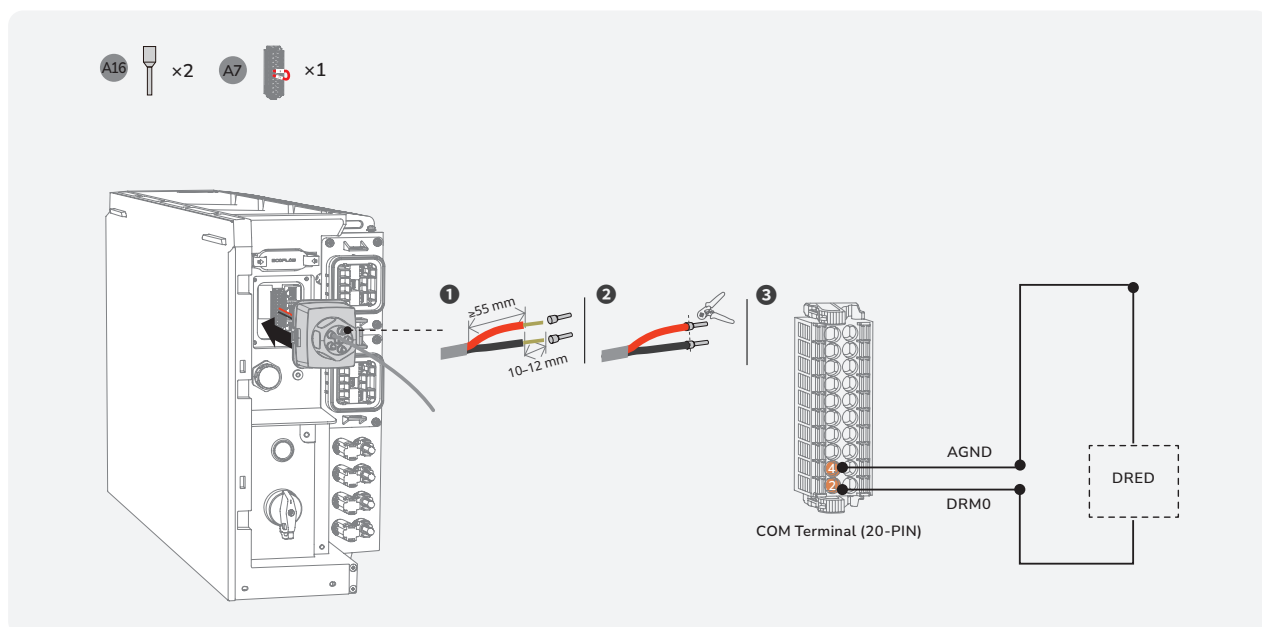
If an earth fault occurs,

- the light indicator will blink, or the buzzer will beep;
- the corresponding fault codes will pop up on the EcoFlow App. Visit the EcoFlow App to retrieve the error code for troubleshooting.



I Installing Demand Response Enabling Device (Required for Australia)

The inverter provides terminals for connecting to a Demand Response Enabling Device (DRED). After the connection, the DRED can trigger demand response mode (DRM0) on the inverter, which instructs the inverter to reduce its output to zero.



I (Optional) Install an EPO

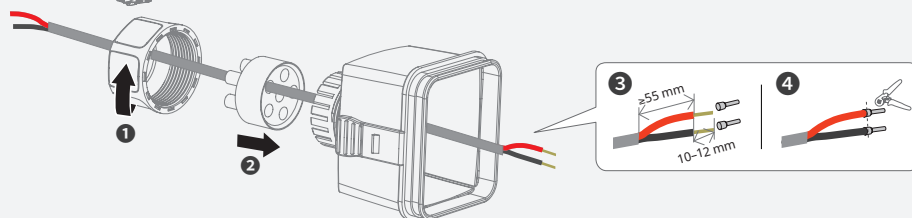
en

NOTICE

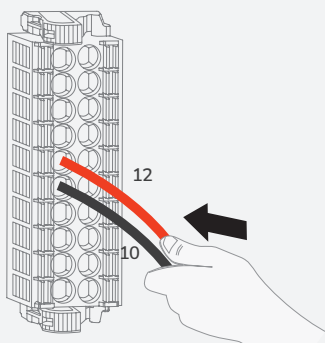
Before installing an EPO, remove the shorting wire between Pin 10 and Pin 12.

1

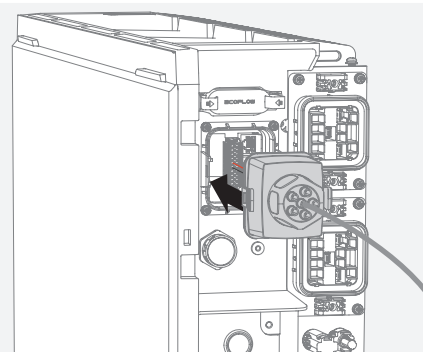
A16 ×2 A7 ×1



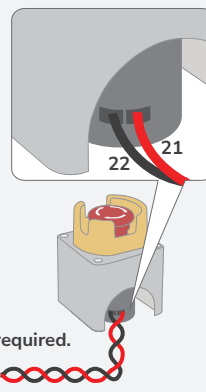
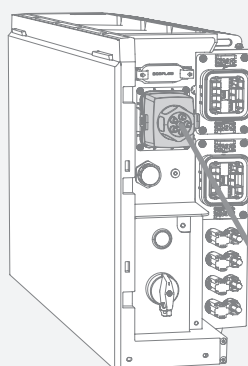
2



3



4



Twisted pair cables are required.

I (Optional) Connect Ecosystem Appliances

EcoFlow Ocean 2 Plus supports connecting with ecosystem appliances (EcoFlow PowerHeat, EcoFlow PowerPulse 2, etc.) via the COM interface.

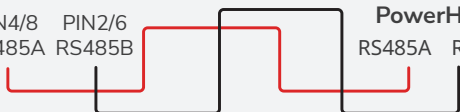
Refer to instructions in "(Optional) Install an EPO" section, COM terminal definition in "Install COM Terminal with Shorting Wire" section, and the documents of the corresponding products.

💡 RS485 / CAN communication cable length: ≤50m

16-Pin COM Port

PIN4/8
RS485A RS485B

EcoFlow
PowerHeat
RS485A RS485B



20-Pin COM Port

PIN9
CANH
PIN11
CANL

EcoFlow PowerPulse 2

PIN8
CANH
PIN7
CANL



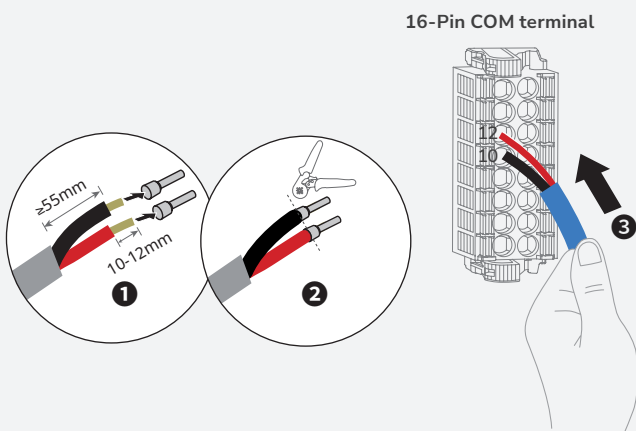
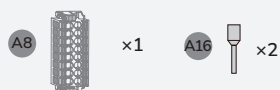
I (Optional) Install Energy Meter for Partial Backup System

NOTICE

- Smart meter is sold separately and has been preset before delivery. Do not modify the relevant parameters.
- The compatibility of this product with smart meters may vary by regions and versions. For detailed instructions on the installation and wiring scheme of the smart meter for this product, refer to the guide that comes together with the meter.
- The cable colors shown in the figures are for reference only. Select an appropriate cable according to the local standards.
- RS485 communication cable length: $\leq 50\text{m}$
- Meter brand and model: ACREL, ADL200N-CT/D16

• With CT

1



2

Meter Sampling

Find the home mains and connect the smart meter as shown in the diagram below.

3

Meter Communication

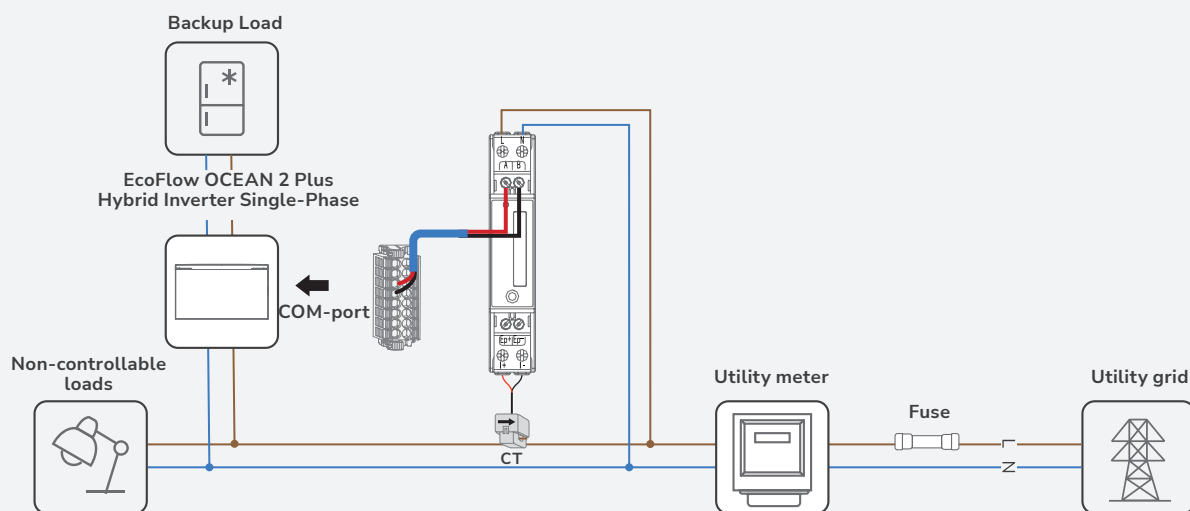
Find communication ports RS485A and RS485B on the meter and connect with the inverter.



L	Grid L
N	Grid N
A	RS485 A
B	RS485 B

I+	Grid L CT
I-	

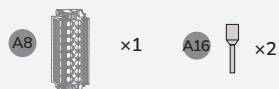
Communication Wiring Diagram



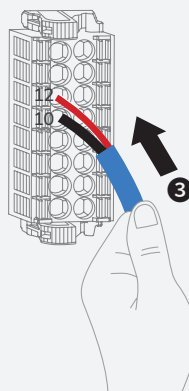
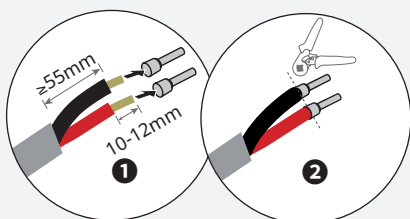
• Without CT

en

1



16-Pin COM terminal



2

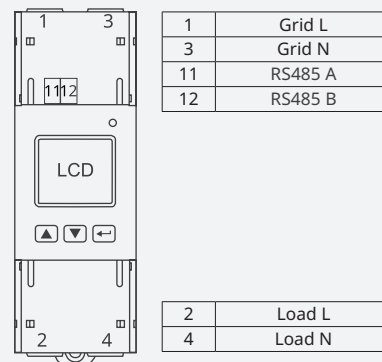
Meter Sampling

Find the home mains and connect the smart meter as shown in the diagram.

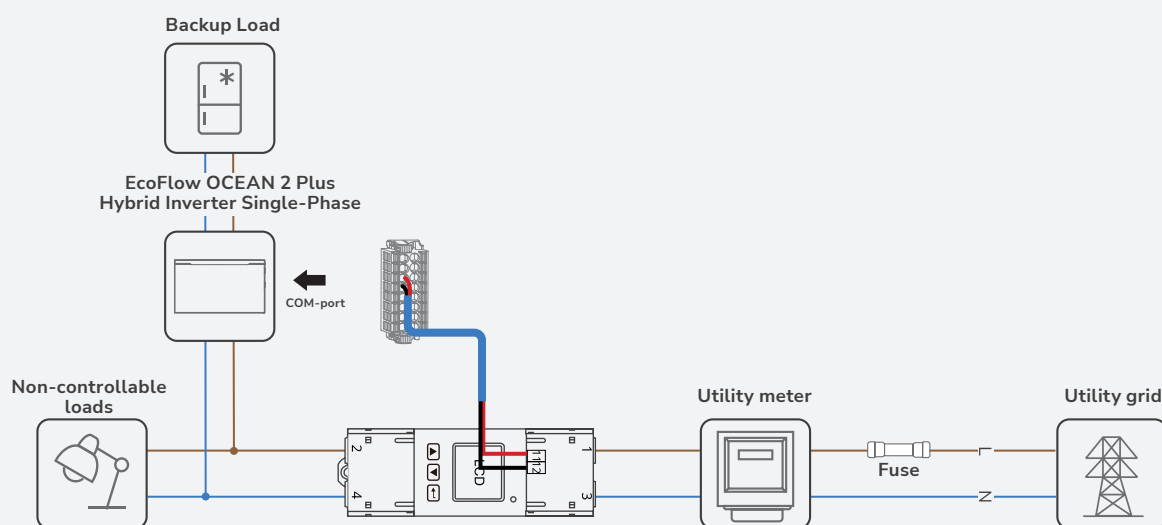
3

Meter Communication

Find communication ports RS485A and RS485B on the meter and connect with the inverter.



Communication Wiring Diagram



I (Optional) Install Energy Meter for System with Third-Party PV Integration

NOTICE

- It is recommended to use a CAT5 or higher-rated network cable.
- Smart meter is sold separately and has been preset before delivery. Do not modify the relevant parameters.
- The compatibility of this product with smart meters may vary by regions and versions. For detailed instructions on the installation and wiring scheme of the smart meter for this product, refer to the guide that comes together with the meter.
- If the existing third-party PV system already has its own grid-tied meter, its meter configuration and wiring should remain unchanged when the EcoFlow OCEAN 2 Plus Single-Phase system is added."
- Install CT with a minimum 50cm clearance from all other power cables, except for the conductor being measured which may pass through the CT; this prevents electromagnetic interference that could compromise measurement accuracy.

• With CT

1

A8 x1 A16 x2

16-Pin COM terminal

Meter for partial backup scenario

Meter for third-party inverter

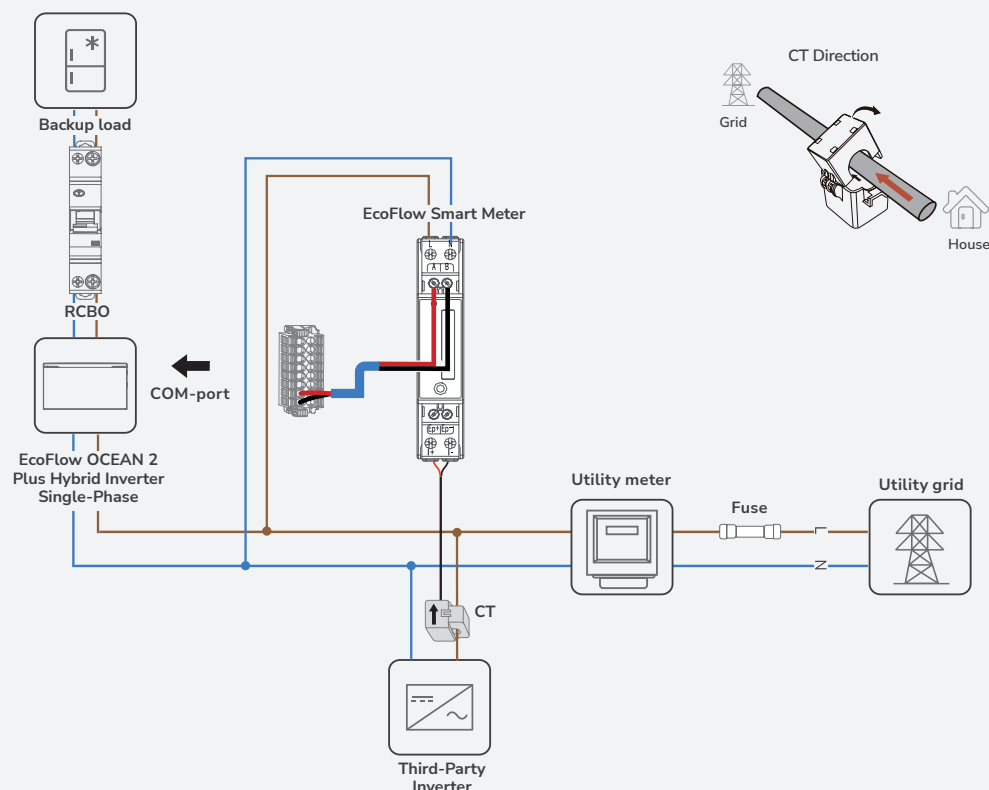
2 Meter Sampling
Find the home mains and connect the smart meter as shown in the diagram.

3 Meter Communication
Find communication ports RS485A and RS485B on the meter and connect with the inverter.

L	Grid L
N	Grid N
A	RS485 A
B	RS485 B

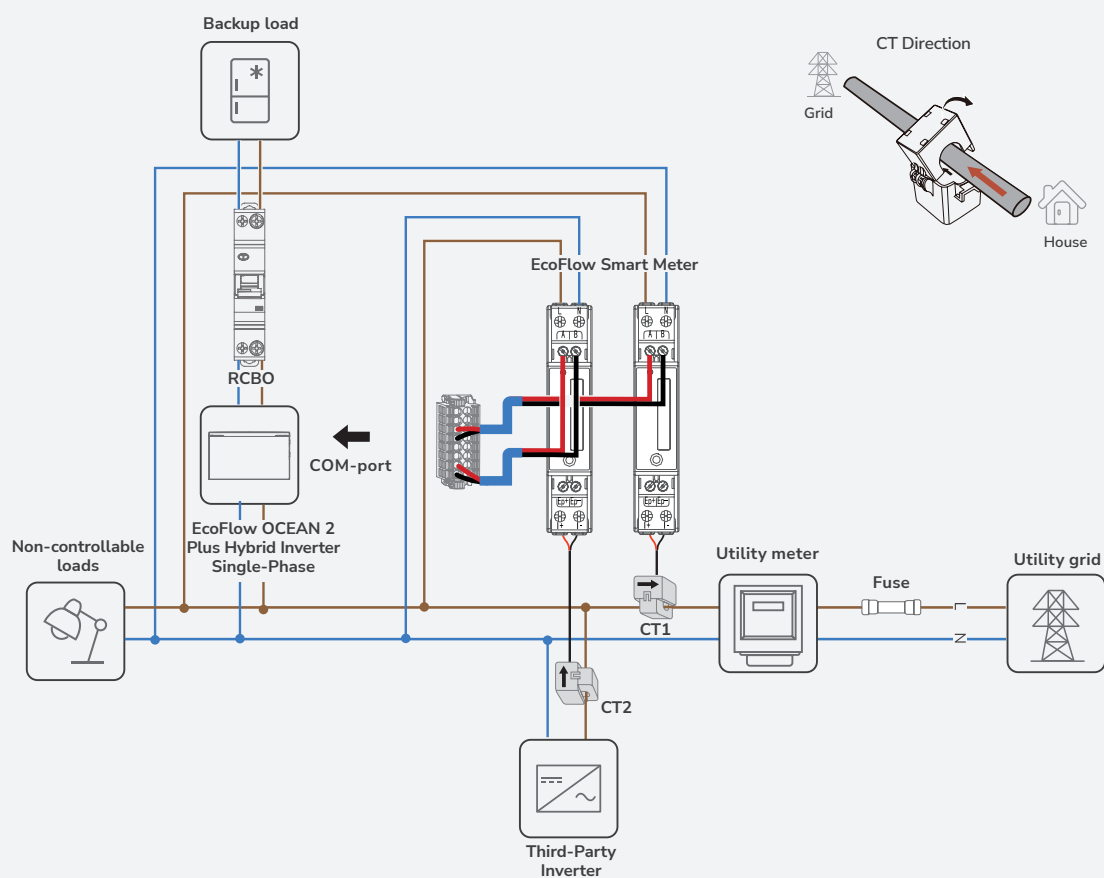
I+	Grid L CT
I-	

Communication Wiring Diagram—for whole-home backup



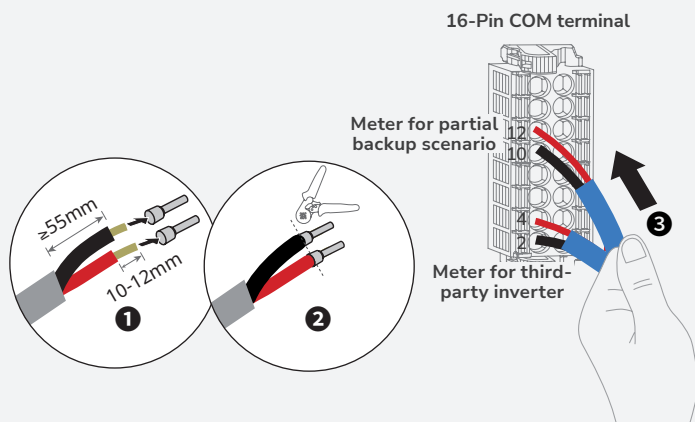
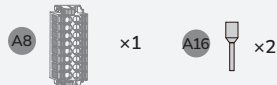
Communication Wiring Diagram—for partial backup

en



• Without CT

1



2

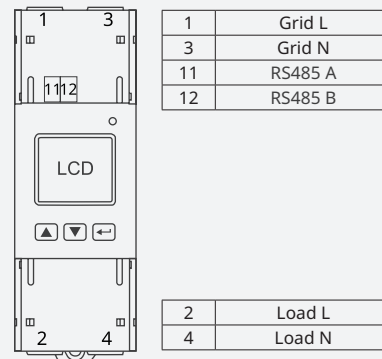
Meter Sampling

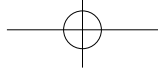
Find the home mains and connect the smart meter as shown in the diagram.

3

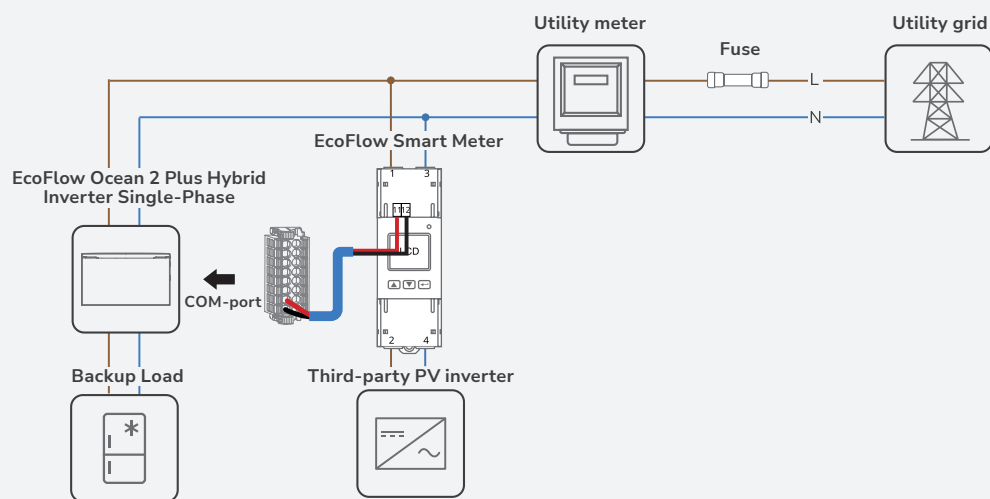
Meter Communication

Find communication ports RS485A and RS485B on the meter and connect with the inverter.

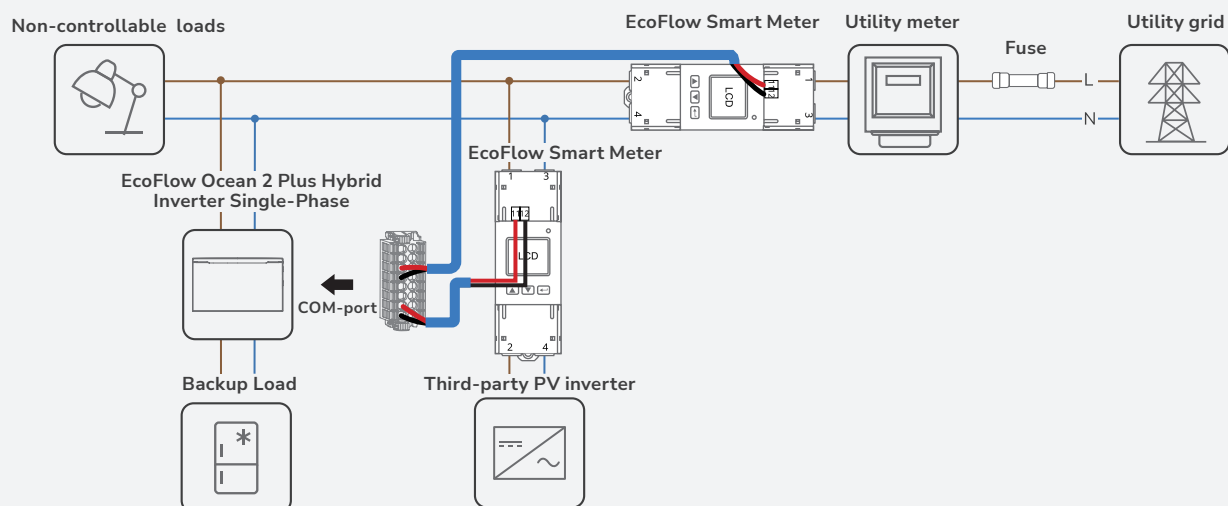




Communication Wiring Diagram—for whole-home backup

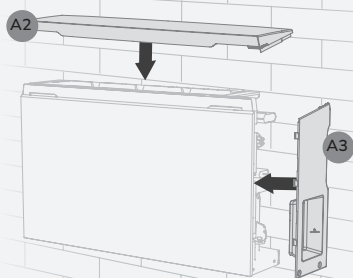
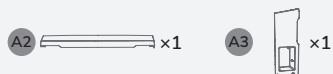


Communication Wiring Diagram—for partial backup

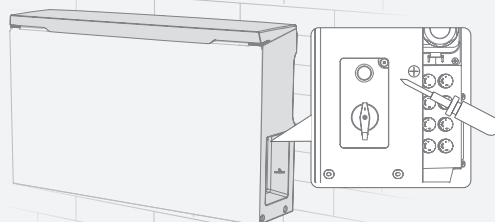


I Install trim covers

1



2



System Commissioning

en

I Checking before Power-On

Check Item	Acceptance criteria
Equipment	The equipment is installed correctly and securely.
Grounding	The PE cables are connected correctly, securely, and reliably.
Cable routing	Cables are routed properly in accordance with the installation requirements.
Cable tie	Cable ties are properly spaced along the cable bundle, with no sharp edges or burrs.
Switch	All switches connecting to the system are OFF.
Cable connection	The AC/DC power cable, battery cable, and communication cable are connected correctly, securely, and reliably.
Unused terminal and port	All unused terminals and ports are covered with watertight caps.
Installation environment	The installation space is proper, and the surrounding environment is clean and tidy.

I System Power-On

• Procedure (PV module configured)

1. Set the BATTERY SWITCH to ON position (for Australia and France versions).
2. Set the PV SWITCH to ON position.
3. Turn on the AC switch between the inverter and the power grid.
4. Observe the LED to check the operating status.

• Procedure (PV module not configured)

1. Set the BATTERY SWITCH to ON position (for Australia and France versions).
2. Set the PV SWITCH to ON position.
3. Turn on the AC switch between the inverter and the power grid.
4. After commissioning, press and hold for three seconds the BATTERY ON/OFF button.
5. Observe the LED to check the operating status.

I System Power-Off

Before installing, operating, and maintaining the equipment, always disconnect it from all power source.

⚠ WARNING

After the system is powered off, the remaining electricity and heat may still cause electric shocks and burns. Therefore, wait at least five minutes and wear protective gloves before operating the equipment.

1. Send a shutdown command through the app.
2. Set the PV SWITCH to OFF position.
3. Turn off the AC switch between the inverter and the power grid.
4. Secure the PV SWITCH with a lock to prevent accidental startup. The lock is prepared by the customer.

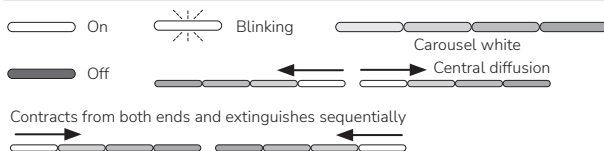


Locking Operation:

1. Reveal lock hole: Press the button on the switch to expose the lock hole.
2. Apply lock: Use customer-provided lock to secure the switch through the exposed lock hole.

5. Set the BATTERY SWITCH to OFF position (for Australia and France versions).
6. Secure the BATTERY SWITCH with a lock to prevent accidental startup. The lock is prepared by the customer (for Australia and France versions).
7. Press and hold the BATTERY ON/OFF button for 10 seconds, until the indicator is off.
8. Sequentially disconnect GRID cables, PV input cables, battery cables, communication cables and all modules connecting to the system.

I LED Indicators Introduction



• Daily Use

Power On	Description
	Startup
Power Off	Description
	Shutdown
Charge Status	Description
	0-25%
	25-50%
	50-75%
	75-100%
	100%
Discharge Status	Description
	1-10% (Low battery)
	11-24%
	25-49%
	50-74%
	75-100%

• Installation/Commissioning

Over-the-air Updates / Self-Check Status	Description
	Over-the-air update or self-check ongoing.
Wi-Fi Setup Status	Description
	Wi-Fi pairing ongoing

• Abnormal/Fault

Faulty Status	Description
	Electrical connection fault detected
	Communication fault detected
	Battery fault detected
	Converter fault detected

I EcoFlow APP Setup (For Installer)

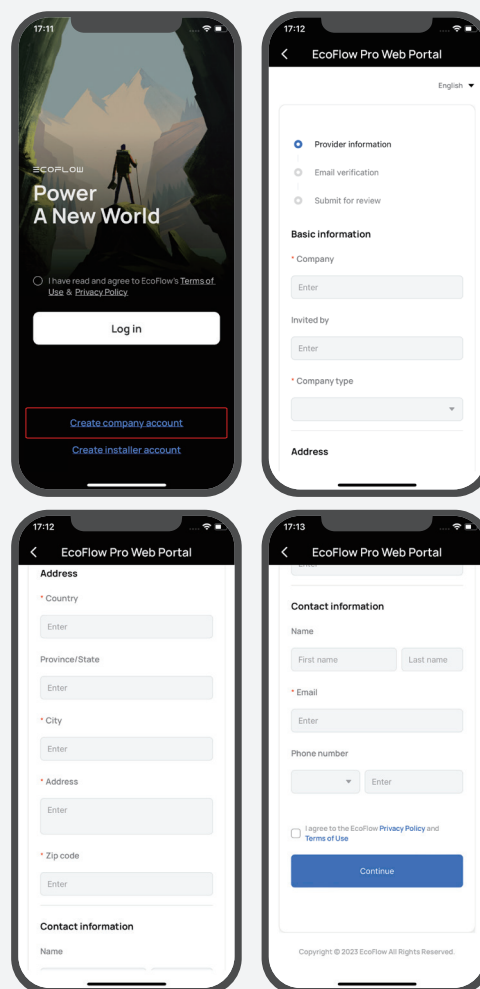
1 Download EcoFlow Pro App (For installer only)

Scan the QR code or download at:
<https://download.ecoflow.com/ecoflowproapp>

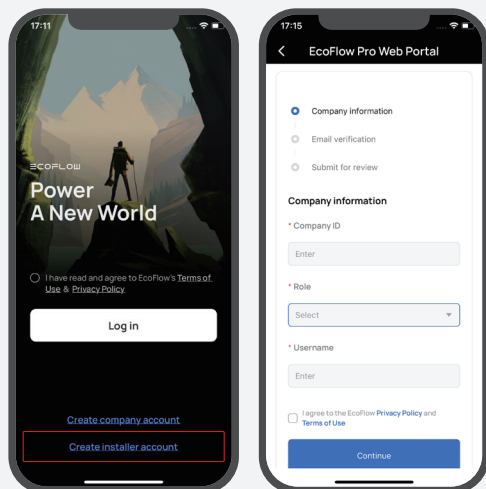


2 Create Account

a. Create company account

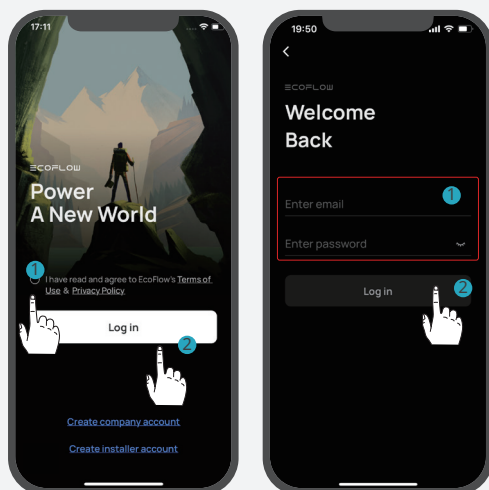


b. Create installer account



3 Log In

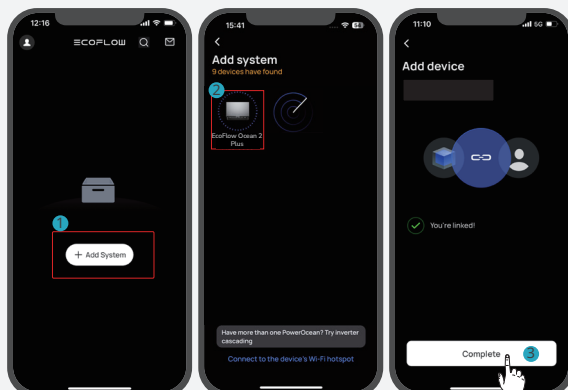
Enter the installer account and password.



4 Add Device

You can connect to the system via Bluetooth or Wi-Fi.

a. Connect to the system via Bluetooth.
Click **Add System** to automatically search for bluetooth devices nearby, and click **EcoFlow PowerOcean Single Phase** to connect, then click **Complete** to proceed.



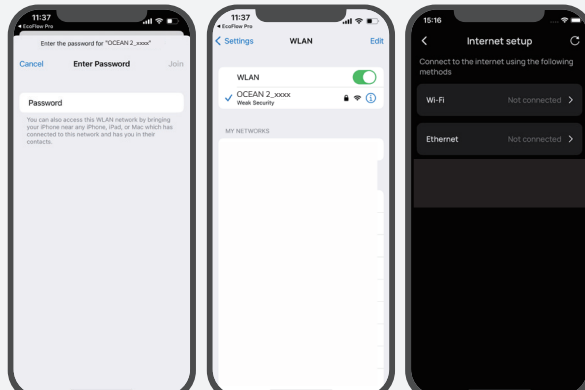
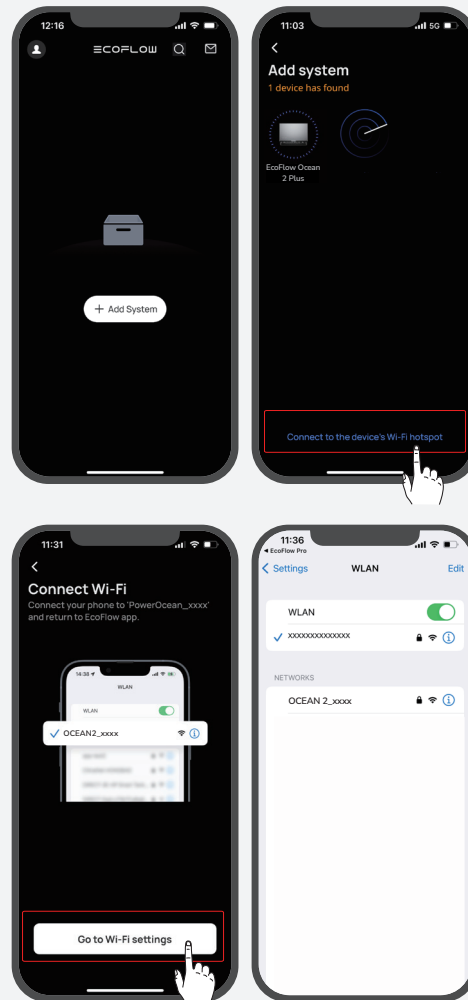
b. Connect to the system via Wi-Fi

1. Click "Add System" and then click "Or connect to the system's Wi-Fi" to access your phone's Wi-Fi settings.
2. Find "PowerOcean_xxxx" and click it to enter the password for the Wifi, then click "Join". The password is the last 8 digits of the serial number of the inverter.



You can find the serial number (S/N) in the product nameplate.

3. After successfully connected your phone to "PowerOcean_xxxx", tap the "EcoFlow Pro" on the top left of your phone's Wi-Fi setting page to shift back and proceed to commissioning.



en

5

Commissioning

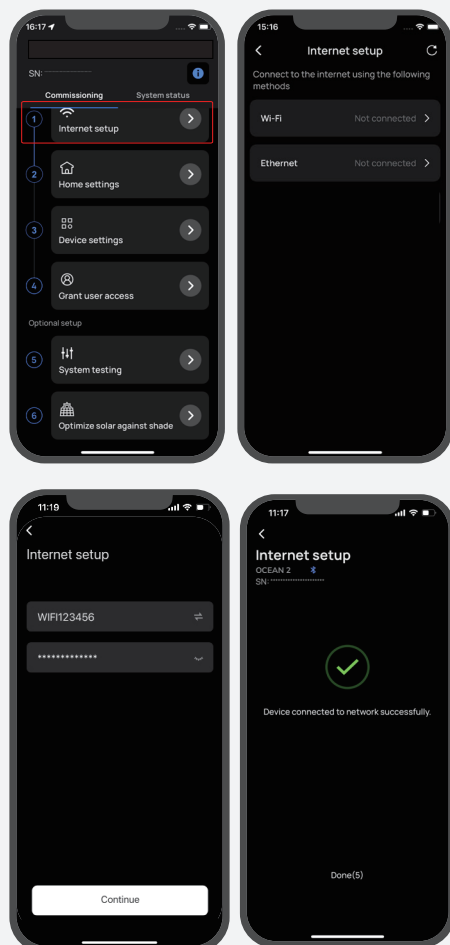
After bound device successfully, the device enters the four-step commissioning process.

Step1: Internet Setup

click Internet Setup to start the network configuration.

Method 1: Wi-Fi

Click Wi-Fi, select the appropriate WiFi name and enter the password and click continue.

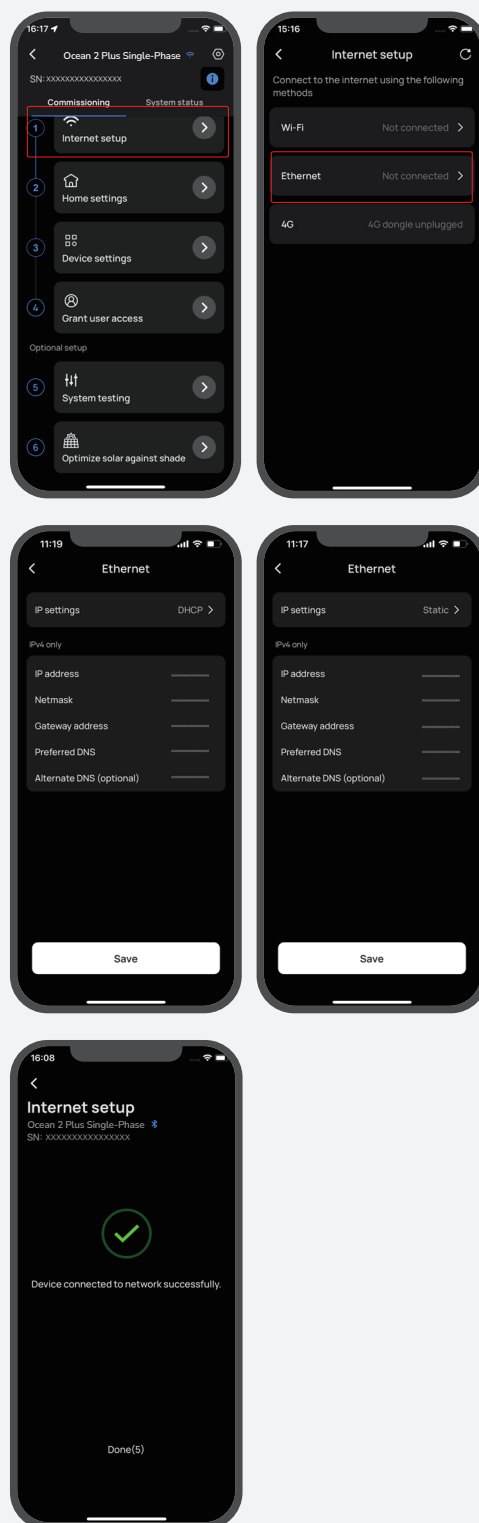


Method 2: Ethernet

Connect the system to a router using a network cable, wait a minute before proceeding. Then click "Ethernet" to set DHCP/Static mode. (Both modes are available)



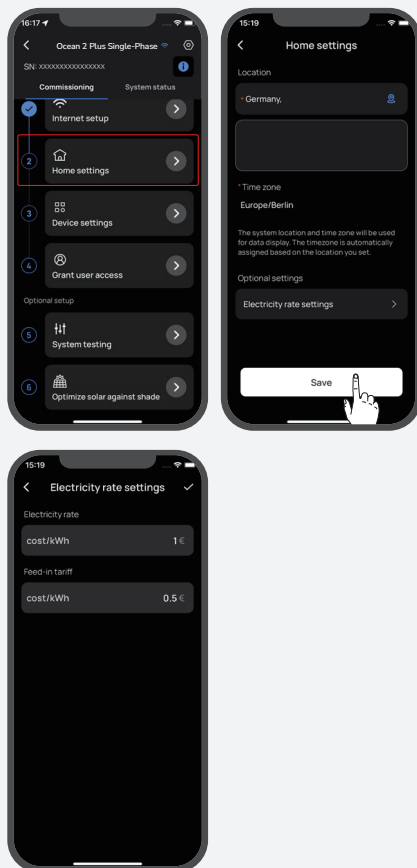
- By default, the IP setting is DHCP mode, which assigns dynamic IP address to the device (recommended).
- Static mode requires manual configuration of the IP address. Please make sure the IP address is not in conflict with other devices, you can visit the router to check the IP addresses of other devices.



Step2: Home Setting

Click **Home Setting** to enter the corresponding house address.

(Optional) Set the electricity rate.



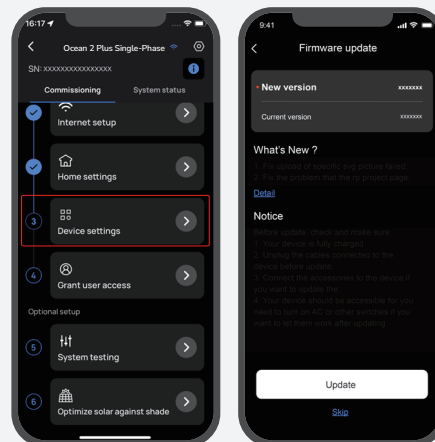
Step3: Device Setting

a. Click Device Setting to verify that the devices in the device list match the connected devices.

(Optional) Update firmware before carrying out Device Setting.

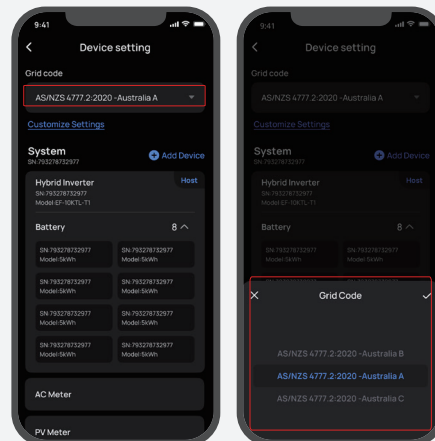
If there is a firmware update available for the EcoFlow PowerOcean system, the update page will pop up to notify you when proceeding this step. The "Skip" button is available

- Set reactive power mode.



for some update that is not urgent. It is highly recommended that you upgrade your PowerOcean firmware for seamless experience immediately.

b. Set grid code, system work mode and feed-in power limitation.

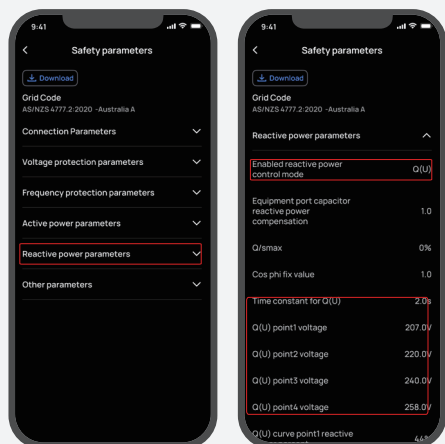


c. (Optional) You can also tap Customize Settings to set Connection parameters, Voltage Protection parameters, Frequency Protection parameters, Reactive Power parameters and other parameters. (Please follow local regulations, if you need to change any of these parameters, please contact your local power organization first.)

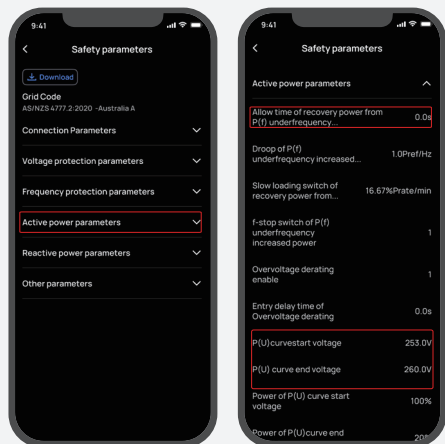
d. Click Done to finish the commissioning.

en

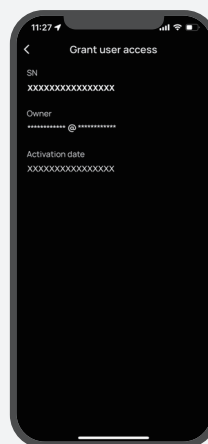
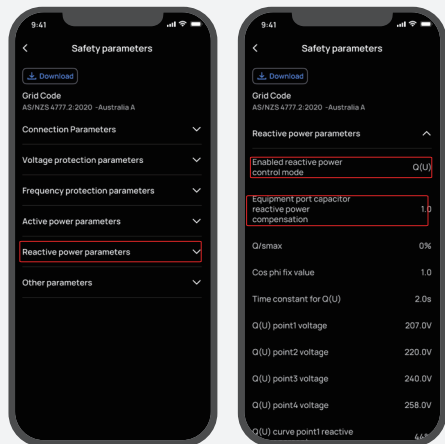
- Set power quality response modes: Volt-var.



- Set power quality response modes: Volt-watt.

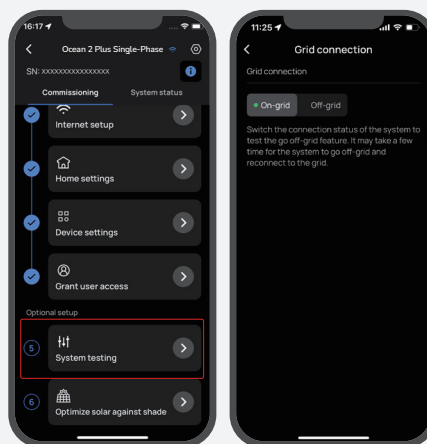


- Set fixed power factor.



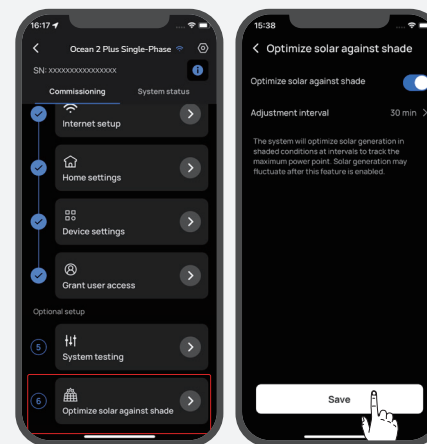
7 (Optional) System Testing

To test the go off-grid feature, you can toggle the button to switch the connection status of the system.



8 (OPTIONAL) Optimize solar against shade

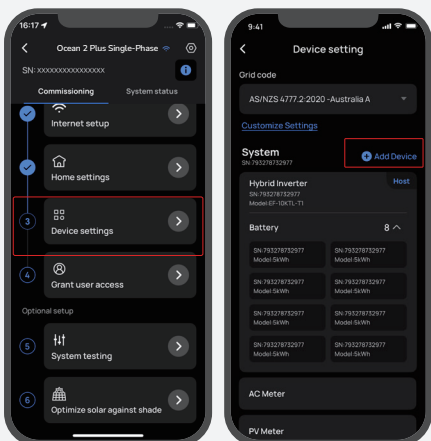
If this feature is enabled, the system will optimize solar generation in shaded conditions at your setup intervals to track the maximum power point. Solar generation may fluctuate.



9

(OPTIONAL) Add device to POWEROCEAN system

After correctly wiring power cables and communication cables with PowerOcean system, tap "Device setting" -> "Add Device" to add devices to EcoFlow Pro App, such as third-party PV inverter, PowerHeat, etc., and then make some relevant settings.

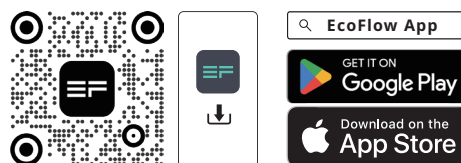


How Users Add Devices

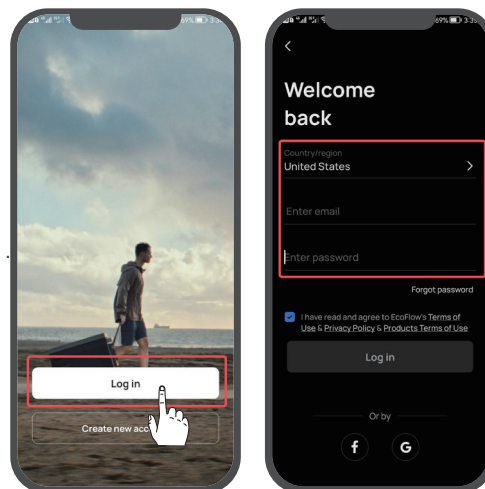
en

1. Down and install EcoFlow User App (For user only)

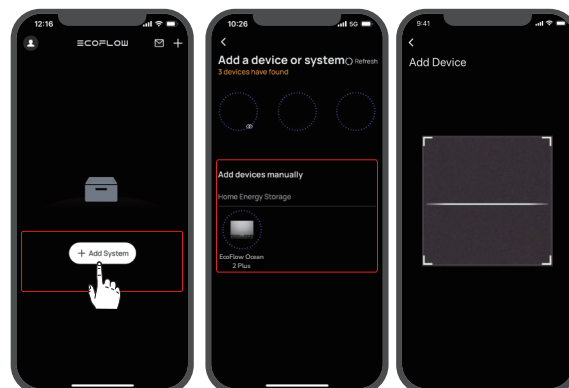
Scan the QR code or download at:
<https://download.ecoflow.com/app>



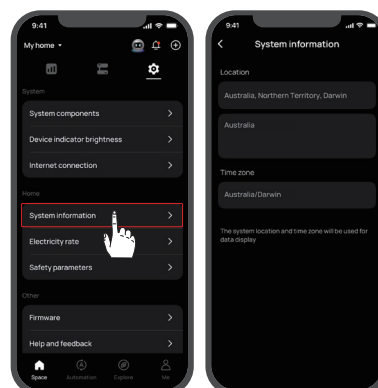
2. Create a new account and log in



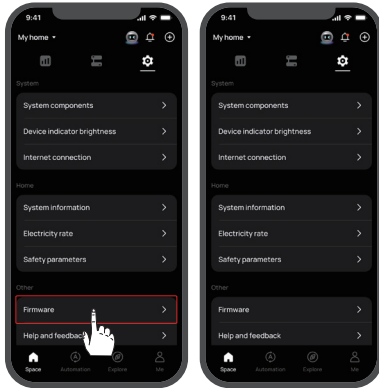
2. Add device manually.



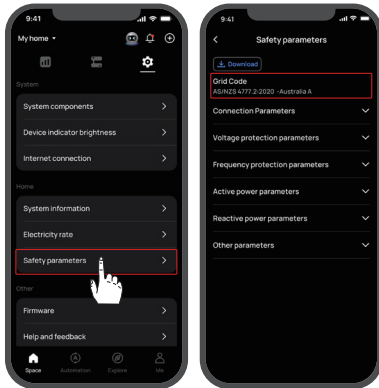
- How to view region settings?



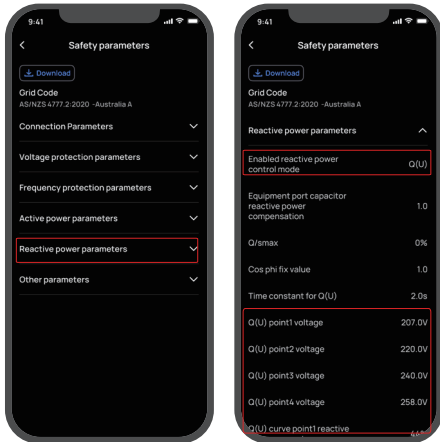
- How to view firmware version?



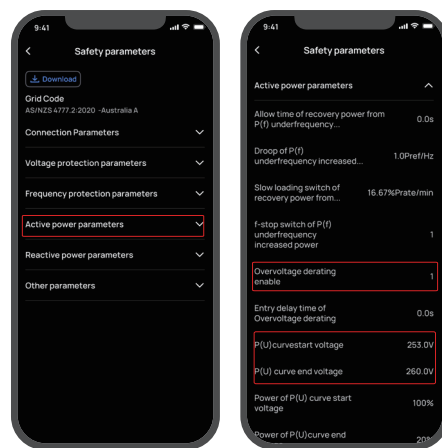
- How to view grid code?



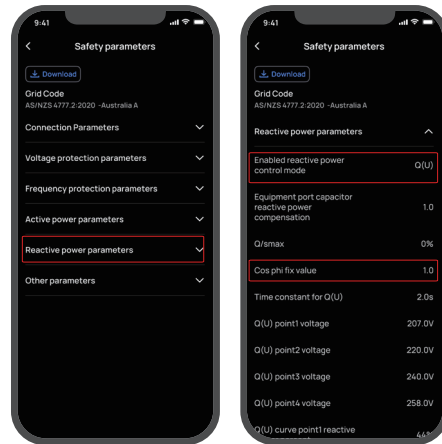
- How to view power quality response modes: Volt-var?



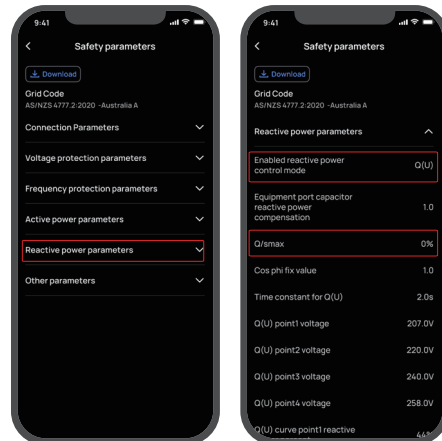
- How to view power quality response modes: Volt-watt?

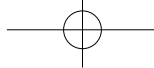


- How to view fixed power factor?



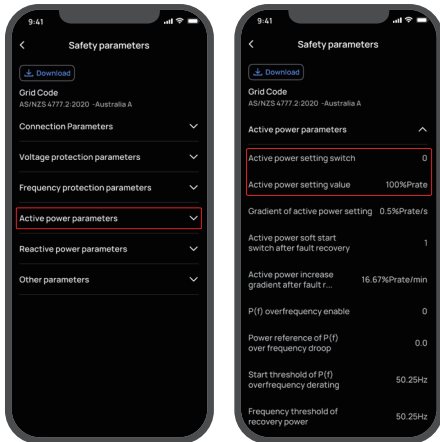
- How to view reactive power mode?



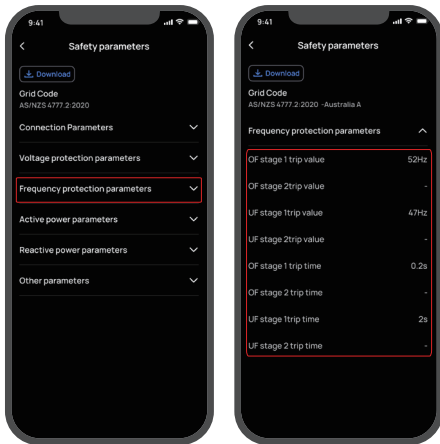


en

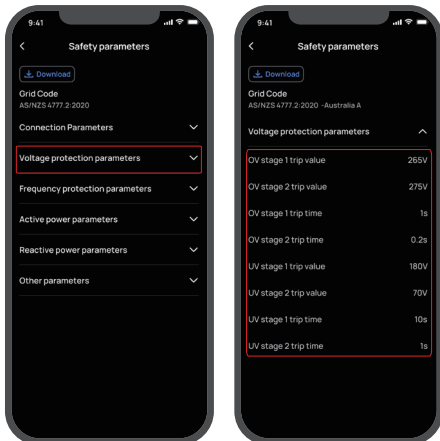
- How to view power rate limit?

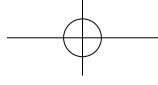


- How to view frequency protection parameters?



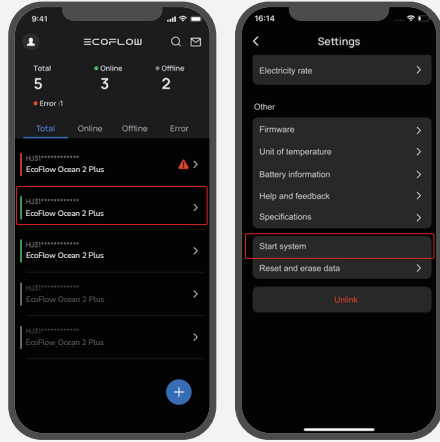
- How to view voltage protection parameters?





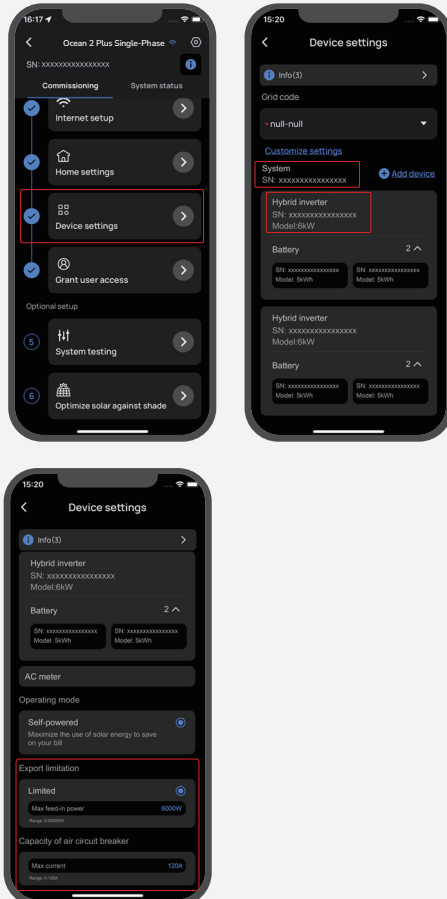
Start system

- Prefer to twist release the Emergency Stop button (if there is any) to start the systems.
- If no Emergency Stop button is configured, you need to access to the EcoFlow App and select "Device setting" -> "Start system" to start the systems.



Set Capacity of air circuit breaker and Export limitation for the cascading system

Access to the EcoFlow Pro App, then select "Device setting" to set the capacity of air circuit breaker (0-120A) based on user's home actual current of air circuit breaker, and set export limitation (0-50kW) for the cascading system.



System Maintenance & Replacement

en

⚠ WARNING

- Before any maintenance or replacement, turn off all switches of the inverter and the battery junction box and disconnect all power sources.
- Wear proper PPE before any operations.
- Place temporary warning signs or set up barriers to prevent unauthorized access to the maintenance area.

I Routine Maintenance

To ensure the long-term operating of the equipment, you are advised to perform routine maintenance according to this section.

Check Item	Check Method	Power off or not	Maintenance Cycle
System cleanliness	- Periodically check that the heat sinks are free of dust and obstructions, and ensure proper ventilation and heat dissipation for the equipment. - Clean the equipment surface with a dry, soft cloth if there is dust or dirt. Do not use liquids, abrasive materials, or hard objects for cleaning.	Yes	Once every 6 months
System running status	- Check that the equipment is not damaged or deformed. - Check that the equipment operates with no abnormal sound. - Check that all equipment parameters are correctly set during operation. - Check for abnormal noise from the fan during operation and ensure that there are no objects obstructing the fan. If foreign objects are found, remove them.	No	
Electrical connection	Check that all cables are properly secured and undamaged.	Yes	Check once every 6 months after creating new systems and once every 6 to 12 months thereafter
Grounding reliability	Check that ground cables are securely connected.	Yes	
Seal ability	Check that all unused terminals and ports are properly sealed with waterproof covers as supplied.	Yes	

I Troubleshooting

⚠ WARNING

The equipment should only be powered on after all issues have been resolved. Otherwise, the faults may worsen or the equipment could be damaged.

For installers, to troubleshoot the system:

1. Open the EcoFlow Pro app and log in.
2. Check the error code and follow the instructions provided in the app.
3. Fully power off the system. See the System Power-Off

section for guidance.

4. Follow the app instructions to resolve the issue. If the problem persists, contact your dealer.

For home owners, to troubleshoot the system:

1. Open the EcoFlow app and log in.
2. Check the most common FAQs or contact customer support via Settings > Help & Feedback.
3. If the issue persists, contact EcoFlow technical support for further assistance.

I Inverter Storage

- Do not unpack the equipment if you do not intend to use the equipment immediately.
- Keep the storage temperature at -30°C to 60°C and the humidity at 0%–100% RH.
- Store the product in a clean, dry place, and protect it from dust and moisture-related corrosion.
- Do not stack the inverters to avoid personal injury or equipment damage.
- Do not place this product near water, fire or other heat sources, such as heaters, direct sunlight, gas ovens, etc..
- During the storage period, check the equipment periodically.
- If the equipment has been stored for over 6 months, it must be inspected and tested by professionals before use.



For details about battery maintenance, see EcoFlow Power-Ocean LFP Battery User Manual.

I Battery Storage and Recharge

• Battery Storage

- During storage, place batteries according to the orientation markings on the packing case. Do not place batteries upside down or on their sides.
- Stack battery packing cases in accordance with the stacking requirements indicated on the outer packaging.
- Handle batteries with caution to avoid damage.
- The storage environment requirements are as follows:
 - Ambient temperature: -20°C-55°C; recommended storage temperature: 0°C-35°C
 - Relative humidity: 5% to 80%
 - Place batteries in a dry and clean place with good ventilation.
 - Place batteries in a place that is away from corrosive organic solvents and gases.
 - Keep batteries away from direct sunlight.
 - Keep batteries at least 3 meters away from heat sources and vibration source.
- Disconnect the batteries from all external devices during storage. Ensure that all indicators on the battery junction box are off.
- If a battery is dropped and shows obvious deformation, leakage, or damage without abnormal odor, smoke, or fire, contact qualified professionals to transfer the battery to an open and safe area, or contact a certified recycling company for proper disposal.
- If the battery is not used for a long period of time, store it intact in a semi-charged state (60% SOC). The battery is recommended to be discharged to 30% and then recharged to 60% every three months.

• Battery recharge



Battery recharge operations should be carried out by EcoFlow only. Please contact the EcoFlow technical support team for battery recharge service.

- If the power level of the battery is lower than 1% after use, recharge it to 30%-60% before storage. If the battery has been idle for a long time when the power is seriously insufficient, it will cause irreversible damage to the cells and shorten the service life of the battery.
- If the battery has been idle for a long time and the power level is severely low, it will enter a deep sleep protection mode. In such a case, recharge the battery before using it again.

I Replacement



WARNING

- Only professionals with appropriate qualifications are allowed to perform the replacement activities.
- Wear proper PPE before any operations.

• Replace the inverter fan

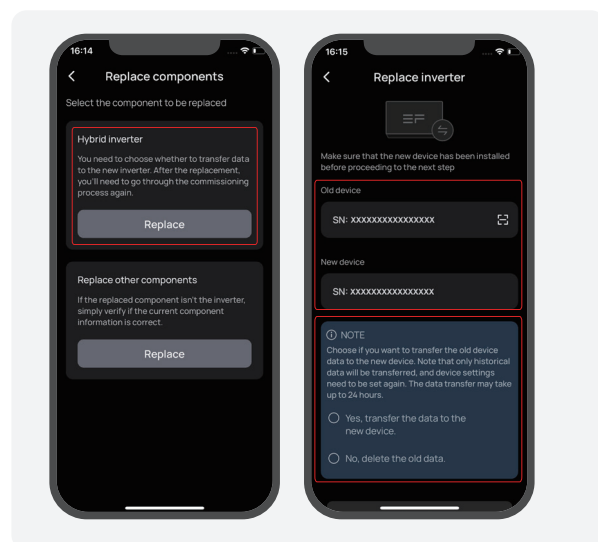
NOTICE

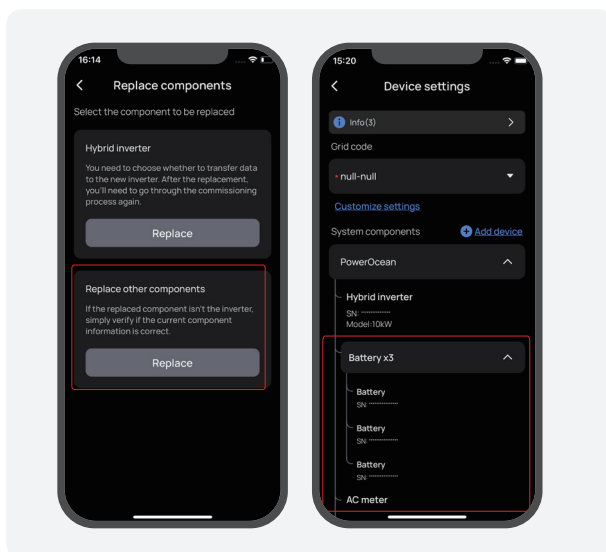
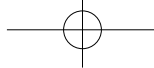
You can only replace the whole fan module instead of the individual fan.

1. Lift up the handle.
2. Loosen the bottom screws, and then the top screw, using a Phillips screwdriver.
3. Pull the top screw by hand to remove the fan module.
4. Disconnect the cable.
5. Install a new fan and connect the cable.
6. Align the locating pins and place the fan module into the fan position.
7. Secure the top screw.
8. Secure the bottom screws, and lower the handle.

• Replace the inverter

1. Power off the entire system. Refer to the [System Power-Off](#) section.
2. Sequentially disconnect GRID cables, PV input cables, battery cables, communication cables and all modules connecting to the inverter.
3. Remove the inverter or other components from the mounting bracket.
4. Install a new inverter and new components. For example, if you upgrade the inverter of different model, the battery junction box and WIFI module might be different. Refer to the new inverter's Installation Guide.
5. Power on the system and perform system commissioning. Refer to the Installation Guide delivered with the new inverter.
6. Transfer the device data to the new inverter or delete the previous data **Settings > Replace components** in the EcoFlow Pro app.





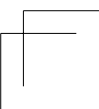
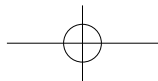
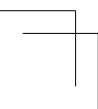
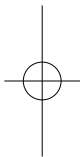
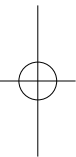
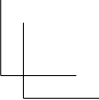
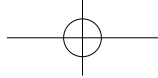
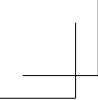
I Decommissioning

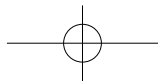
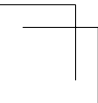
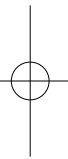
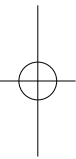
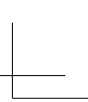
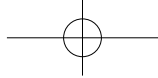
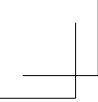
CAUTION

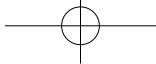
Before removing a inverter, ensure that it is powered off. Refer to the [System Power-Off](#) section.

1. Sequentially disconnect GRID cables, PV input cables, battery cables, communication cables and all other modules connected to the inverter.
2. Remove the inverter or other components from the mounting bracket.
3. Remove the mounting bracket.
4. Pack and store the inverter properly.

The battery module complies with the requirements of the German Battery Act (BattG). Dispose of used or defective batteries in accordance with applicable local regulations.







PAP
Raccolta carta

© 2026 EcoFlow Inc. All rights reserved.