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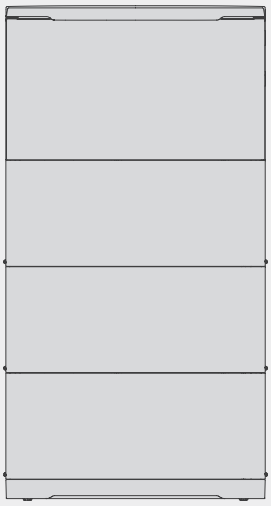
Installation Guide

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

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

Symbol Conventions

Symbol	Description
DANGER	Indicates a hazard with a high level of risk which, if not avoided, will result in death or serious injury.
CAUTION	Indicates a risk of electric shock.
WARNING	Indicates a hazard with a medium level of risk which, if not avoided, could result in death or serious injury.
CAUTION	Indicates a hazard with a low level of risk which, if not avoided, could result in minor or moderate injury.
NOTICE	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.

Safety Symbols

Icon	Name	Meaning
	Caution	Caution, risk of danger.
	Electric shock warning	Caution, risk of electric shock.
5 perc	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	CE marking	The product complies with the requirements of the applicable EU directives.

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

⚠ DANGER

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 mm^2. 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-P1-6K0-S2 EF HD-P1-6K0-S2F	EF HD-P1-8K0-S2 EF HD-P1-8K0-S2F EF HD-P1-8K0-S2A	EF HD-P1-9K9-S2A	EF HD-P1-10K0-S2 EF HD-P1-10K0-S2F	EF HD-P1-12K0-S2 EF HD-P1-12K0-S2F 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)	12000	16000	20000	20000	24000
AC Input/ Output (On-grid)	Nominal Output Power (W)	6000	8000	9999	10000	12000
	Max. Output Apparent Power (VA)	6600	8800	9999	11000	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)	26.1 A@230 V 27.3 A@220 V	34.8 A@230 V 36.4 A@220 V	43.5 A@230 V 45.5 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)	32.1	42.8	53.5	53.5	• 64.2 (EF HD-P1-12K0-S2, EF HD-P1-12K0-S2F) • 63 (EF HD-P1-12K0-S2A)
	Power Factor	0.8 leading~0.8 lagging				
	Max. Input Current (A)	• 72 (for model EF HD-P1-6K0-S2, EF HD-P1-6K0-S2F, EF HD-P1-8K0-S2, EF HD-P1-8K0-S2F, EF HD-P1-10K0-S2, EF HD-P1-10K0-S2F, EF HD-P1-12K0-S2, EF HD-P1-12K0-S2F) • 63 (for model EF HD-P1-8K0-S2A, EF HD-P1-9K9-S2A, EF HD-P1-12K0-S2A)				
	THDi at Full Load	Current Total Harmonic Distortion ≤3%				
AC Output (Off-Grid)	Nominal Output Power (W)	6000	8000	9999	10000	12000
	Nominal Output Current (A)	26.1 A@230 V 27.3 A@220 V	34.8 A@230 V 36.4 A@220 V	43.5 A@230 V 45.5 A@220 V	43.5 A@230 V 45.5 A@220 V	52.2 A@230 V 54.5 A@220 V
	Nominal Voltage (V)	L-N: 220V AC/230V AC; L+N+PE				
	Nominal Frequency (Hz)	50/60				
	Off-grid THDu	≤2%				
Battery Input/Output	Rated Voltage (V)	800				
	Voltage Range (V)	720-900				
	Battery Capacity	Up to 12 battery modules				
	Communication Method	CAN				
Parallel Installation	Maximum On-Grid Capacity[2]	Up to 5 cascaded inverters				
	Maximum Off-Grid Capacity	Up to 2 cascaded inverters				
Effciency	Max. Efficiency	97.6%				
	Deep Power Saving Mode (W) [3]	15				
	Self Consumption (Light-load scenario)[4] (W)	50				
Protection	Grid-to-Off-grid Switching Time[5] (ms)	0				
	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				
	AC Overvoltage Protection	Yes				
	DC Surge Protection	Type II				
	AC Surge Protection	Type II				

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 (W×D×H mm)	Approx. 679.6 × 203.2 × 406.5
	Anti-Theft	Supported
	Ingress Protection Rating	IP66
	Wi-Fi Frequency Range (MHz) Maximum Output Power (dBm)	2.4GHz: 2400-2483.5, 5GHz: 5150-5350, 5470-5725, 5725-5850 <20
	Bluetooth Frequency Range (MHz) Maximum Output Power (dBm)	2402-2480 <20
	Mounting Method[6]	Floor Stand / Wall Mounted
	Environmental Category	Outdoor / Indoor
Compliance	Safety Standards	IEC/EN 62109-1, IEC/EN 62109-2, AS 60947.3, ISO4892-4
	Grid-tied Standards	EN 50549, G99, UNE, NTS, AS/NZS4777.2
	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 opperation.

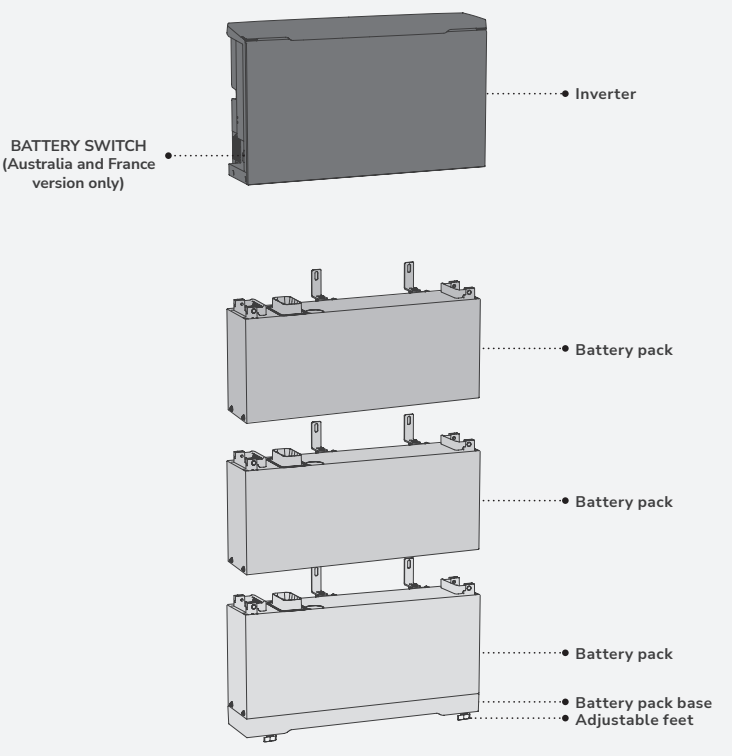
[2] In grid-connected parallel operation, load-side current is limited by the maximum input current rating of the grid port.

[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

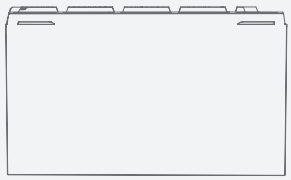
What's in the Box

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

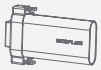
A2 ×1

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

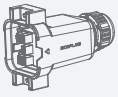
A7 ×1

Communication terminal (20-pin)

A8 ×1

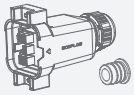
Communication terminal (16-pin)

A9 ×1



Grid connector

A10 ×1



Backup connector

A11 ×1

Marking-off template

A12 ×1

Expansion bolt
(M6×60)

A13 ×3

Grouding 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

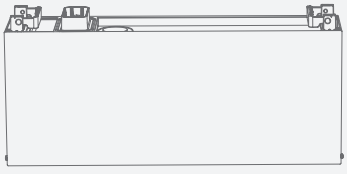
Mounting bracket

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)

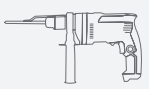
- **EcoFlow OCEAN 2 LFP Battery Base**

C1 ×1

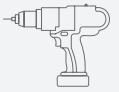
Battery base

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)

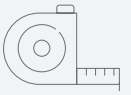
Wire strippers

RJ45 crimping tool

Square crimping tool
(for tubular terminals 0.5, 10 or 16 mm²)

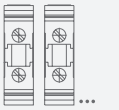
Heat-shrink tubing

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 mm² grounding cable
(copper conductor)

4-6 mm² PV input cable
(black, red)

16 mm² UL10269 power cable
(blue, brown)

Cat 5e or higher shielded network cable

2×0.5 mm² twist pair cable

System Installation

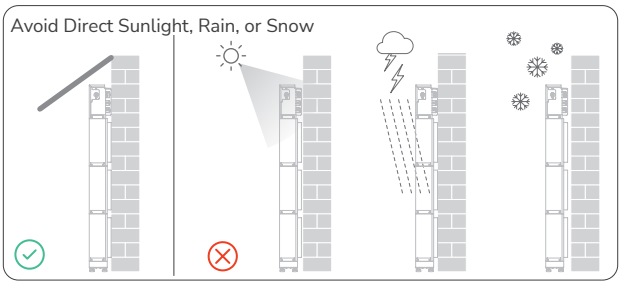
Installation Environment Requirements

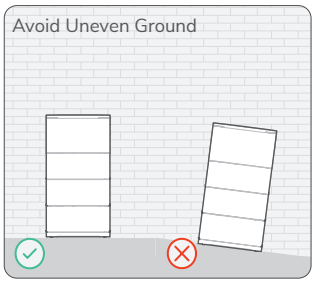
⚠ WARNING

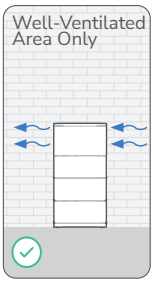
The installation and operation environment must comply with applicable international, national, and local standards for lithium batteries and the inverter.

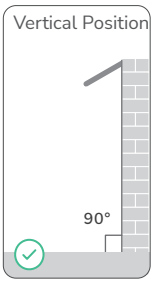
NOTICE

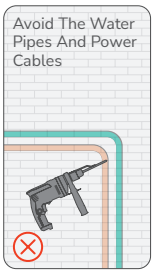
- When installing the equipment in a garage, keep it away from the driveway.
- The mounting structure for the equipment must be fire-resistant. Do not install the equipment on flammable building materials. Suitable non-combustible materials include brick, masonry block, or concrete.
- The mounting material 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.

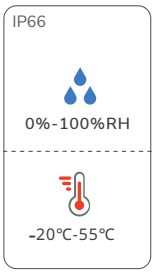


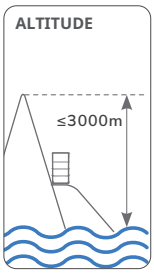


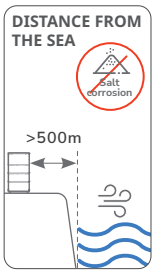


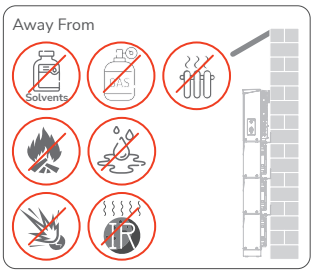


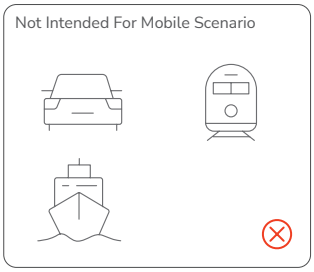


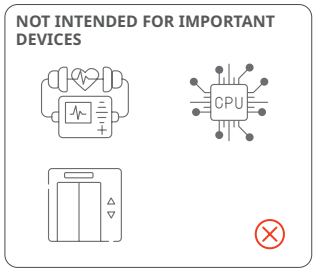












Installation Clearance Requirements

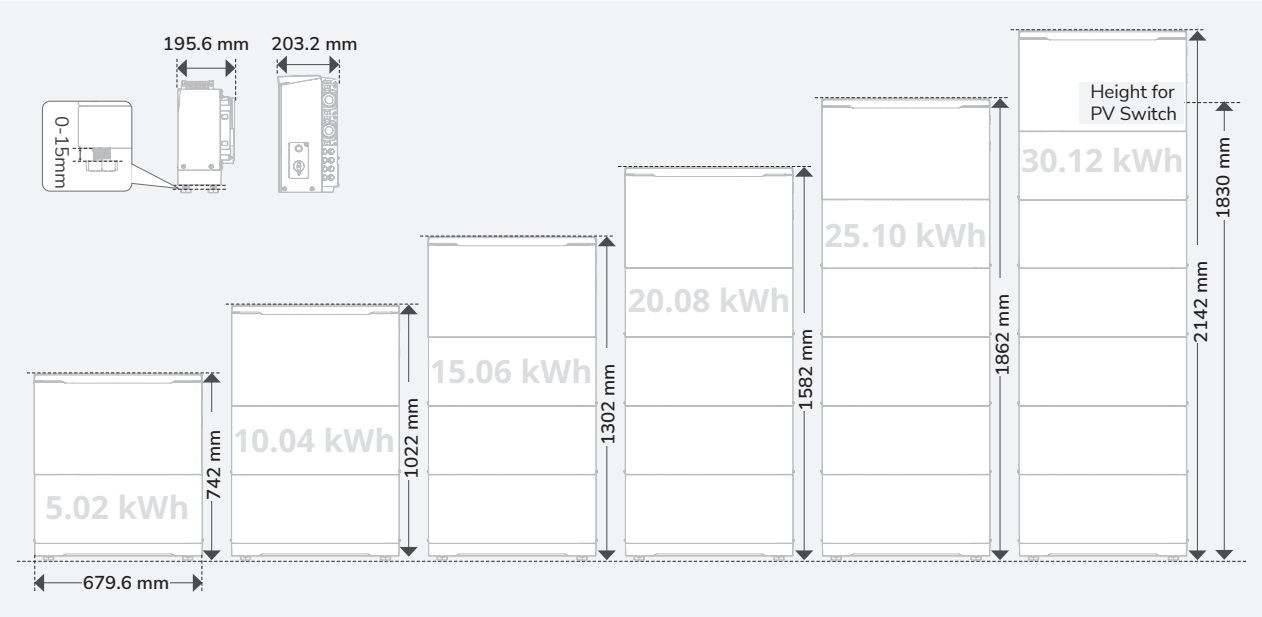
WARNING

- 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**

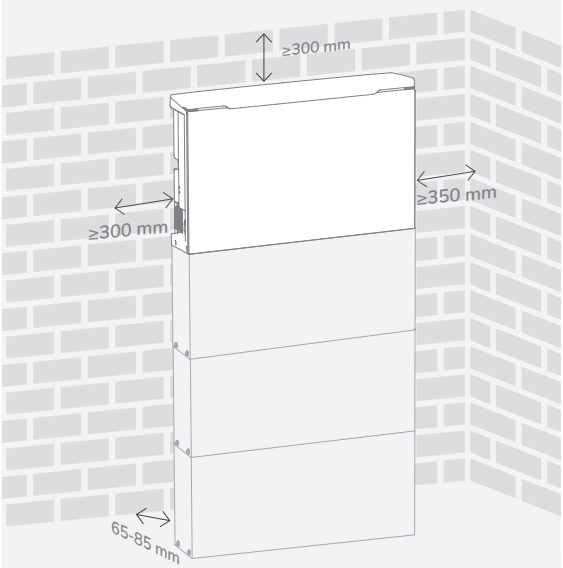


- **Clearance**

WARNING

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

Minimum clearance



Minimum clearance of cascaded inverter

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.

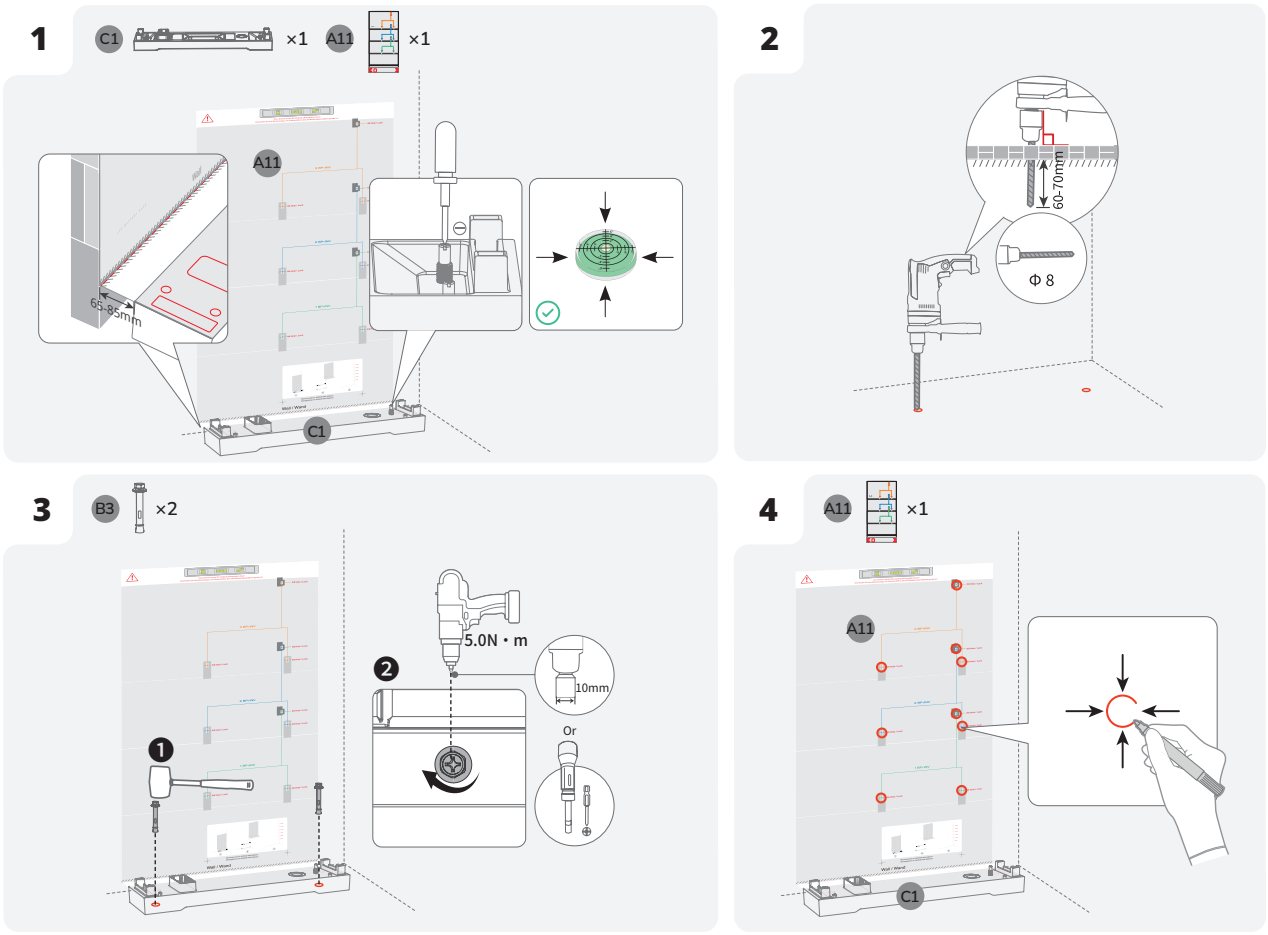
CAUTION

- 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.

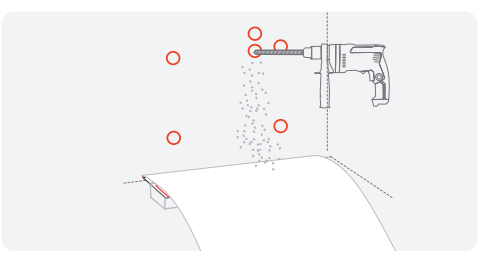
NOTICE

- 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.

Method 1: Floor Mounted



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.



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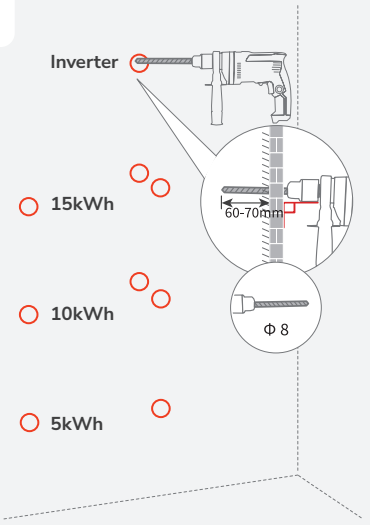
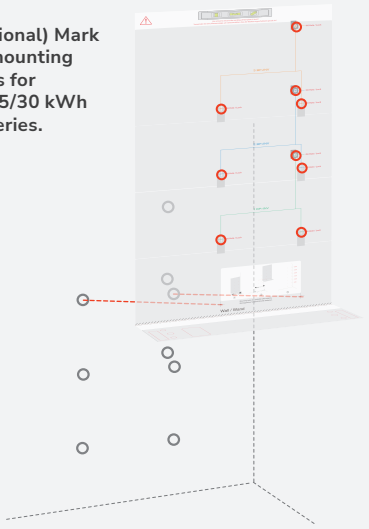
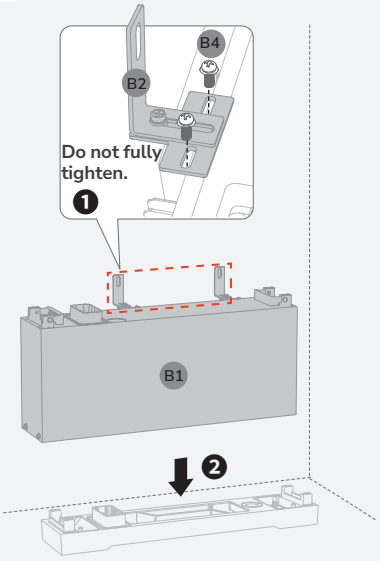


(Optional) Mark off mounting holes for 20/25/30 kWh batteries.



6

B1 ×1 B2 ×2 B4 ×4



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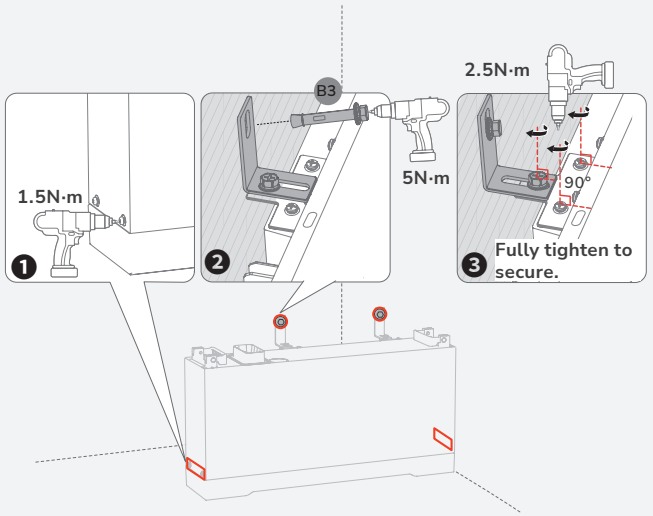
B3 ×2



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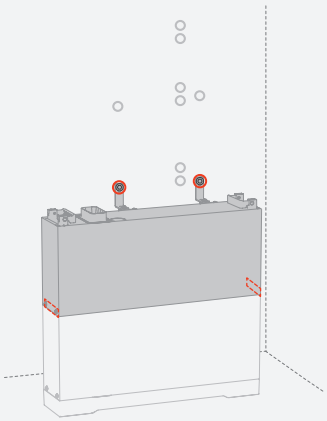
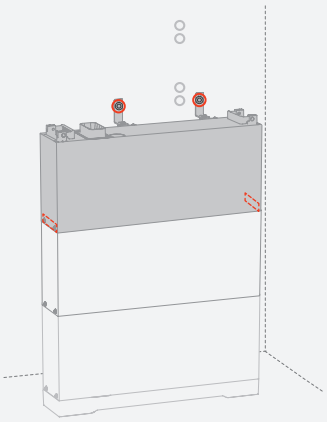
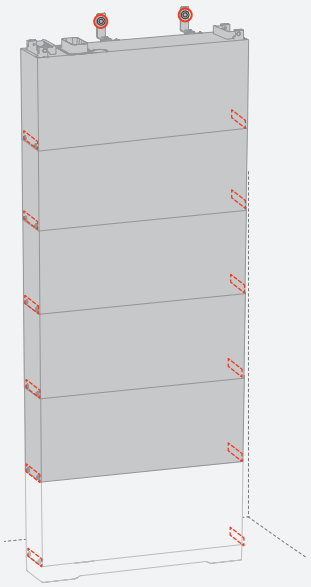




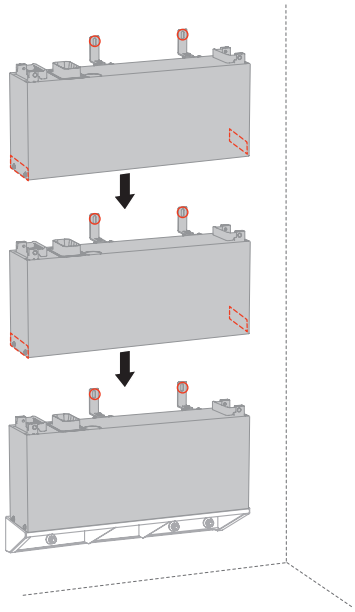


Up to 6 batteries can be stacked.

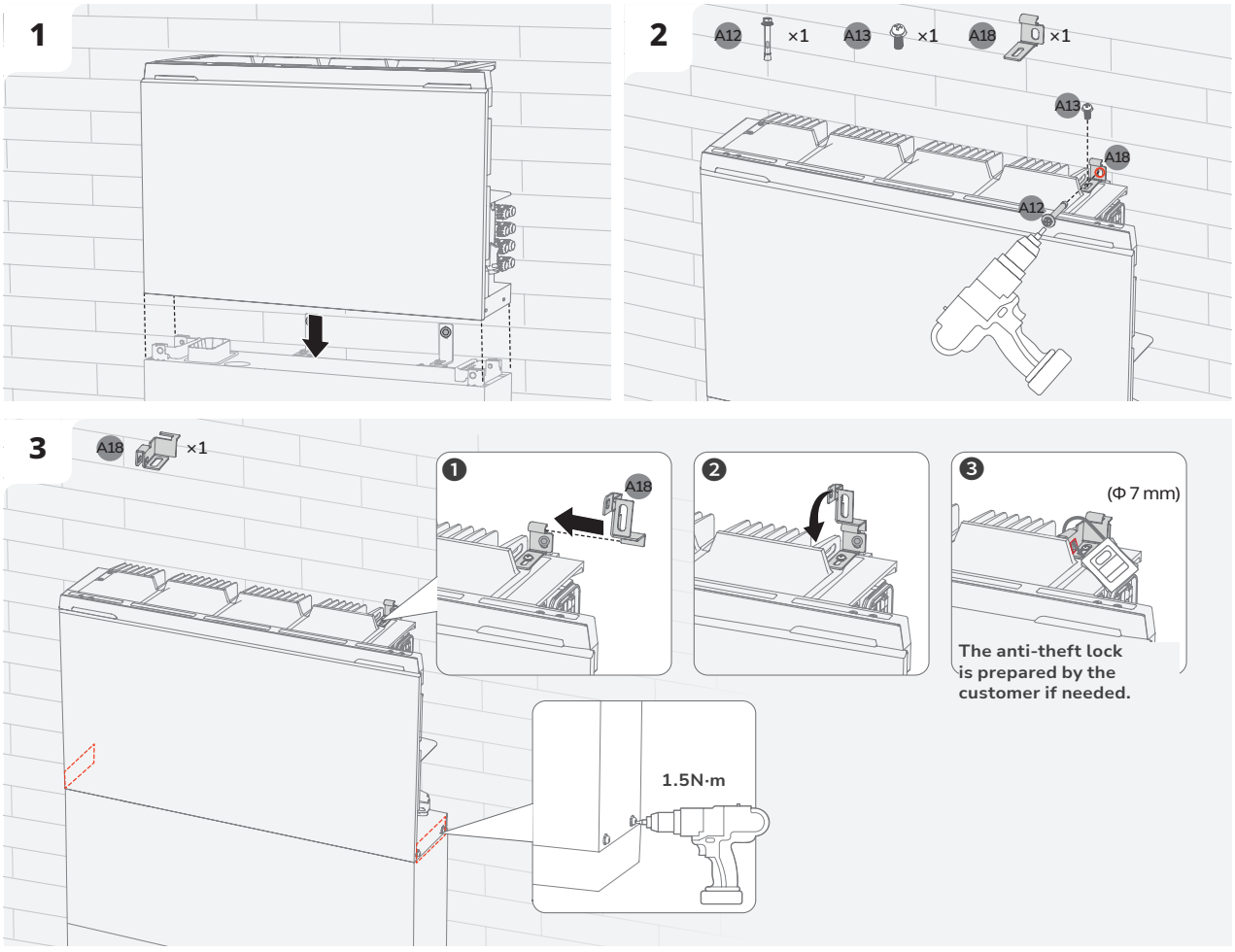
Method 2: Wall Mounted (Optional)

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.



Install Inverter

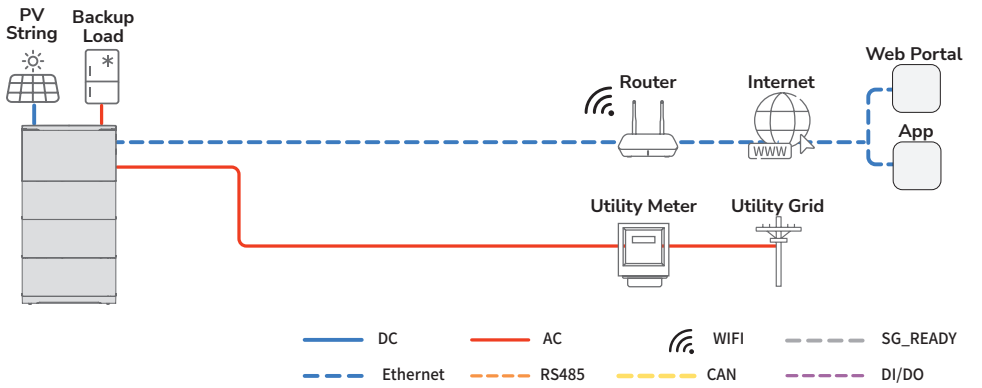


Application Scenarios

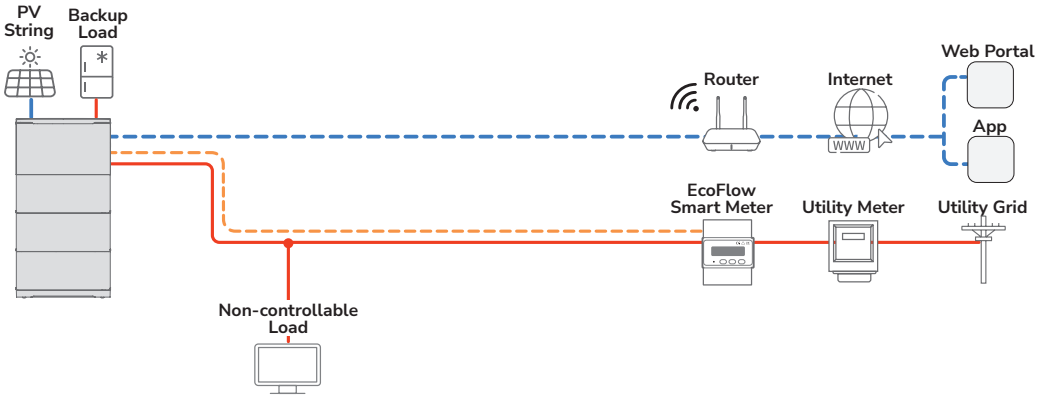
The wiring scheme described in this manual is based on the latest version of the APP software and firmware released in December 2025, which is subject to change with software updates. If you have any questions, please contact your local EcoFlow after-sales service.

Single Inverter Setup

- **Whole Home Backup System**



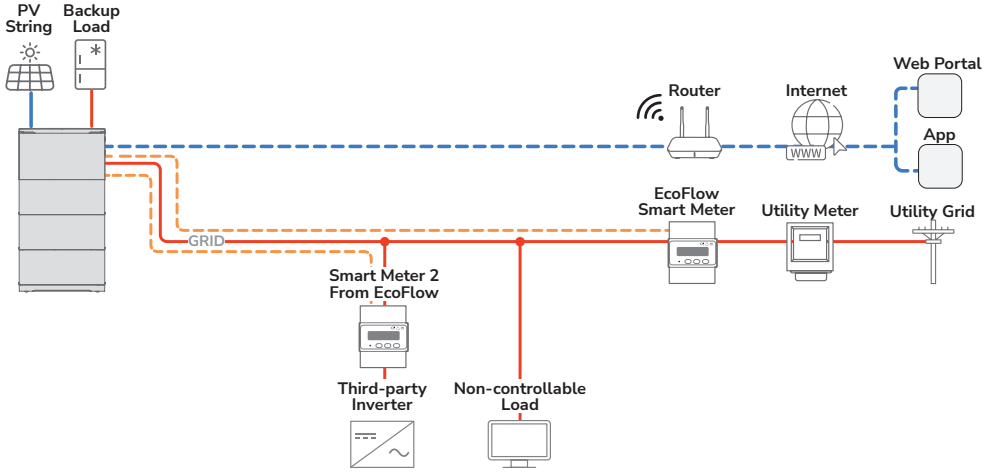
- **Partial Home Backup System**



- **Use With Existing PV System**

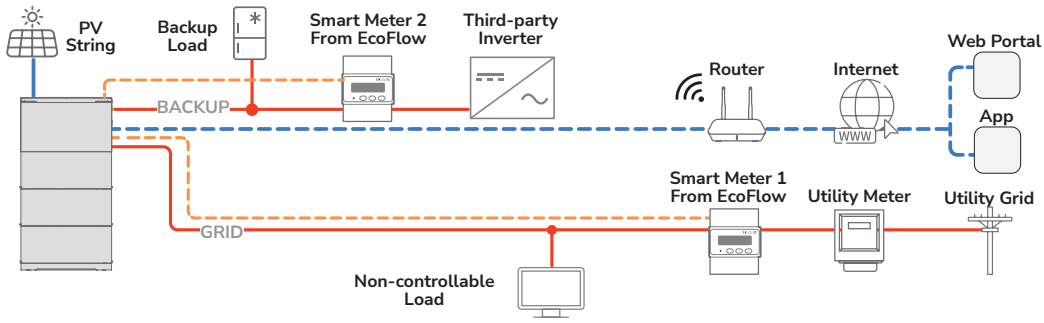
EcoFlow Ocean 2 Plus system is compatible with single-phase PV grid-tied system. For single-phase third-party inverter connection, its rated power shall not exceed the GRID port's rated power. The power generation from the existing PV inverter will be firstly provided to the loads and then charge the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

- **Connect via GRID port**



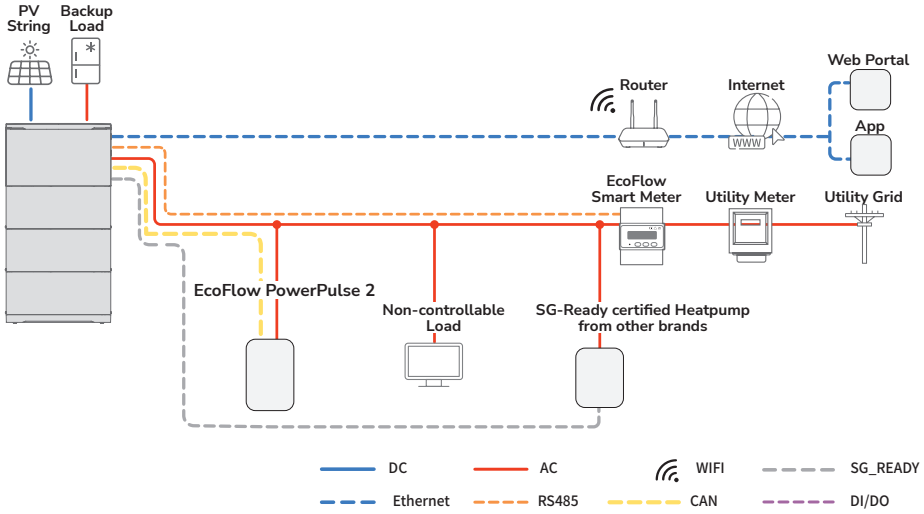
- **Connect via BACKUP port (for Partial Home Backup)**

- 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**

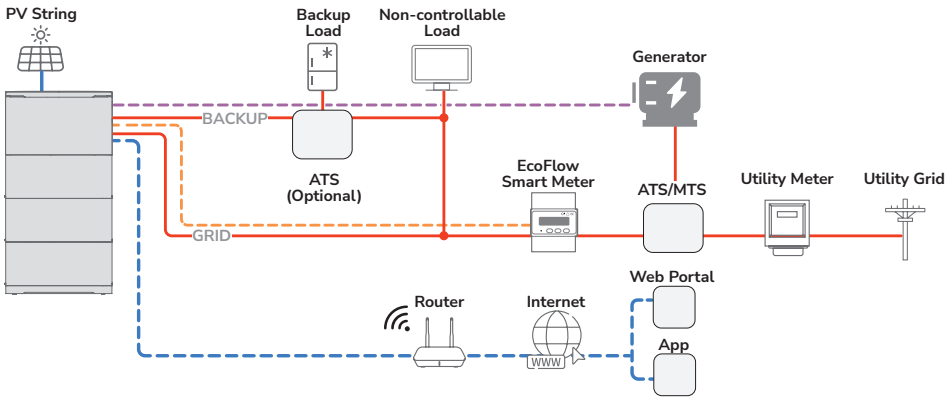
EcoFlow Ocean 2 Plus system is compatible with EcoFlow EV Charger (PowerPulse 2), Heatpump (PowerHeat), any other SG-Ready certified Heatpump. When connected, these devices will be powered by PV strings, battery and utility grid. With the self-powered mode of the EcoFlow Ocean 2 Plus system, the self-consumption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



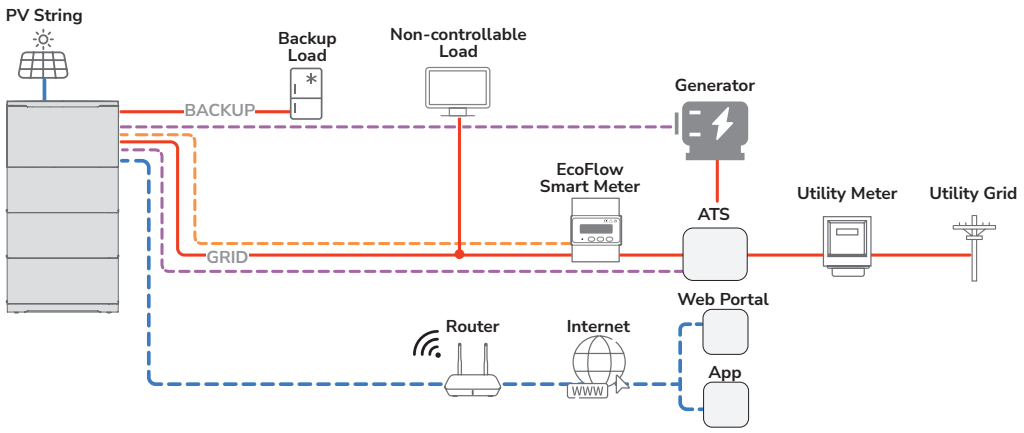
- **Use With Generator**

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

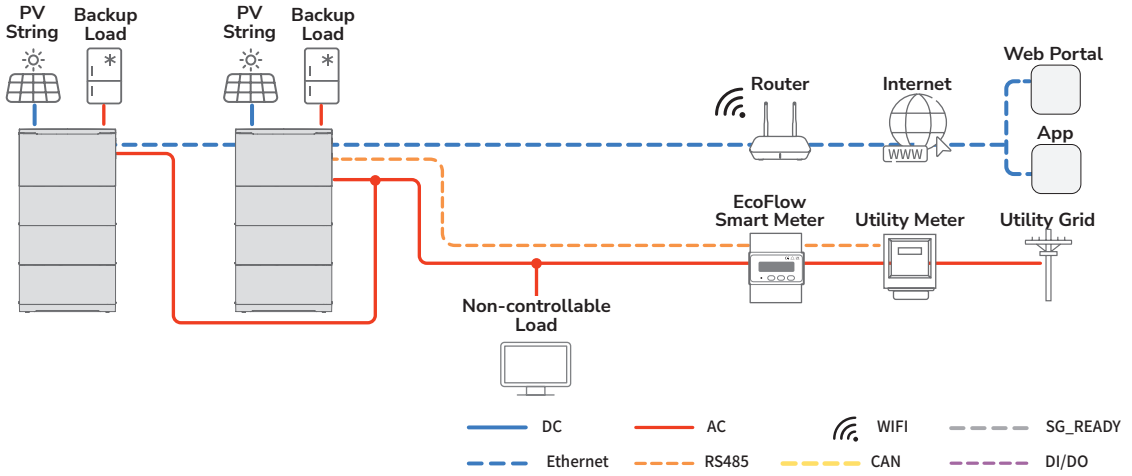


Cascaded Inverters Setup

- **Separate Loads**

WARNING

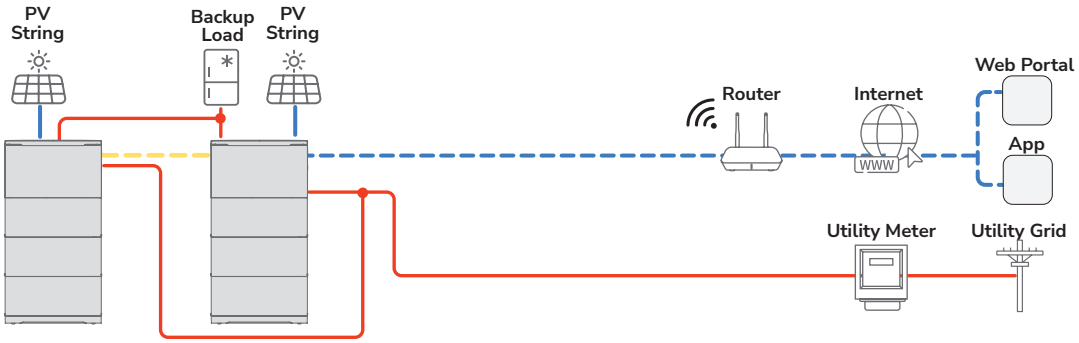
- Only inverters of the same model can be cascaded.
- When cascaded inverters operate without the grid, the BACKUP port will remain inactive if no battery modules are connected.



- **Sharing Loads**

WARNING

- Only inverters of the same model can be cascaded.
- Both BACKUP ports must be connected together even if no loads are connected; otherwise, the system may malfunction.

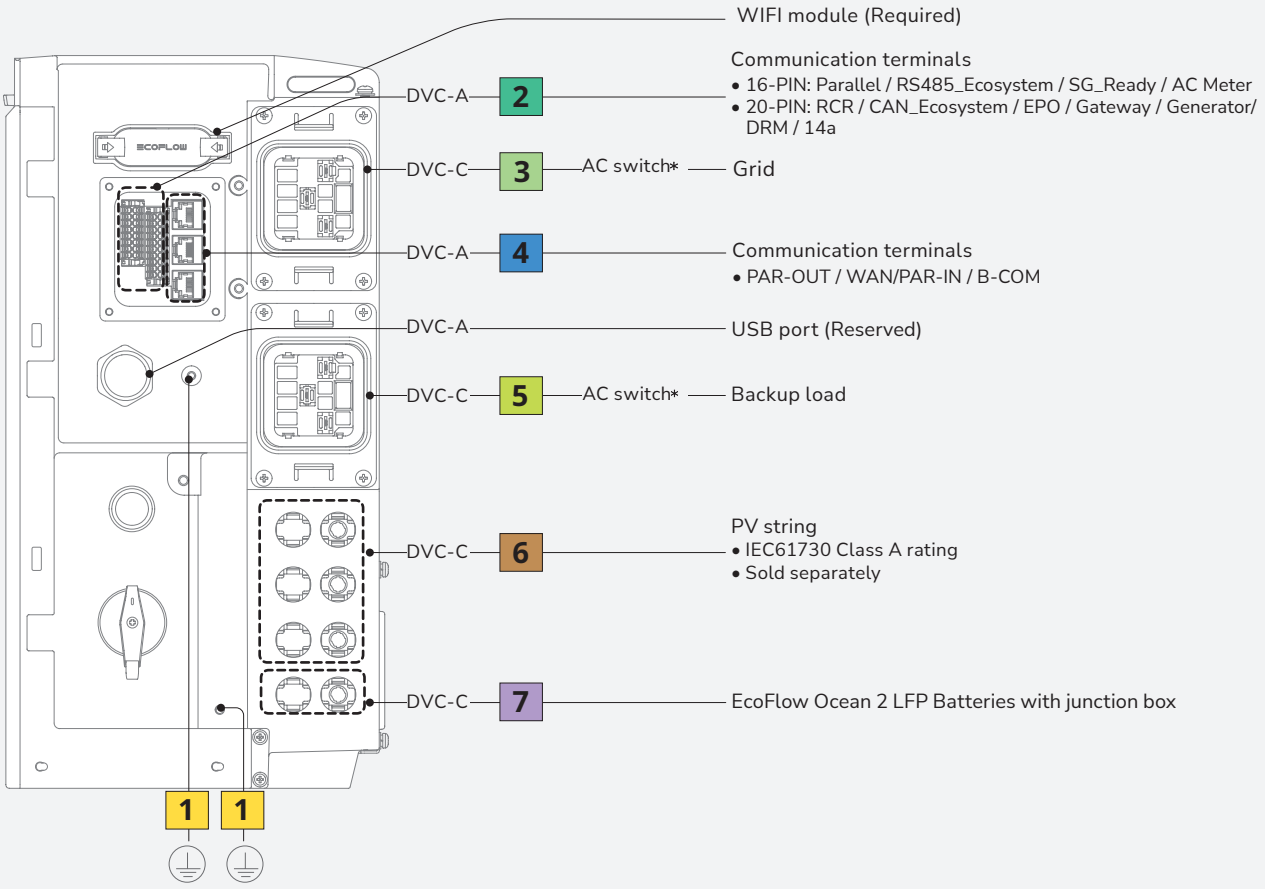


Electrical Connection

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 mm²

2 **Shielded twisted pair cable**
2×0.5mm²

3 **Grid power cable**
16 mm² cable. Select the appropriate conductor size based on the grid service current, local electrical code, and inverter specifications.

4 **Cat 5e or higher shielded network cable**

5 **Backup load power cable**
16 mm² cable. Select the appropriate conductor size based on the grid service current, local electrical code, and inverter specifications.

6 **PV input cable**
4-6 mm² with a rated voltage greater than or equal to 1000V DC

7 **Battery power cable**
6-10 mm² with a rated voltage greater than or equal to 1000V DC

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

Wiring Diagram

NOTICE

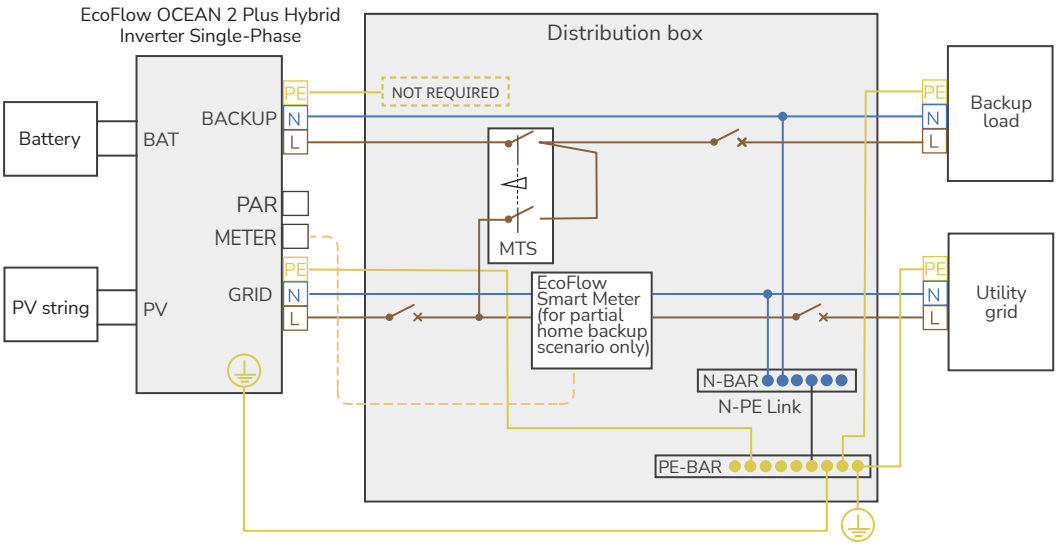
- The wiring of N and PE at the GRID and BACKUP terminals varies by region due to different regulatory requirements.
- A Manual Transfer Switch (MTS) is recommended for switching the power supply between the grid and the inverter in the whole-home backup system.
- A Manual Transfer Switch (MTS) is recommended 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**

Method 1 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.



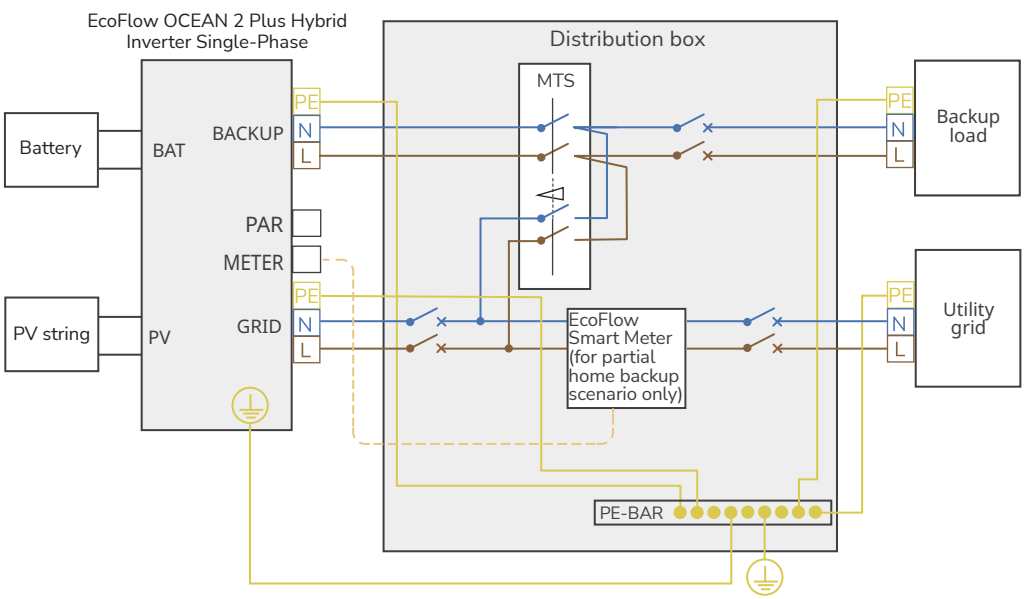
Method 2 N–PE Separate at Main Panel

⚠ CAUTION

Do not connect the N busbar to the N-wire between the inverter and grid, otherwise the inverter operation may be abnormal.

NOTICE

Do not connect the N-wires of the AC-backup side and AC-grid side, otherwise the system may operate abnormally. If connected in some houses, try disconnecting the N busbar from the grid and connecting the AC-GPID N terminal of inverter directly to the N terminal of the grid.



- **Cascaded Inverters (separate loads)**

Method 1 N–PE Bonded at Main Panel (for Australia and New Zealand)

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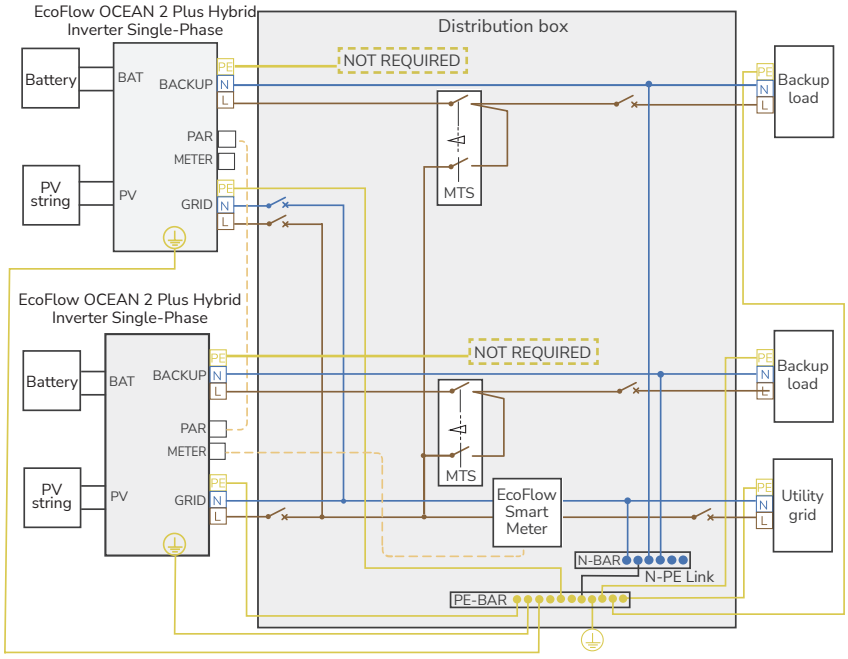
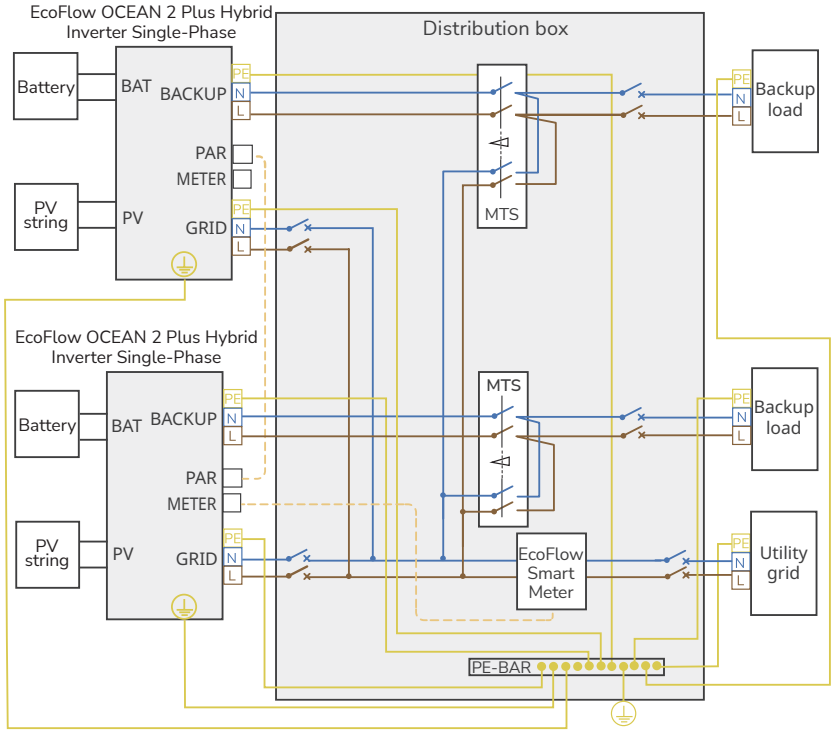


Method 2 N–PE Separate at Main Panel

CAUTION Do not connect the N busbar to the N-wire between the inverter and grid, otherwise the inverter operation may be abnormal.

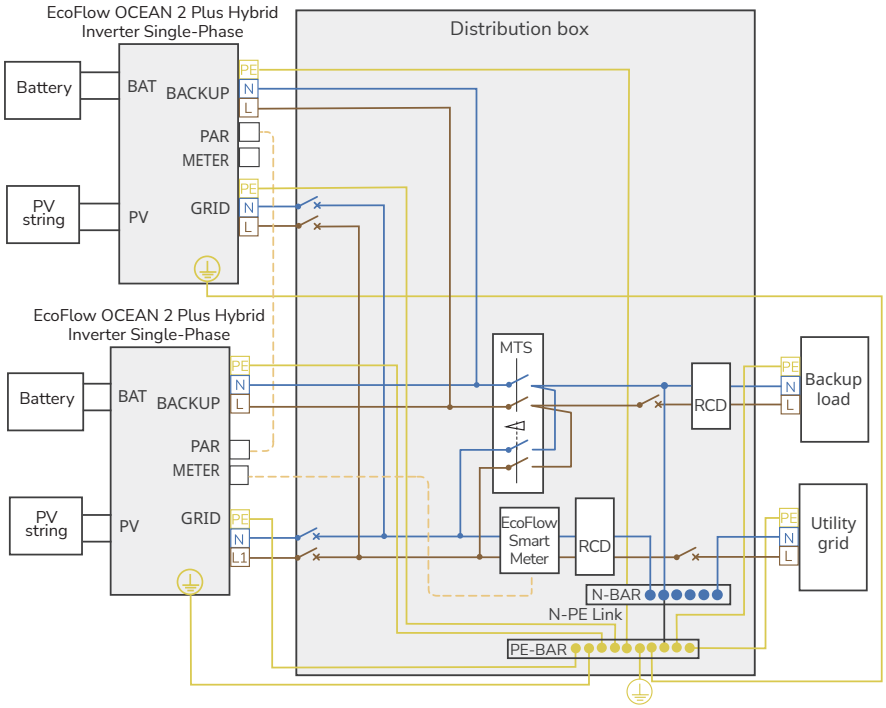
NOTICE Do not connect the N-wires of the AC-backup side and AC-grid side, otherwise the system may operate abnormally. If connected in some houses, try disconnecting the N busbar from the grid and connecting the AC-GPID N terminal of inverter directly to the N terminal of the grid.



- **Cascaded Inverters (sharing loads)**

Method 1 N–PE Bonded at Main Panel

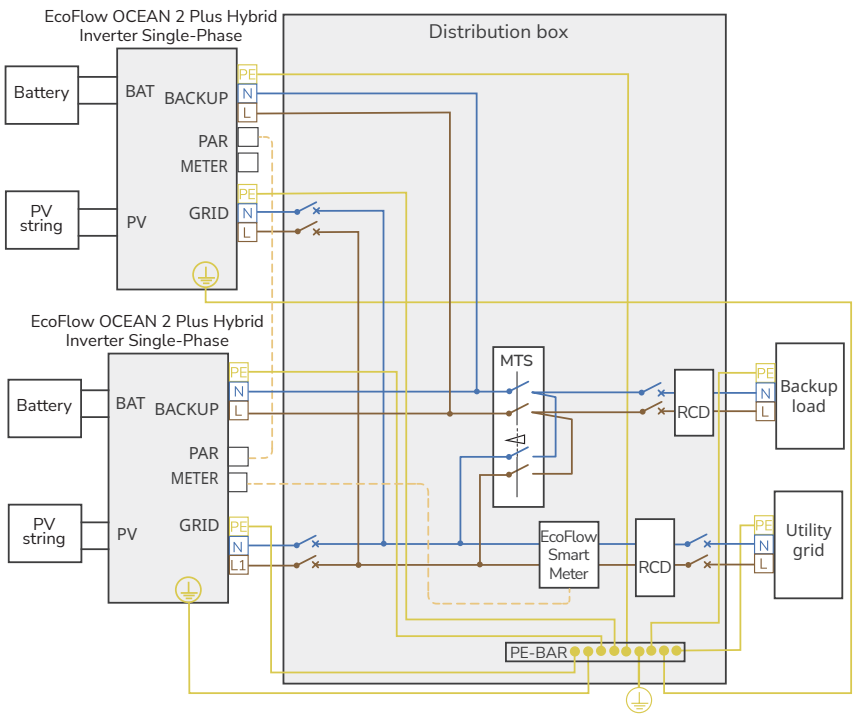
NOTICE For Australia and New Zealand, the N conductors on the GRID side and the BACKUP side must be bonded according to AS/NZS 3000 wiring rules. Otherwise, abnormal BACKUP operation and potential safety risks may occur. Therefore, the following diagram applies to installations in Australia, New Zealand,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



Method 2 N–PE Separate at Main Panel

⚠ CAUTION Do not connect the N busbar to the N-wire between the inverter and grid, otherwise the inverter operation may be abnormal.

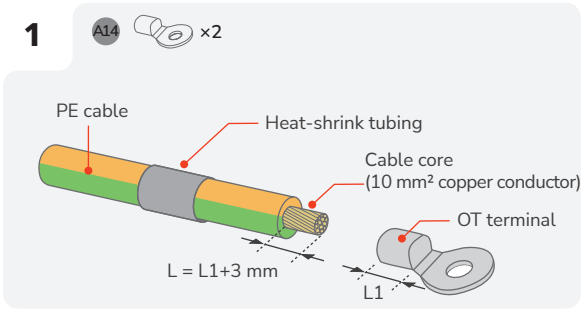
NOTICE Do not connect the N-wires of the AC-backup side and AC-grid side, otherwise the system may operate abnormally. If connected in some houses, try disconnecting the N busbar from the grid and connecting the AC-GPID N terminal of inverter directly to the N terminal of the grid.

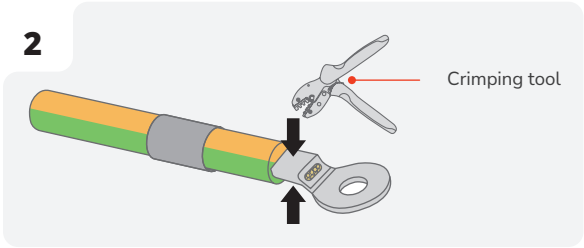


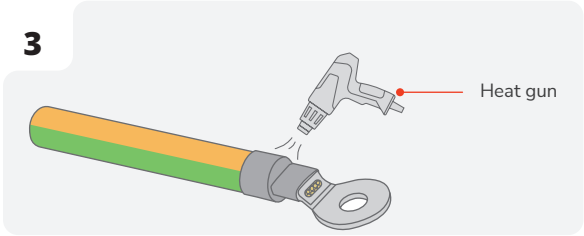
Connect PE Cables

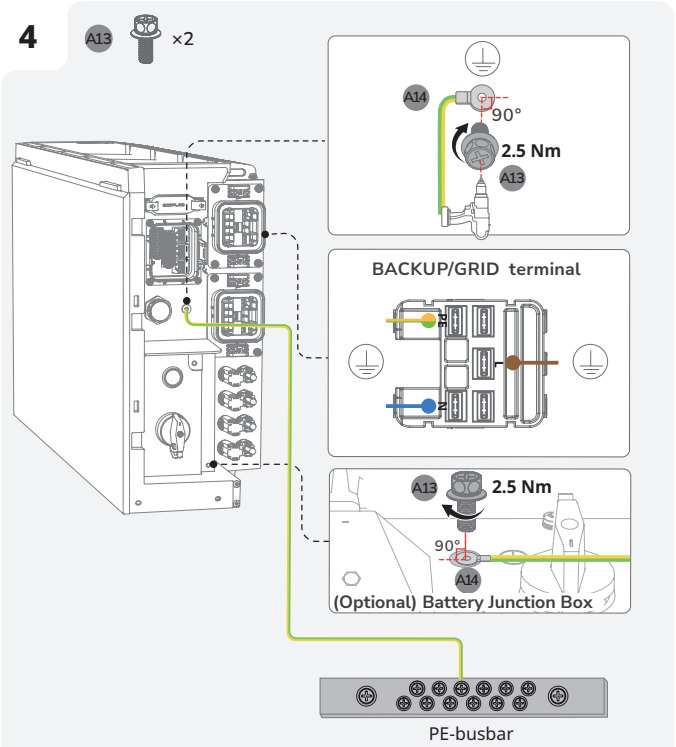
NOTICE

- 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.









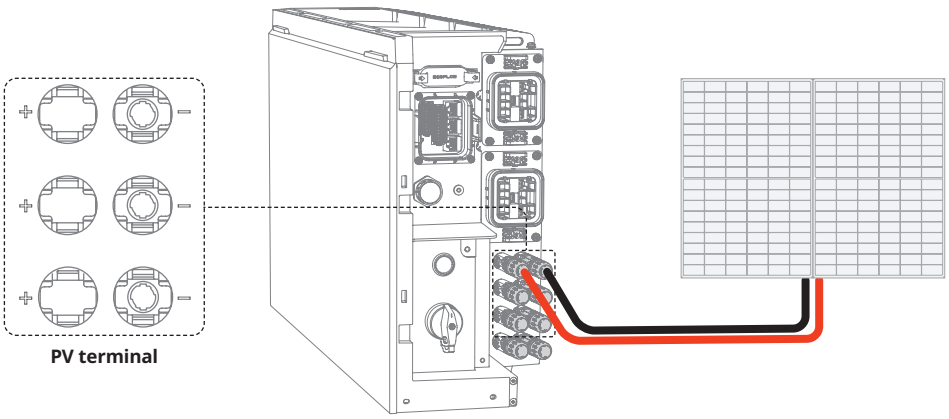
Connect PV Input Cables

DANGER

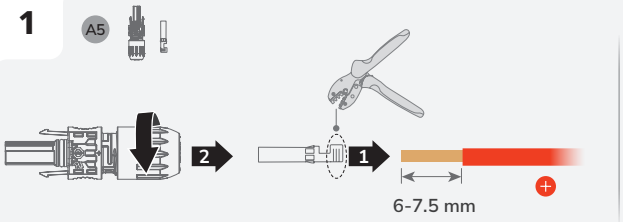
- Before connecting the PV input cables, ensure AC switch connected to the inverter and the PV SWITCH on the inverter are OFF. Failure to do so may result in electric shock.
- The PV strings will generate lethal high voltage when exposed to sunlight. Disconnect the PV cable before connecting DC power.
- 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.

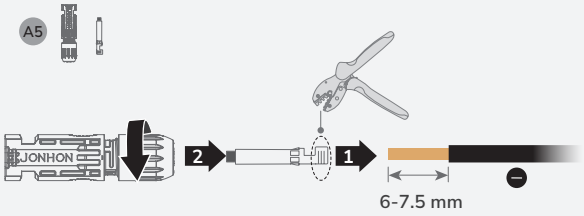
NOTICE

- 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.



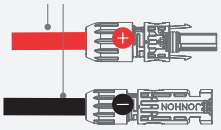
1





2

DANGER!
Pull back to comfirm the connection is secure.



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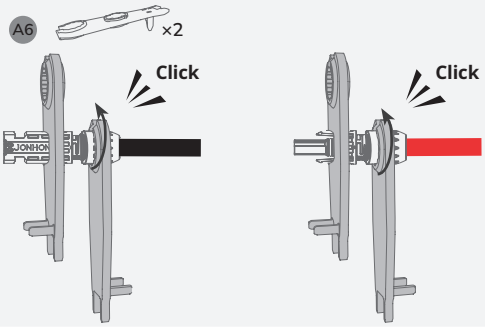
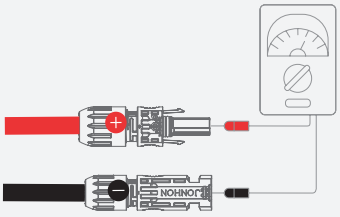


4

Ensure that the cable polarities are correct.



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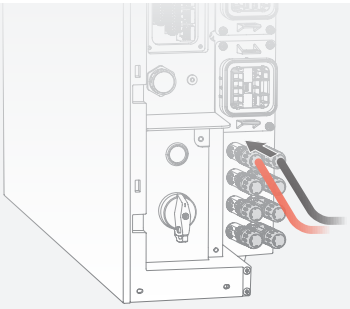
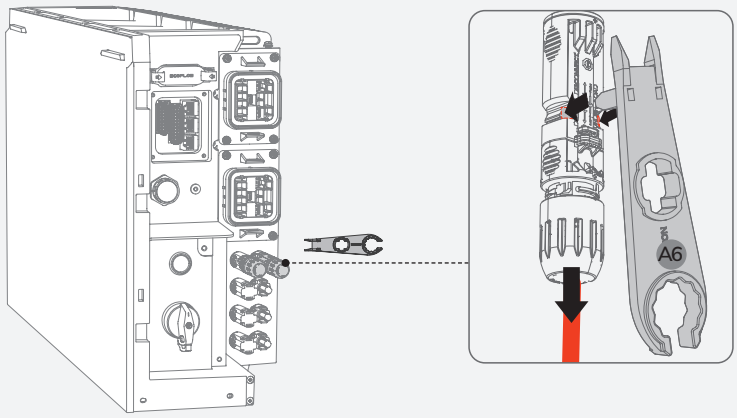


- Set the multimeter to DC gear to measure the voltage at the DC position. Wear appropriate PPE and use proper insulation during measurement. If the voltage is negative, the PV input polarity is incorrect and needs correction. If the voltage exceeds 1000 V, too many PV modules are configured to the same 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.

A6 ×1



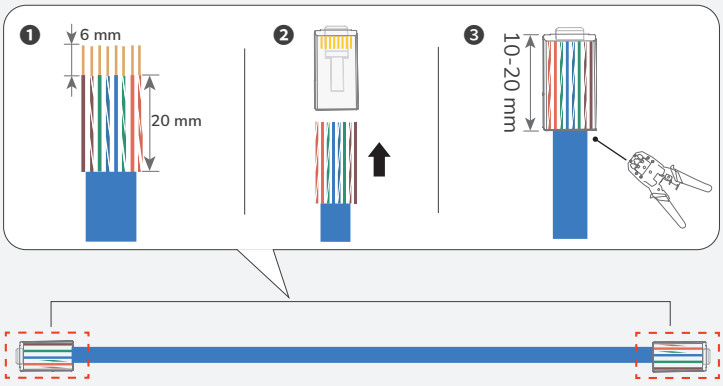
Communication Between Cascaded Inverter

NOTICE

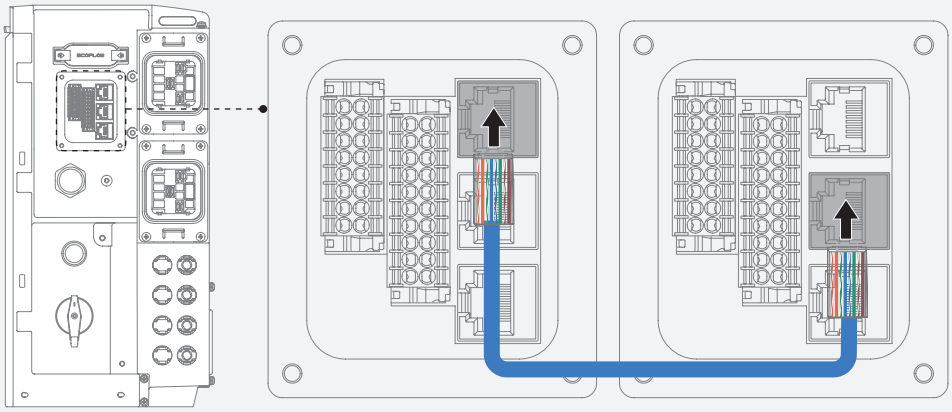
- Up to 2 inverters can be cascaded.
- On-grid parallel communication cable length: ⩽100m; Off-grid parallel communication cable length: ⩽10m.

1

A17 ×2



2



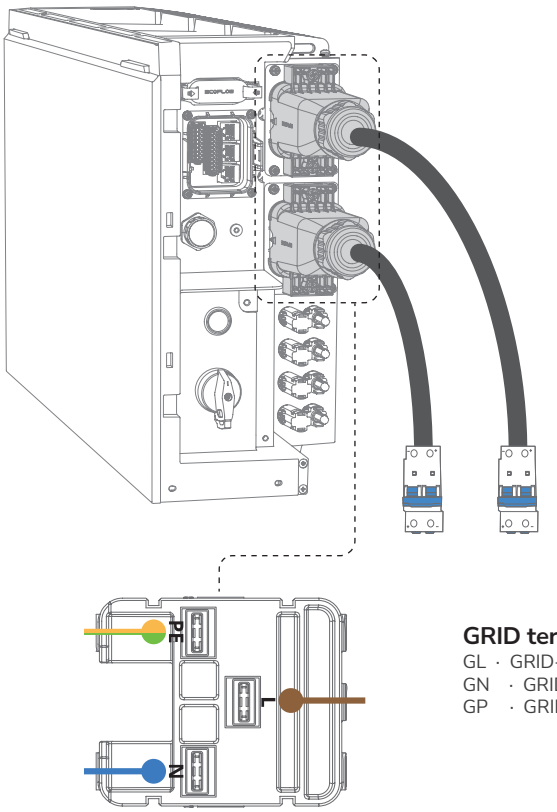
Connect GRID/BACKUP Cables

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

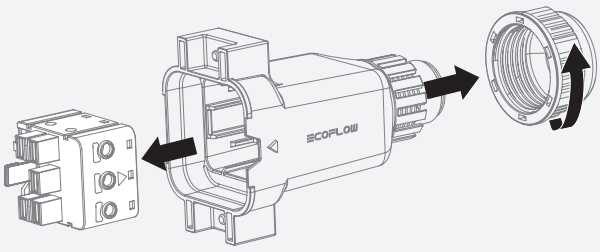
L · LOAD-L, live wire
N · LOAD-N, neutral wire
P · LOAD-PE, ground wire

GRID terminal

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

1

A9 / A10 ×1



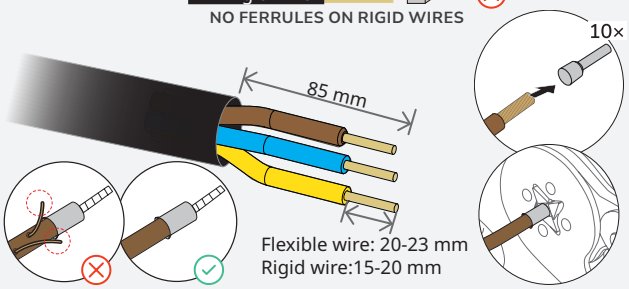
2

A15

Flexible wire

Rigid wire

NO FERRULES ON RIGID WIRES



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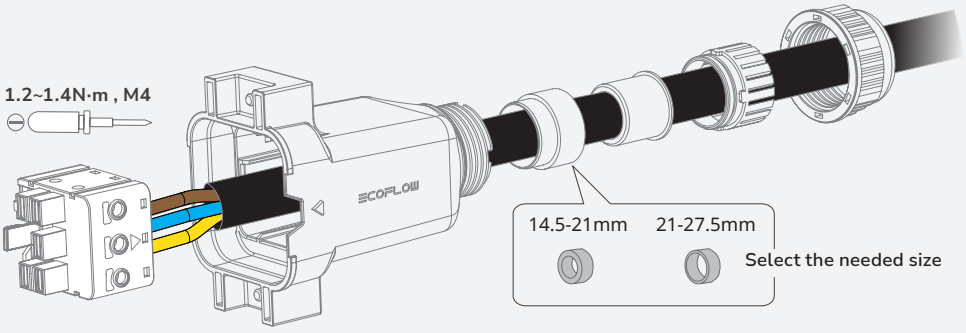
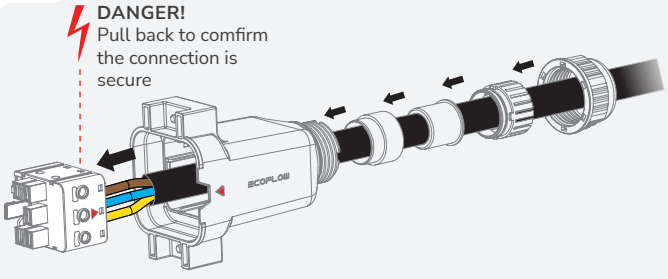


4



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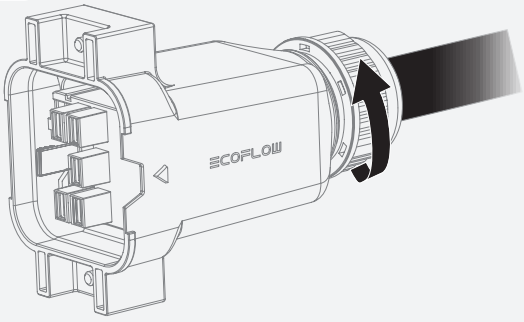

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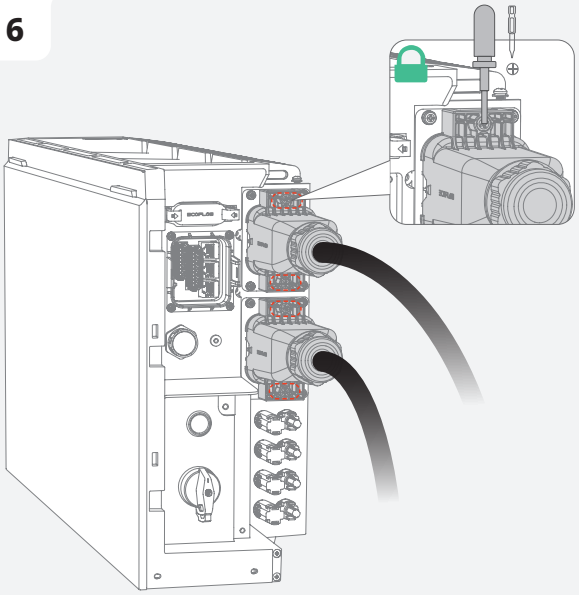
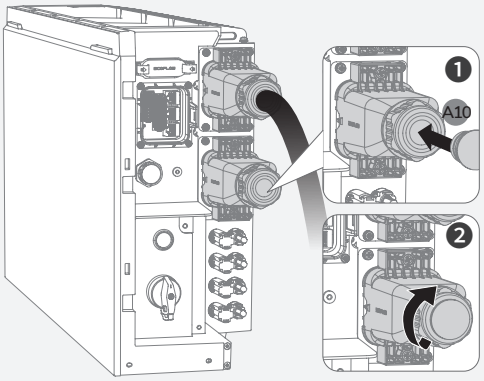


(Optional) Install the electrical safety plug for Backup terminal

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.



Cascade Batteries

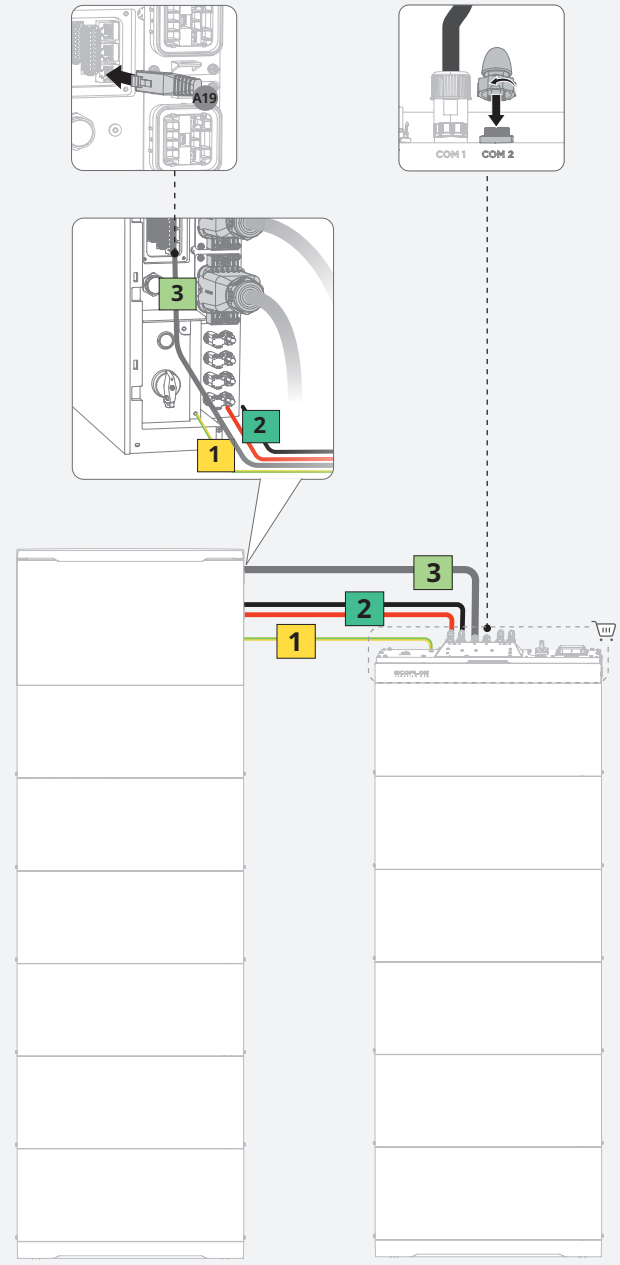
NOTICE

- 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.

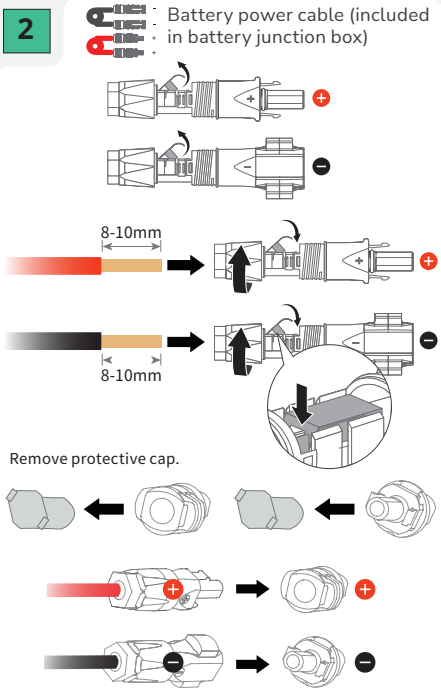
1 For details about connecting grounding terminals between the battery junction boxes, see the “Connect PE Cables” section in this guide.

⚠ CAUTION

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

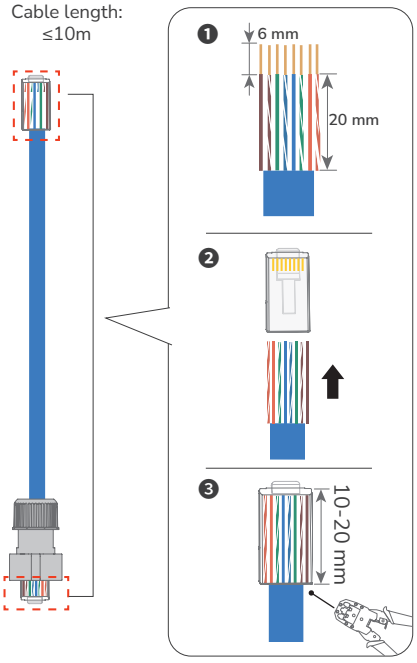


2 Battery power cable (included in battery junction box)



3 ×1 (included in battery junction box)

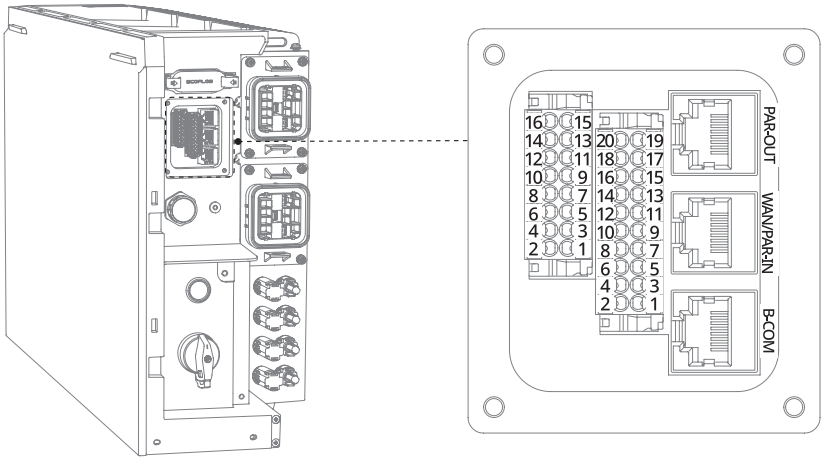
Cable length: ≤10m



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 supported in Australia and New Zealand.
- Relay Contact rating of SG_Ready pins: 30V/2A. The recommended load should be rated ≤24V/2A for safe operation.

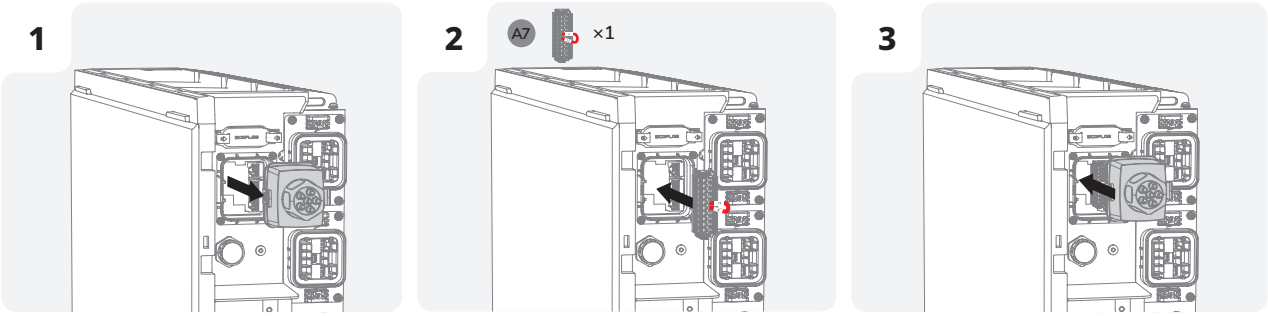


• 16-Pin COM Terminal Definition

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.

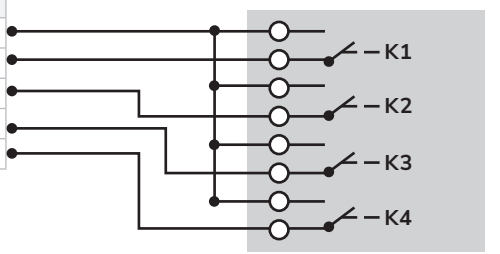
The RCR haS four relays (K1-K4). The relays are potential-free make contacts. The relays are interlocked with each other. Furthermore, each of these relays represents one of the following control stages:

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%

RCR Status Detection	
PIN2	GND2
PIN6	RCR_DI1
PIN8	RCR_DI2
PIN5	RCR_DI3
PIN7	RCR_DI4



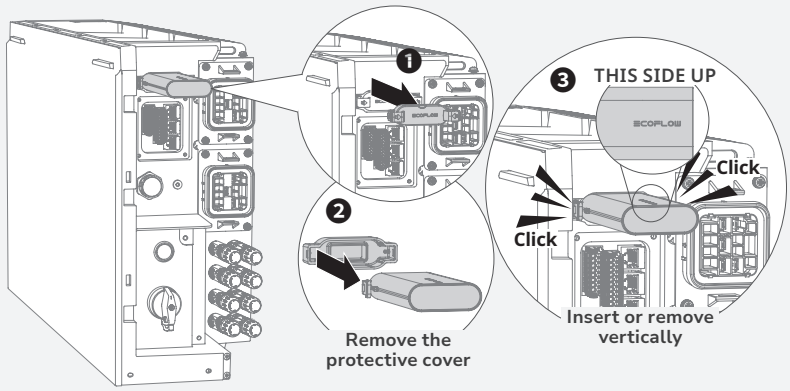
(Optional) To disconnect cables from PAR-OUT / WAN/PAR-IN / B-COM ports, first remove the 16-pin/20-pin communication terminals.

Connect to Internet

NOTICE

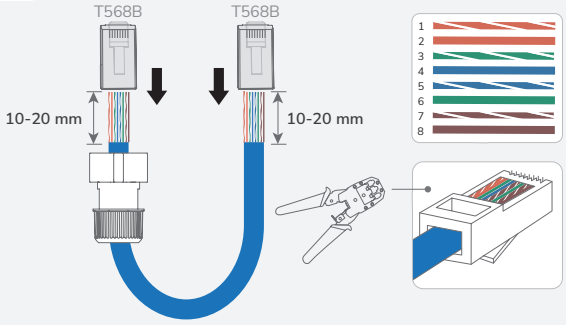
- Use shielded CAT 5 or higher rating network cable for stable connection.
- For more details about EcoFlow OCEAN 2 Plus Dongle, visit following website to access user manual: https://homebattery.ecoflow.com/documentation.
- The WIFI dongle is used for communication between the inverter and the EcoFlow app via Bluetooth or via wired and wireless WLAN networking,which is required for a single inverter or each of cascaded inverters.
- 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.



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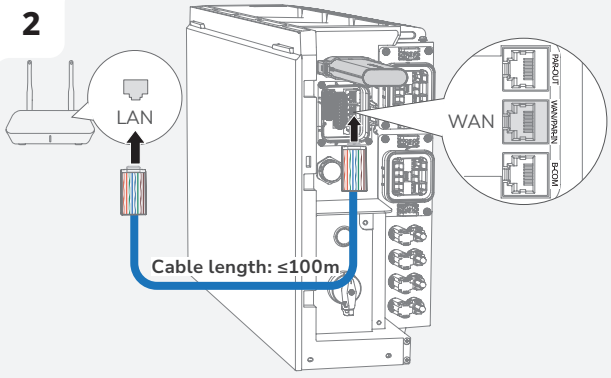
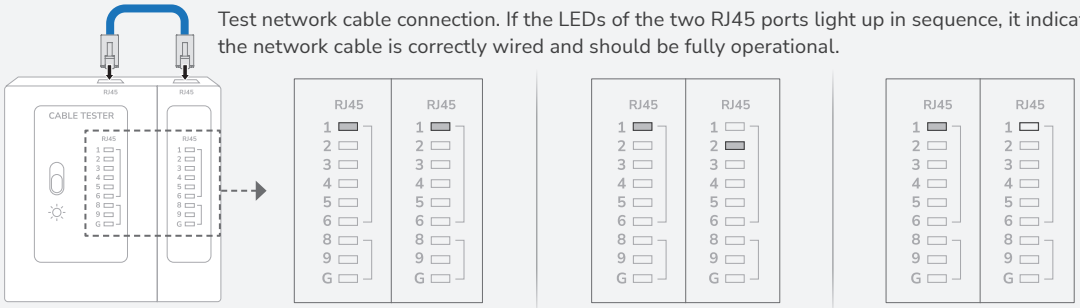
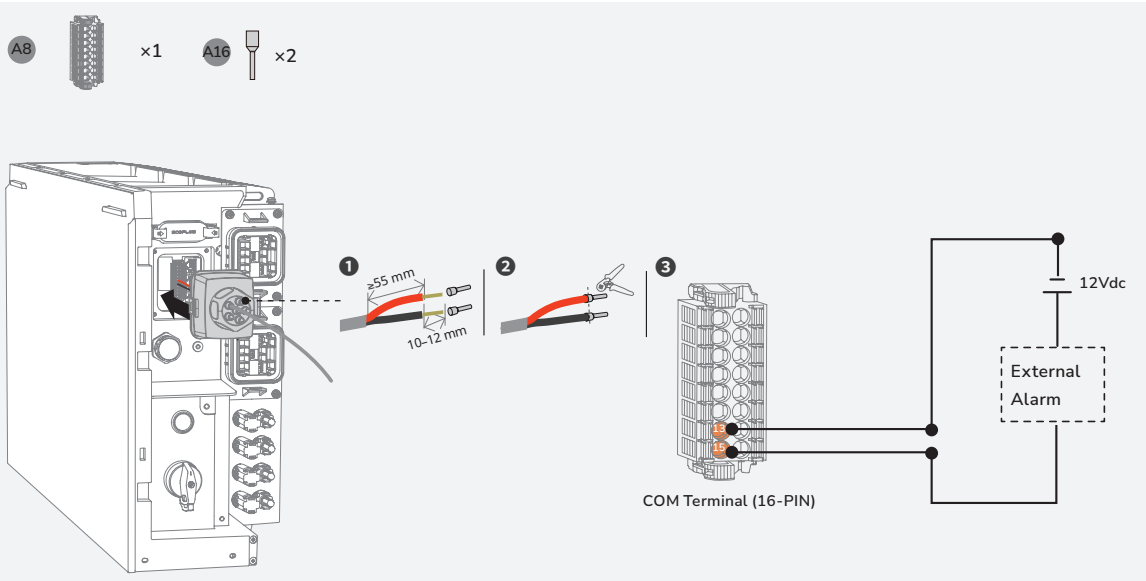


Test network cable connection. If the LEDs of the two RJ45 ports light up in sequence, it indicates that the network cable is correctly wired and should be fully operational.



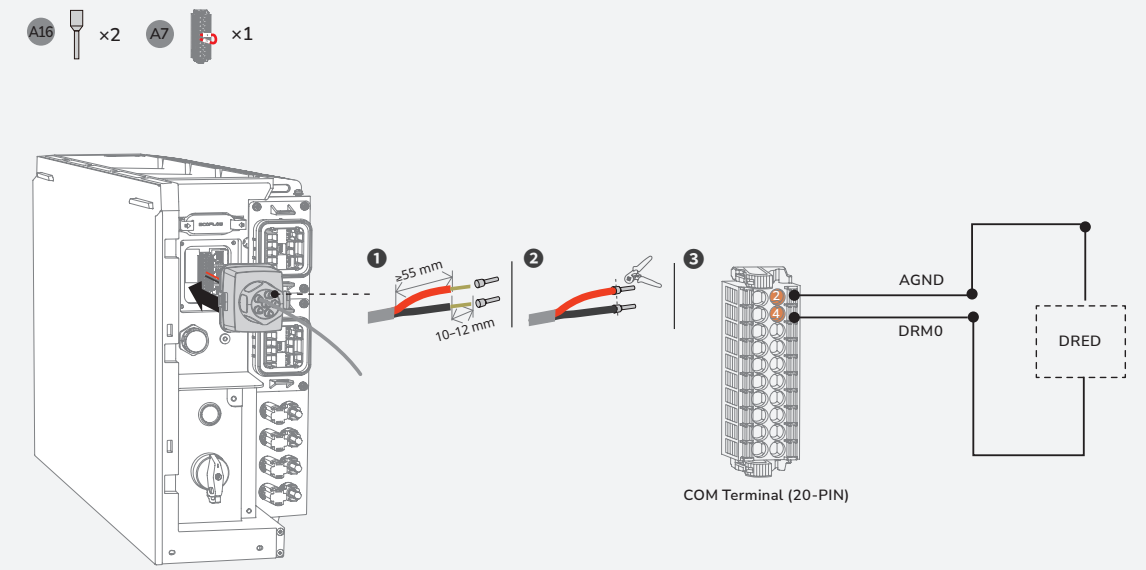
Installing Earth Fault Alarm (For Australia only)

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.



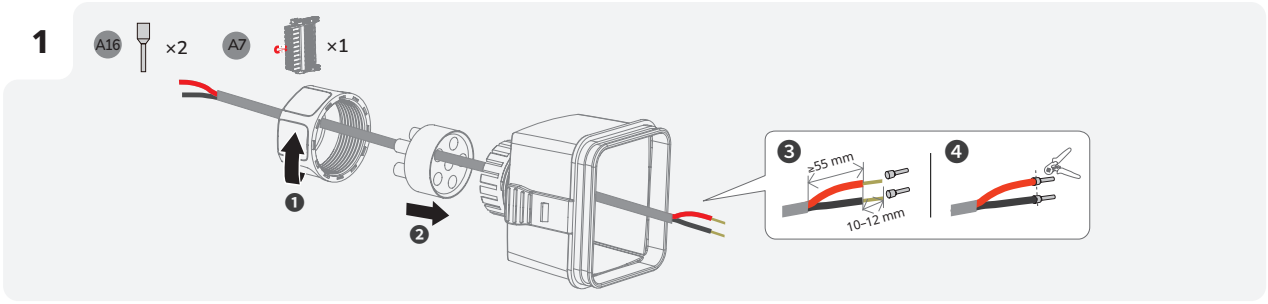
Installing Demand Response Enabling Device (For Australia only)

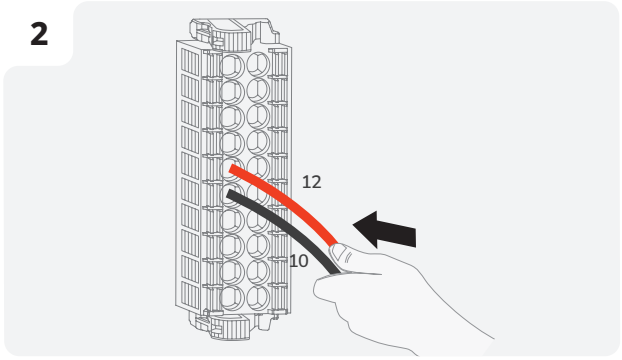
The inverter provides terminals for connecting to a Demand Response Enabling Device (DRED). After the connection, the DRED can trigger various demand response modes (DRMs) on the inverter. These DRMs allow the utility grid to control the inverter's operation, potentially limiting power output or even disconnecting the inverter, to manage grid stability and demand. The most common DRM is DRM0, which instructs the inverter to reduce its output to zero.

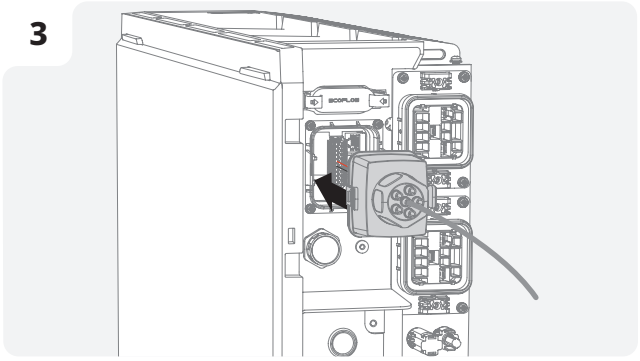


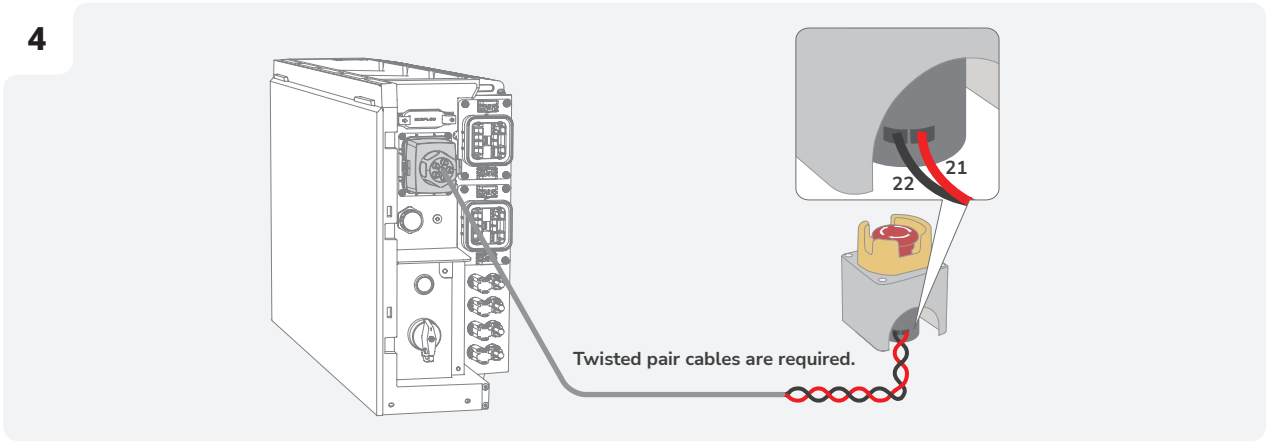
(Optional) Install an EPO

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







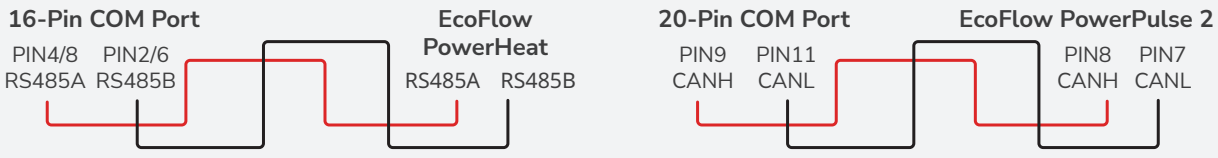


I (Optional) Connect Ecosystem Appliances

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



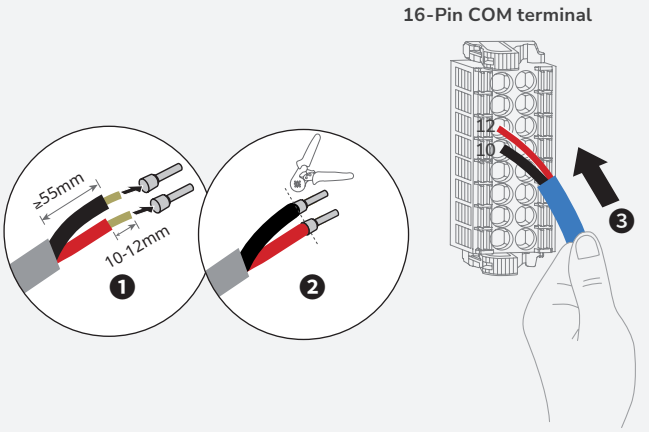
(Optional) Install Energy Meter for Partial Backup System

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: ≤50m

- **With CT**

1

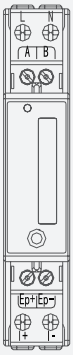


2

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

3

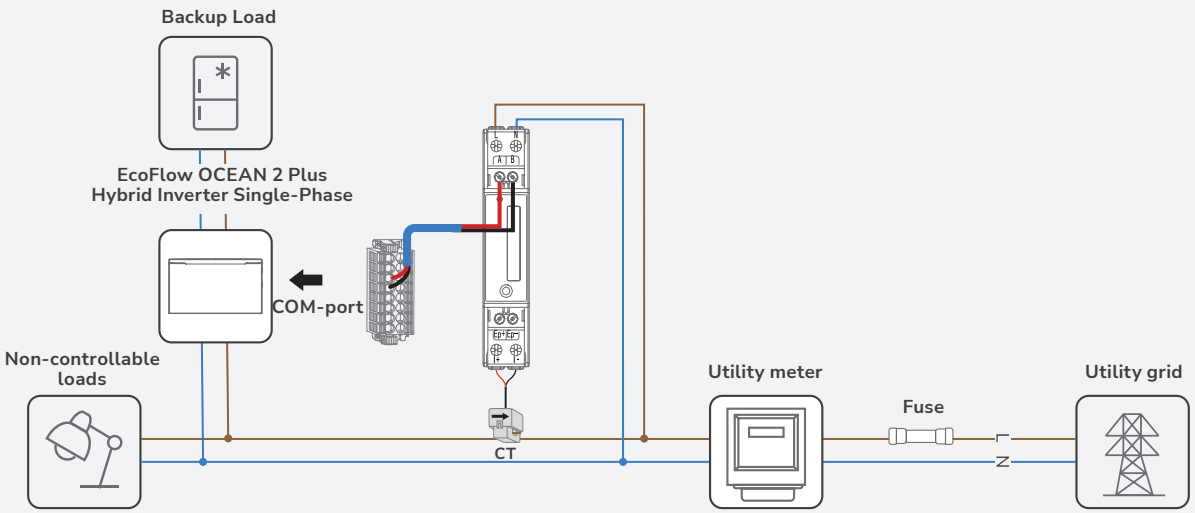
Meter Communication
Find communication ports RS485A and RS485B on the meter and connect with the inverter.



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

I+	Grid L CT
I-	

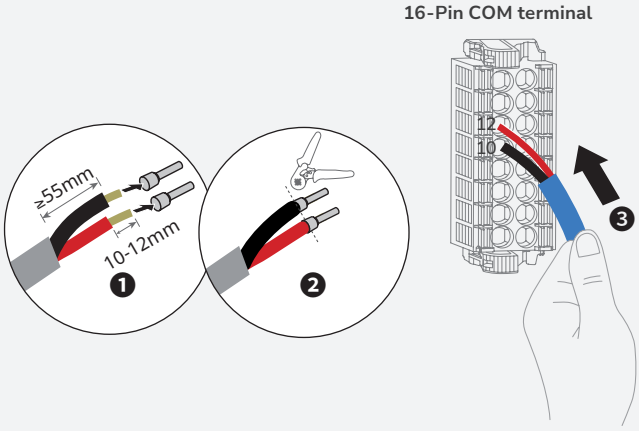
Communication Wiring Diagram



- **Without CT**

1

A8 ×1 A16 ×2



2

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

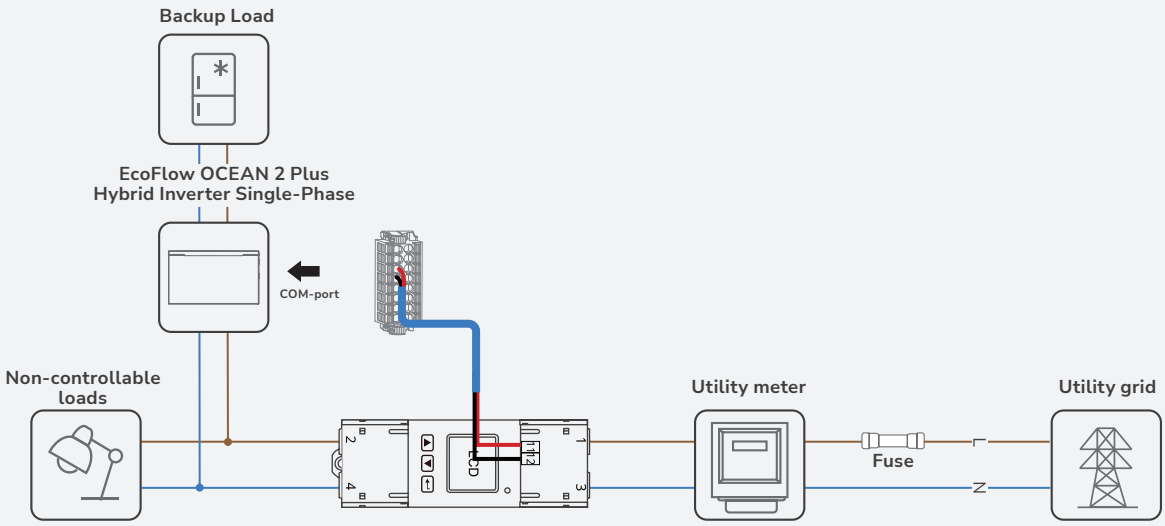
3

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

1	Grid L
3	Grid N
11	RS485 A
12	RS485 B

2	Load L
4	Load N

Communication Wiring Diagram



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

NOTICE

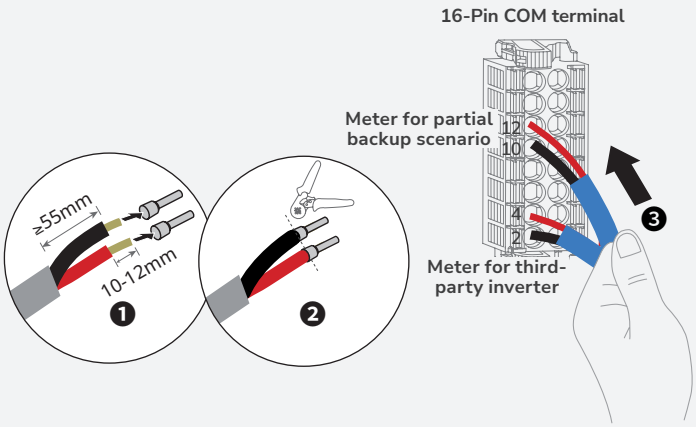
- It is recommended to use a CAT5 or higher-rated network cable.
- Smart meter is sold separately and has been preset before delivery. Do not modify the relevant parameters.
- The compatibility of this product with smart meters may vary by regions and versions. For detailed instructions on the installation 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

×1

×2

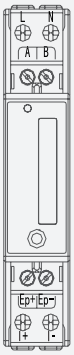


2 Meter Sampling

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

3 Meter Communication

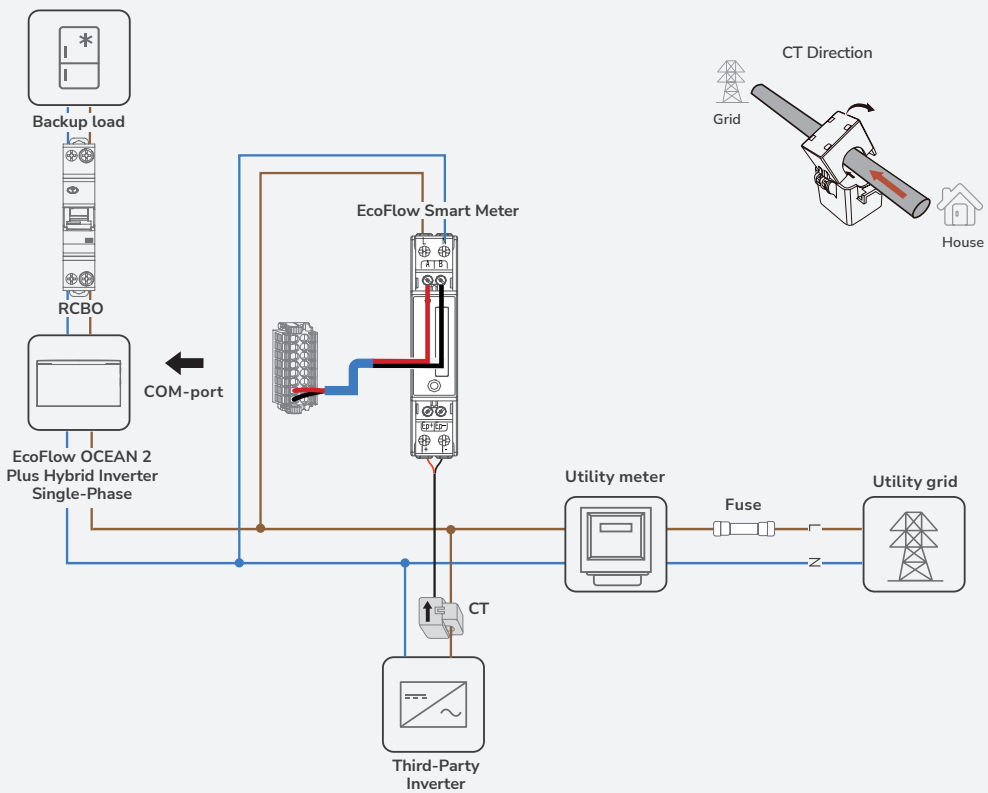
Find communication ports RS485A and RS485B on the meter and connect with the inverter.



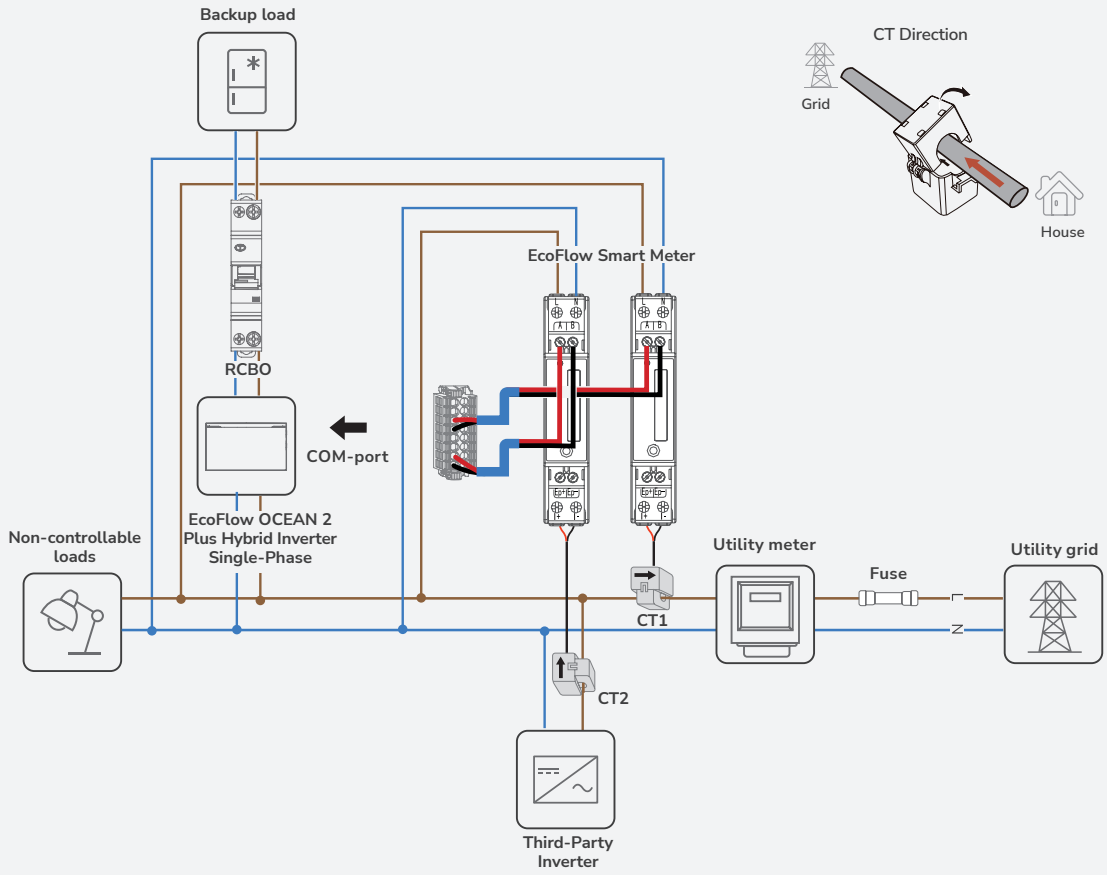
L	Grid L
N	Grid N
A	RS485 A
B	RS485 B

I+	Grid L CT
I-	

Communication Wiring Diagram—for whole-home backup

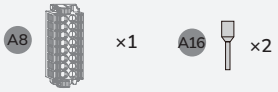


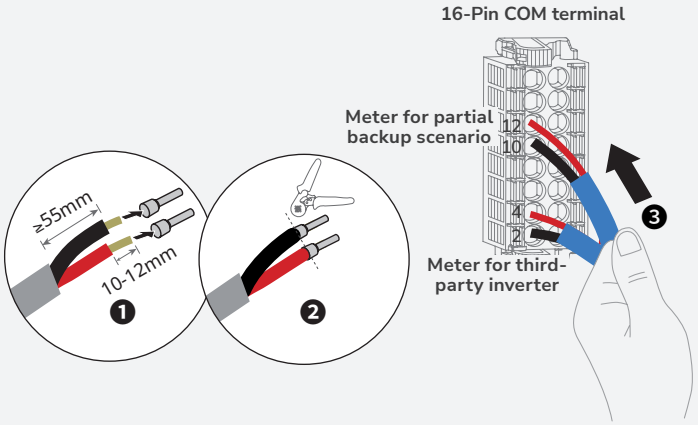
Communication Wiring Diagram—for partial backup



- **Without CT**

1





2 Meter Sampling

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

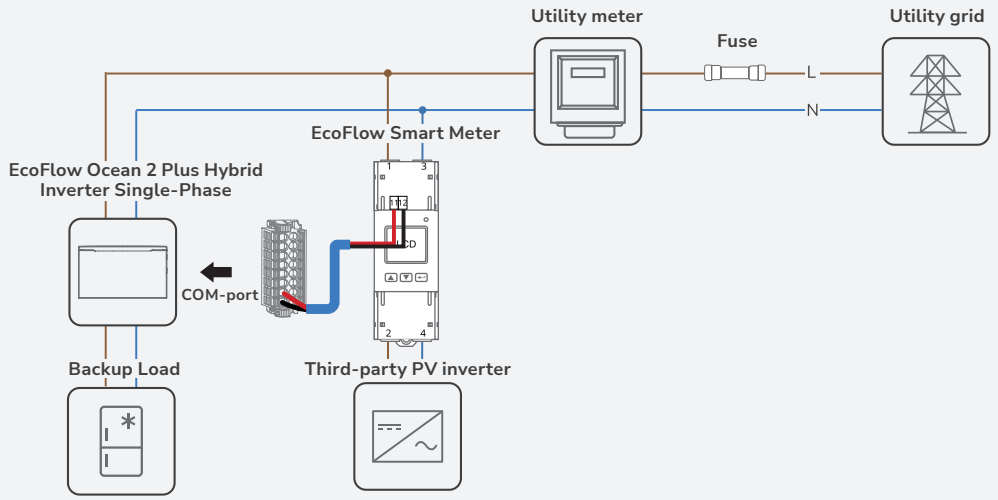
3 Meter Communication

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

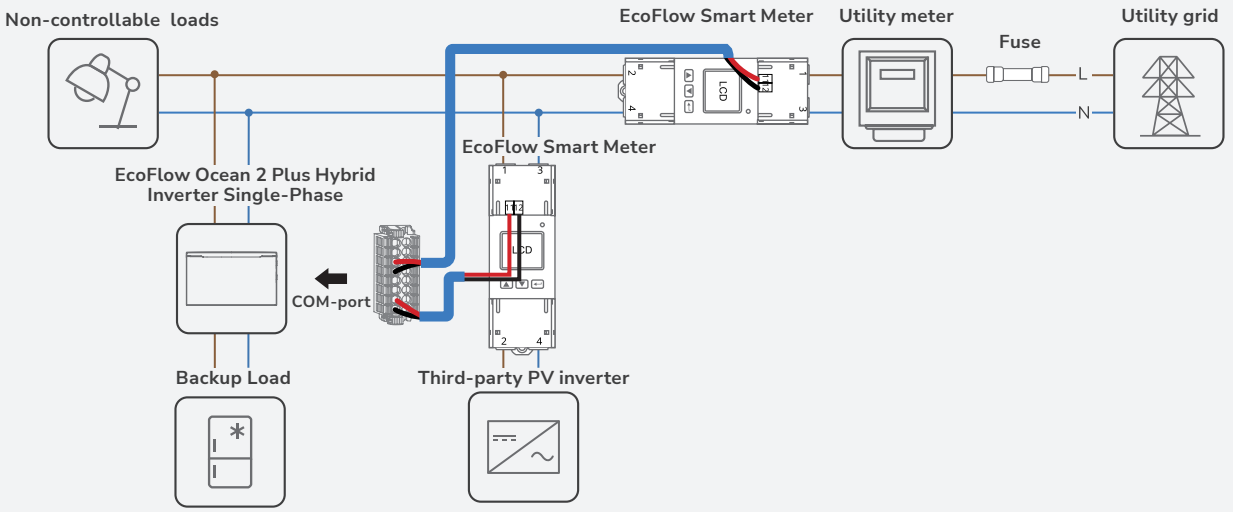
1	Grid L
3	Grid N
11	RS485 A
12	RS485 B

2	Load L
4	Load N

Communication Wiring Diagram—for whole-home backup

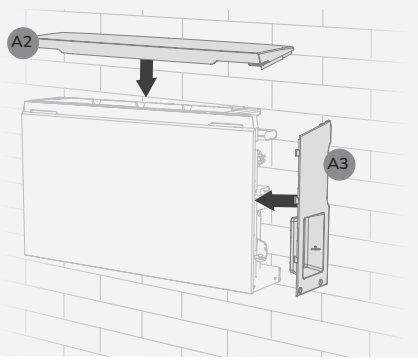


Communication Wiring Diagram—for partial backup

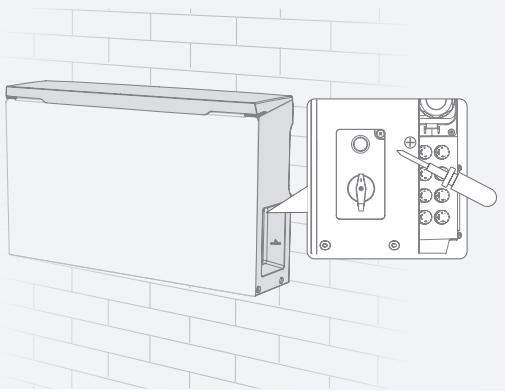


Install trim covers

1



2



System Commissioning

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.

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.

System Power-Off

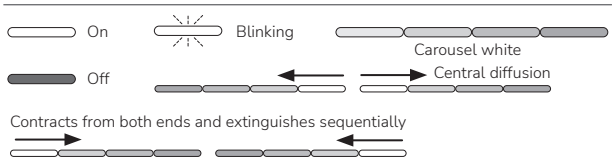
Before installing, operating, and maintaining the equipment, always disconnect it from all power source.

⚠ 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. (Optional) Secure the PV SWITCH with a lock to prevent accidental startup. The lock is prepared by the customer.
5. Set the BATTERY SWITCH to OFF position (for Australia and France versions).
6. (Optional) 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.

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**
First breathing white then blinking	Wi-Fi pairing ongoing

- **Abnormal/Fault**

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

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

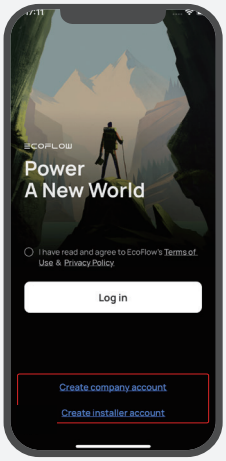
EcoFlow Pro

GET IT ON Google Play

Download on the App Store

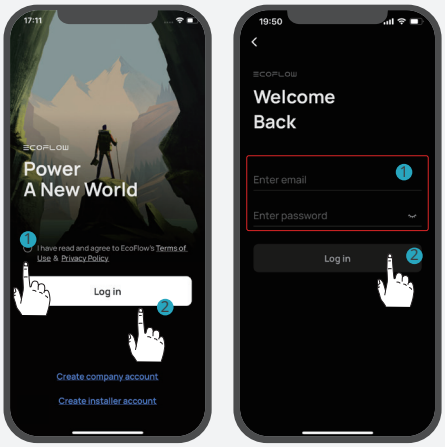
2 Create Account

Create your company or installer account.



3 Log In

Enter the installer account and password.

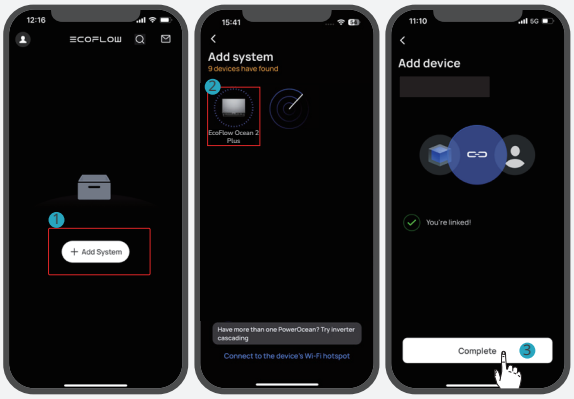


4 Add System

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

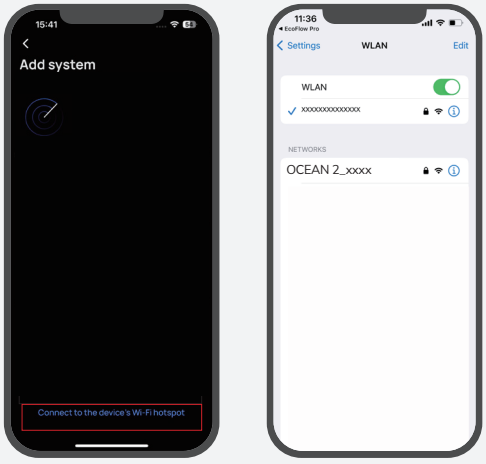
• Via Bluetooth

Tap **Add System** to automatically search for bluetooth devices nearby, tap **EcoFlow OCEAN 2 Plus** to connect, and then tap **Complete** to proceed.



• Via Wi-Fi

1. Tap **Add System**, and tap **Connect to the device's Wi-Fi hotpot** to access to your phone's Wi-Fi settings.
2. Tap **EcoFlow Ocean 2 Plus** and enter the password for the Wi-Fi. The password is the last 8 digits of the serial number of the inverter, found in the product nameplate.



5 Commissioning

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

Step 1: Internet Setup

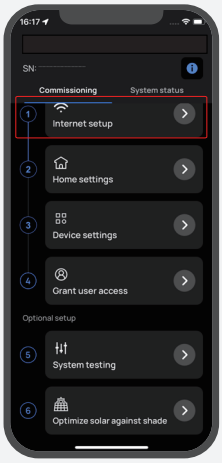
Tap Internet Setup to start the network configuration through one of the following method.

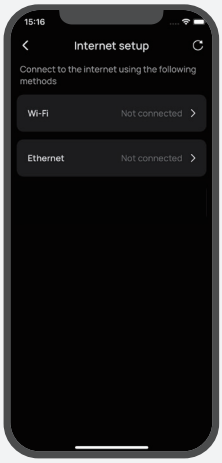
- Wi-Fi

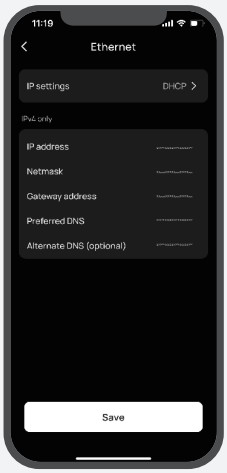
  Select WiFi, select the appropriate network and enter the password.

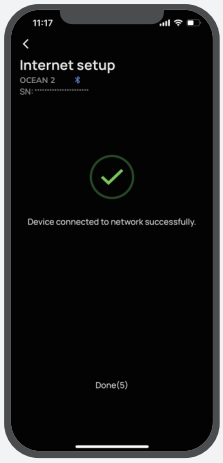
- Ethernet

  Connect the system to a router using a network cable in the DHCP or Static mode.
  - In the default DHCP mode, the device obtains IP address automatically (recommended).
  - In the Static mode, network administrator (homeowner) should set a valid IP address to the device. To avoid IP address conflict, check the IP addresses of other devices on the network by accessing router's settings.



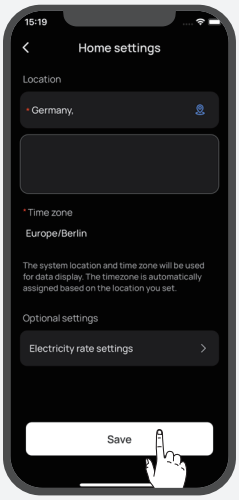






Step 2: Home Settings

Tap Home Setting to enter the corresponding house address and set the electricity rate if needed.

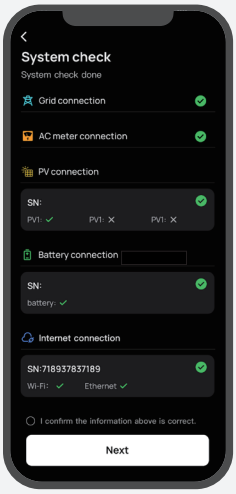


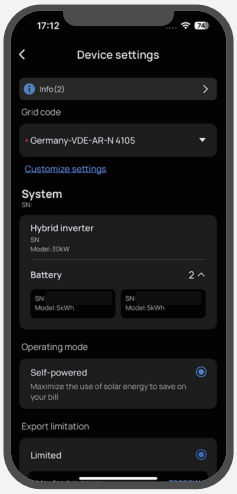
Step 3: Device Settings

Tap Device Settings to verify that the devices in the device list match the connected devices.

- Perform system check to comfirm connection (during the initial commissioning).
- Update firmware (recommended).
- Set the grid code, system work mode, feed-in power limitation, etc.
- Set connection parameters, voltage protection parameters, etc. in Customize Settings.

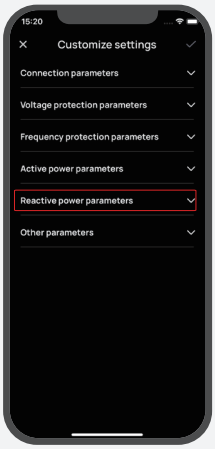
Follow local regulations if you need to change any of these parameters, and contact your local power organization first.

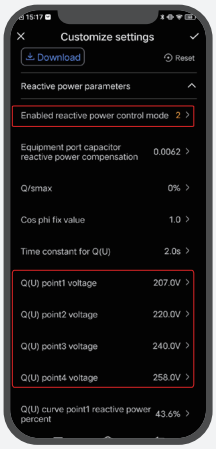




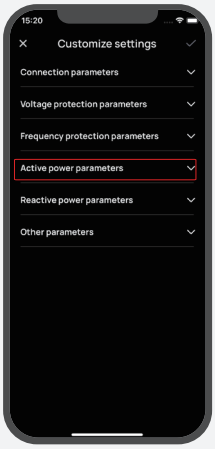
Step 4: Customize settings (For AU version only)

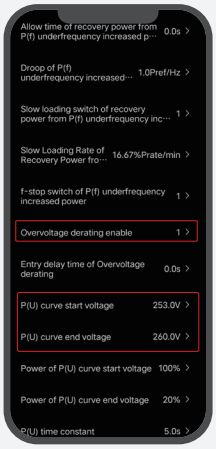
- Set power quality response modes: Volt-var.



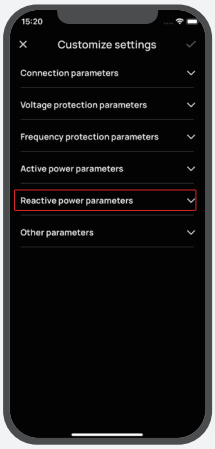


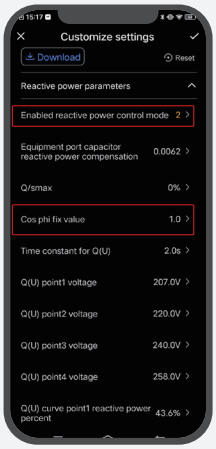
- Set power quality response modes: Volt-watt



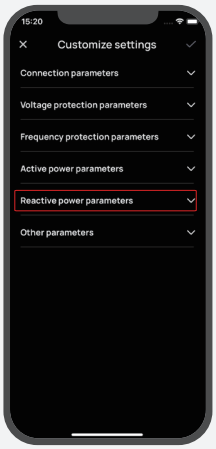


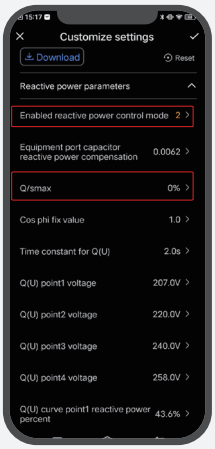
- Set fixed power factor.



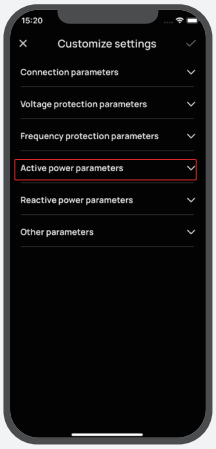


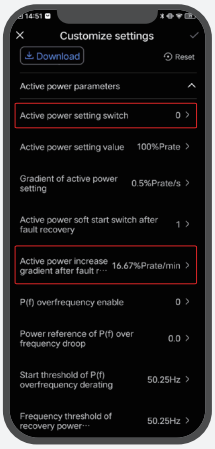
- Set reactive power mode.





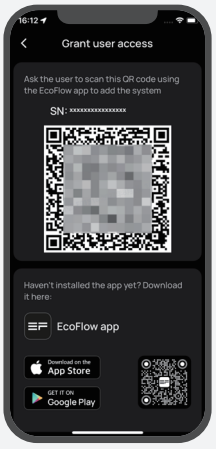
- Set power rate limit.





Step 5: Grant User Access

Tap Grant User Access to generate an access QR code for the home owner to bind the system after the home owner adds the device in the EcoFlow app.

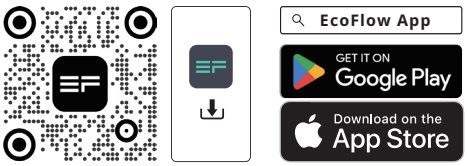


Step 6: Optional Setup

- System testing for on-grid or off-grid feature and Dl active scheduling.
- Optimize solar against shade.

Help Home Owner for App Initial Setup

1. Download and install EcoFlow App Scan the QR code or download at: https://download.ecoflow.com/app



2. Create a new account and log into the app.
3. Add device manually or use Bluetooth.
4. Scan user grant QR code.

   Home owner scans the system QR code displayed on the installer's phone to bind the device.

System Maintenance & Replacement

⚠ 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.

Routine Maintenance

To ensure the long-term operating of the equipment, you are acdvised 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	

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.

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.

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**

⚠ WARNING

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.

Replacement

⚠ WARNING

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

- **Replacing the inverter fan**

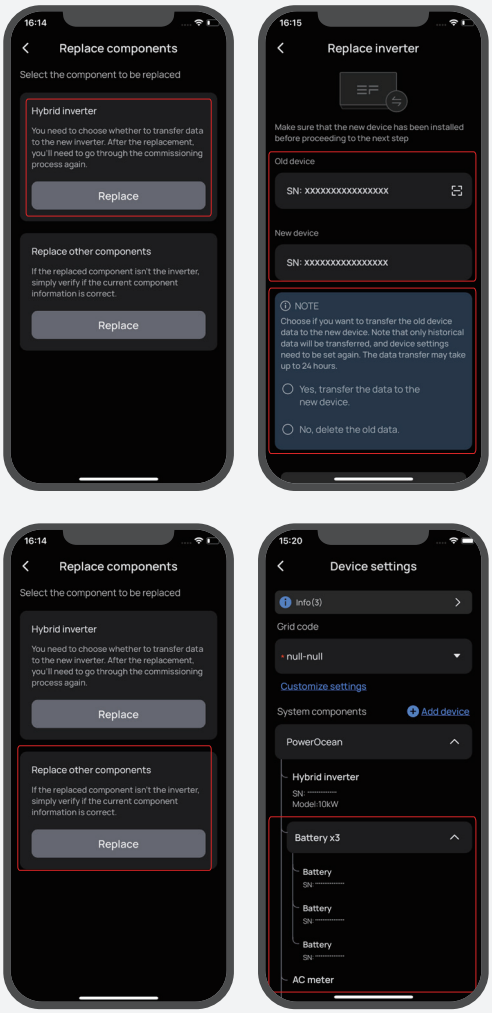
NOTICE

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 differnet. 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.



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.

Appendix

Important Information about Inverter Cascading

⚠ WARNING

- Turn off the grid power and press the EPO (if any) before cascading inverters.
- Set all load circuit breakers to the OFF position; otherwise, the wiring self-check may fail.
- Ensure the firmware version is up to date before performing cascading.

NOTICE

Only inverters of the same model can be cascaded.
Check whether the cascading installation (up to 2 units) is completed according to the following items.

Item	Note
Power cable connection	Refer to "Wiring Diagram". Connect NS protection before wiring to the utility grid according to local regulation.
Communication	Use the inverter cascading cable to connect 2 PAR ports of inverters, and plug the remaining 2 PAR ports with termination resistors. Refer to "Communication Between Cascaded Inverters".
Metering	Connect smart meter for partial backup scenario. Refer to "(Optional) Install Energy Meter for Partial Backup System" section.
Connecting to Internet	An EcoFlow OCEAN 2 Plus dongle is required for a single inverter or each of cascaded inverters. Refer to "Connectto the Internet" section.
System commissioning	Perform system commissioning and wiring check in the EcoFlow Pro app in the following step. Otherwise, the system may be damaged. Before commissioning, make sure all loads are disconnected. 1. Go to **Home settings** > **Device settings** to perform system check (for each inverter). 2. Turn on the load-side circuit breaker of the secondary inverter. 3. Tap **Add device** > I**nverter cascading setup**, and tap Next for wiring check (for inverter cascading). 4. Go to **Home settings** > **Device settings** to perform system check AGAIN (for each inverter). 5. After setup, reset EPO, tap Refresh in the app, and turn on the load-side circuit breaker of backup loads. The inverter indicator will turn white.

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