

## EcoFlow PowerOcean DC Fit



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Q <https://enterprise.ecoflow.com/eu/documentation>

### IMPORTANT





- Lesen und beachten Sie vor der Montage, dem Betrieb und der Wartung des Geräts Montageanleitung und das Sicherheitshinweise.
- Die Bilder in diesem Leitfaden dienen nur zur Veranschaulichung.
- Before installing, operating, and maintaining the equipment, read and follow up Installation Guide and Safety Instructions.
- Images in this guide are for demonstration only.



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# Safety Precautions

Symbol	Description
 <b>DANGER</b>	Indicates a hazard with a high level of risk which, if not avoided, will result in death or serious injury.
 <b>WARNING</b>	Indicates a hazard with a medium level of risk which, if not avoided, could result in death or serious injury.
 <b>CAUTION</b>	Indicates a hazard with a low level of risk which, if not avoided, could result in minor or moderate injury.
 <b>NOTICE</b>	Indicates a potentially hazardous situation which, if not avoided, could result in equipment damage, data loss, performance deterioration, or unanticipated results. <b>NOTICE</b> is used to address practices not related to personal injury.

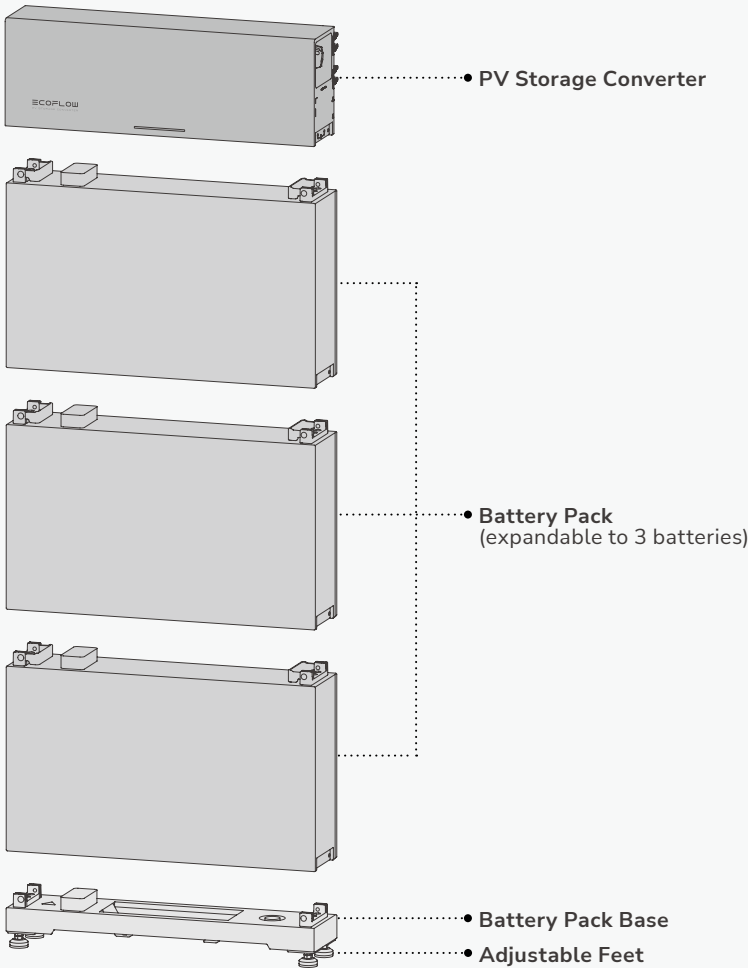


- Do not work with power on during installation or maintenance.
- Personnel who plan to install, maintain, or perform electrical operations on the equipment must receive thorough training, and be familiar with all necessary safety precautions and instructions.
- Personnel who plan to perform special operations should have the necessary local or national qualifications for tasks such as high-voltage operations, working at heights, and so on.
- Wear suitable personal protective equipment (PPE) for all professional or skilled work on the equipment.



- When the photovoltaic (PV) array is exposed to light, it supplies direct current voltage to the power conversion equipment (PCE).
- Do not touch the exposed electrical cable with bare hands.

## EcoFlow PowerOcean DC Fit:



# Preparing Tools and Instruments

## · ESSENTIAL CABLES & CONNECTORS



Grounding cable  
(4 mm<sup>2</sup> copper conductor)



Solar extension cable  
(4 mm<sup>2</sup> - 6 mm<sup>2</sup>)



Shielded network cable  
(Cat 5e or higher)

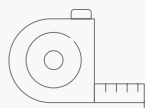


RJ45 connectors  
(Cat 5e or higher)

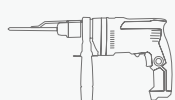


Twisted pair cable  
(2\*0.5 mm<sup>2</sup>)

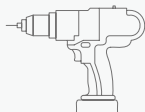
## · ESSENTIAL TOOLS



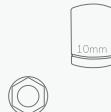
Measuring tape



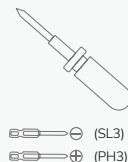
Hammer drill  
(ø 8 mm)



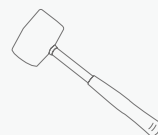
Electrical screwdriver



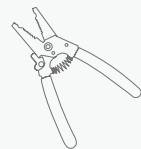
Torque socket  
(10 mm)



Screwdriver



Mallet



Wire stripper



Crimping tool



RJ45 crimping tool



Cable cutter



Marker



Multimeter  
(DC voltage measurement  
range ≥ 1000V DC)



Voltage pen



Wrench  
(14 mm)



Network cable tester



Heat-shrink tubing



Heat gun

## · PERSONAL PROTECTIVE EQUIPMENT AND OTHER OPTIONAL TOOLS



Safety goggles



Safety shoes



Safety gloves



Dust mask



Vacuum cleaner



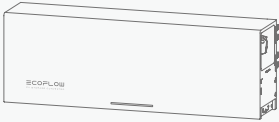

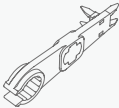



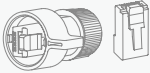


Step ladder

# Package Inspection

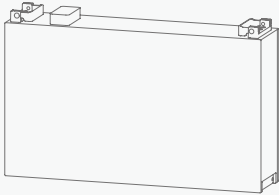



NOTICE

- Check if the deliverables are intact and complete. If any item is missing or damaged, contact the supplier.
- Retain the original packaging and documentation for further needs.

· ECOFLOW POWEROCEAN PV STORAGE CONVERTER

<div>A1 ×1</div> <div></div> <div>EcoFlow PowerOcean PV Storage Converter</div>	<div>A2 ×1</div> <div></div> <div>Smart meter</div>	<div>A3 ×2</div> <div></div> <div>Solar connector spanner</div>
<div>A4 ×12</div> <div></div> <div>Solar connector (+)</div>	<div>A5 ×12</div> <div></div> <div>Solar connector (-)</div>	<div>A6 ×1</div> <div></div> <div>METER port connector (RS485)</div>
<div>A7 ×1</div> <div></div> <div>WAN port connector (Ethernet)</div>	<div>A8 ×4</div> <div></div> <div>Screws (M5*12)</div>	<div>A9 ×2</div> <div></div> <div>OT terminal &amp; Grounding screw (M5*12)</div>

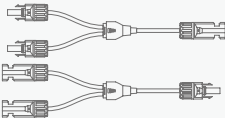
· ECOFLOW POWEROCEAN LFP BATTERY PACK

<div>B1 ×1</div> <div></div> <div>EcoFlow PowerOcean LFP Battery</div>	<div>B2 ×2</div> <div></div> <div>Battery T-shaped / L-shaped mounting piece</div>	<div>B3 ×8</div> <div></div> <div>Screws (M5*12)</div>	<div>A10 ×2</div> <div></div> <div>Expansion bolt (M6*60)</div>
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· ECOFLOW POWEROCEAN LFP BATTERY BASE

<div>C1 ×1</div> <div></div> <div>Battery base</div>	<div>C2 ×4</div> <div></div> <div>Adjustable feet</div>	<div>C3 ×2</div> <div></div> <div>Expansion bolt (M6*60)</div>	<div>C4 ×1</div> <div></div> <div>Marking-off template</div>
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· ECOFLOW Y-BRANCH SOLAR CONNECTOR

<div>D ×2</div> <div></div>
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# Installation Environment

## WARNING

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

## NOTICE

- When installing the equipment in a garage, keep it away from the drive way.
- The mounting structure where the equipment is installed must be fire resistant. Do not install the equipment on flammable building materials.
- Ensure that the installation surface is solid enough to bear the weight of the equipment.

AVOID DIRECT SUNLIGHT, RAIN, OR SNOW

WELL-VENTILATED AREA

VERTICAL POSITION

87°~93°

AVOID UNEVEN GROUND

AVOID DIRECT HEAT DISSIPATION TO INVERTER

AVOID UNSTABLE SURFACES

AVOID PIPES AND CABLES

IP65

4%~100% RH

-20°C ~50°C

ALTITUDE

≤3000 m

DISTANCE FROM THE SEA

>500 m

AWAY FROM

Solvent
 Gasoline
 Heat source
 Moisture
 Explosive material
 Flammable material
 Infrared radiation

AWAY FROM CHILD & WORKING & LIVING AREAS

NOT INTENDED FOR MOBILE SCENARIOS

NOT INTENDED FOR IMPORTANT DEVICES

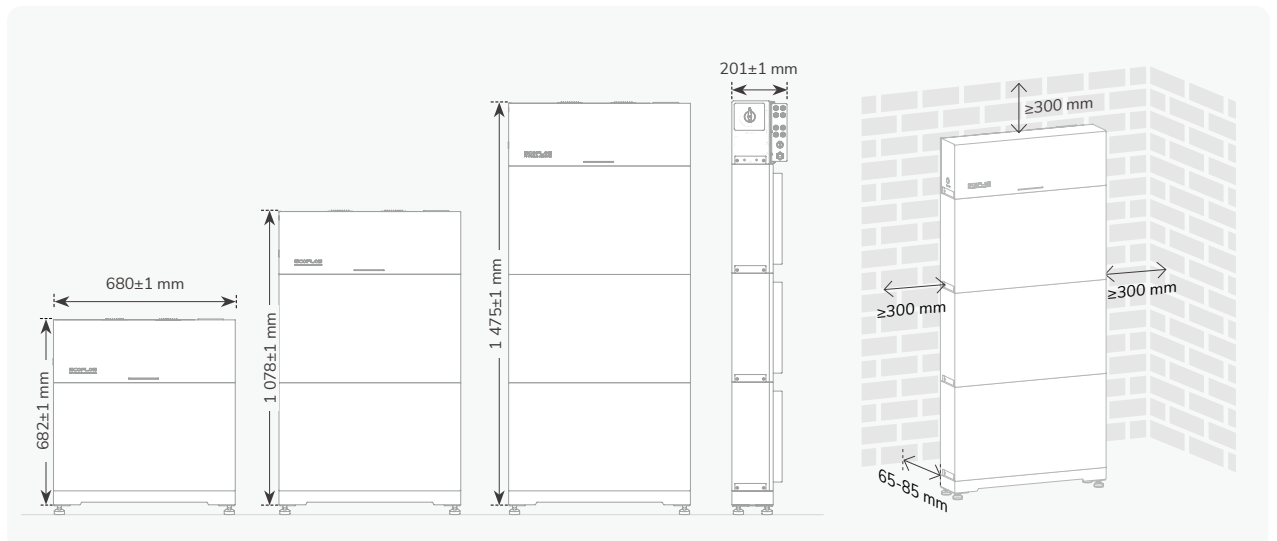
# Installation Space

## WARNING

- Reserve enough clearance around equipment to ensure sufficient space for installation and heat dissipation.

## NOTICE

- Reserve enough space on both sides of the equipment to facilitate the locking operation of the screws.



# System Installation

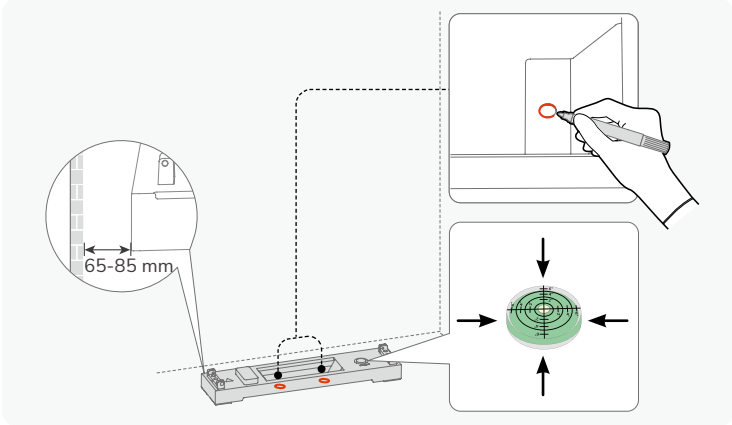
- DANGER**
- When drilling screw holes, avoid the water pipes and power cables buried in the wall and under the floor.
- CAUTION**
- When moving heavy equipment, assign enough personnel (two or more).
  - When moving the battery pack, hold the handles on top of it.
- NOTICE**
- Install the provided adjustable feet to level the battery base if needed.

## Installing Battery Base

Without adjustable feet

**1**

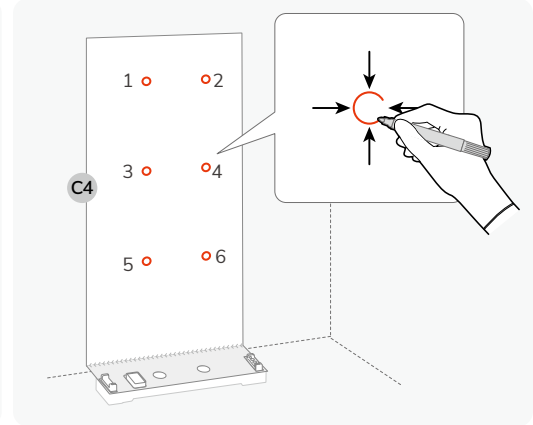
C1



**2**

C4

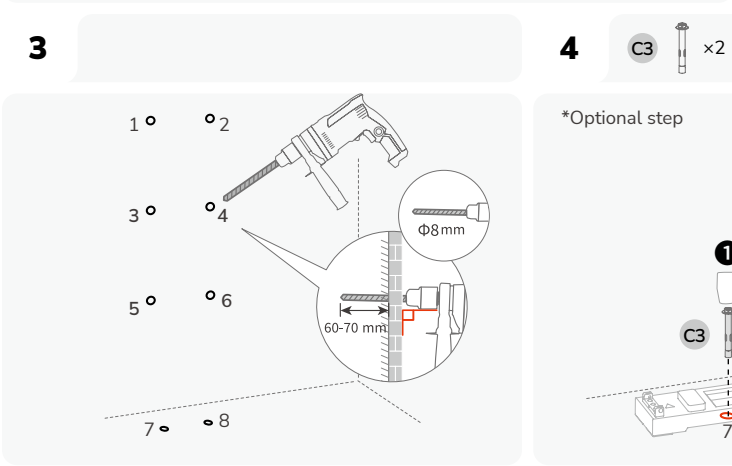
x1



**3**

C3

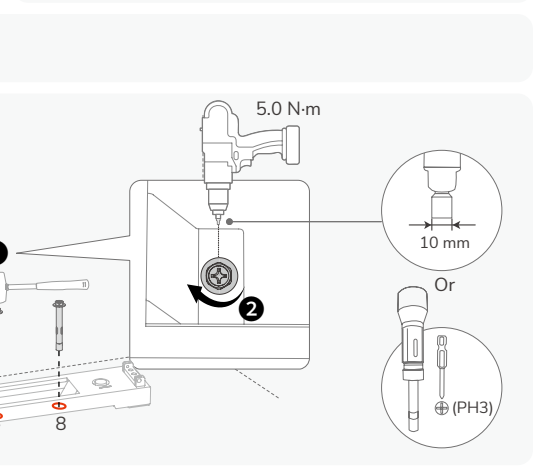
x2



**4**

C3

x2



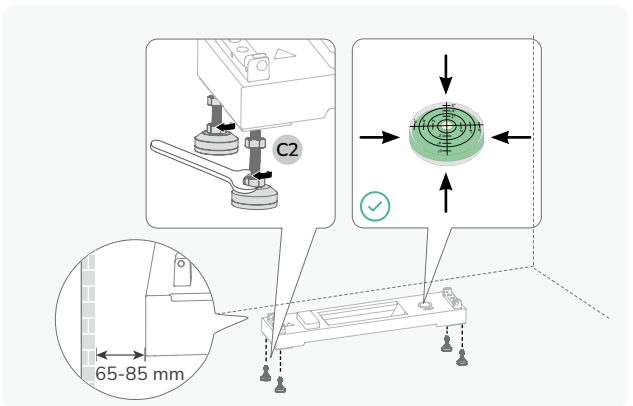
With adjustable feet

**1**

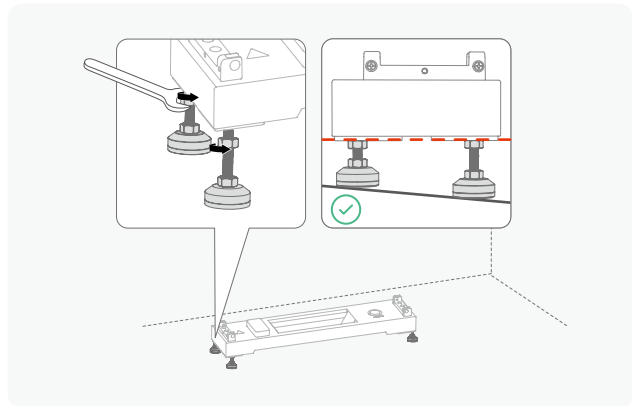
C1

C2

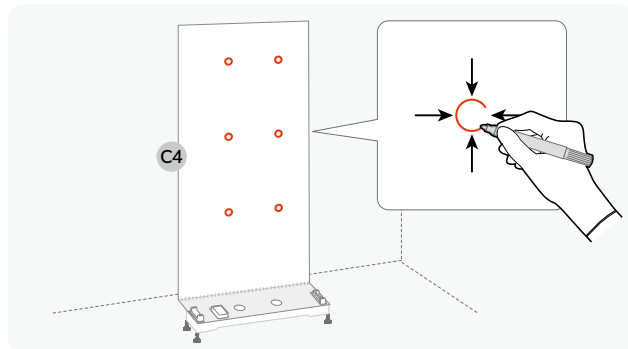
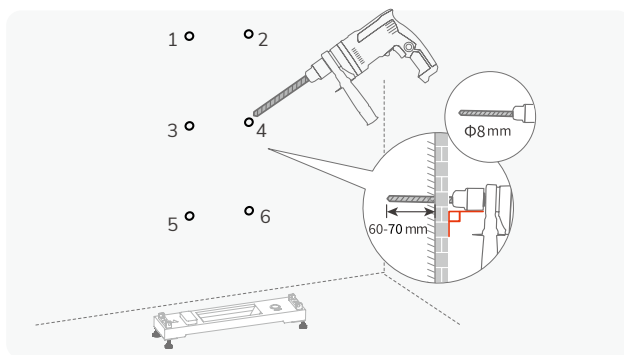
x4






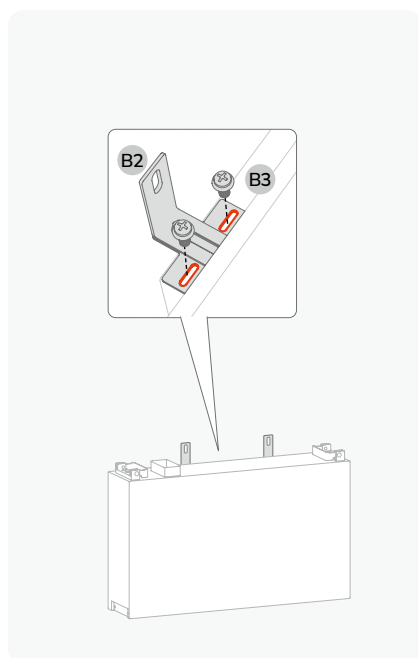
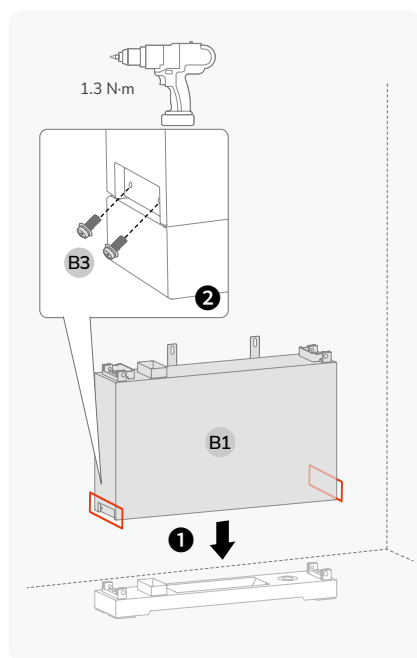
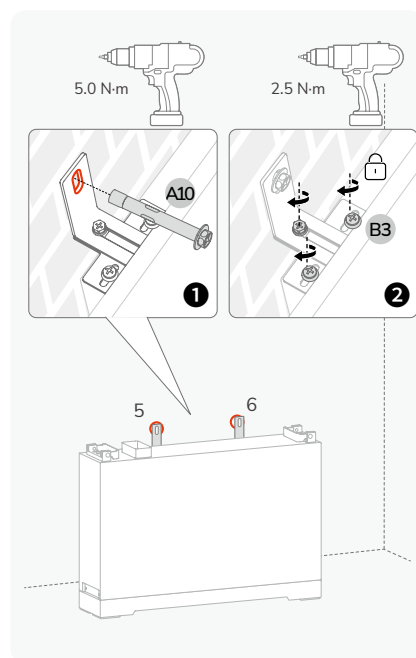




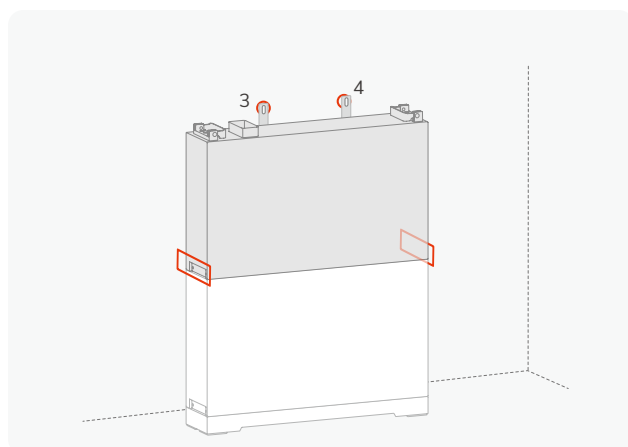




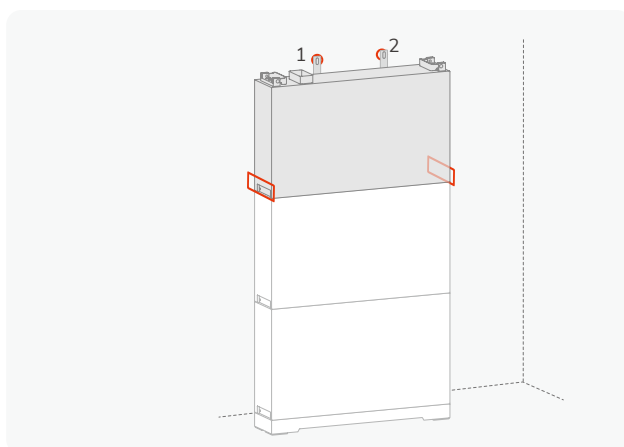
**2**





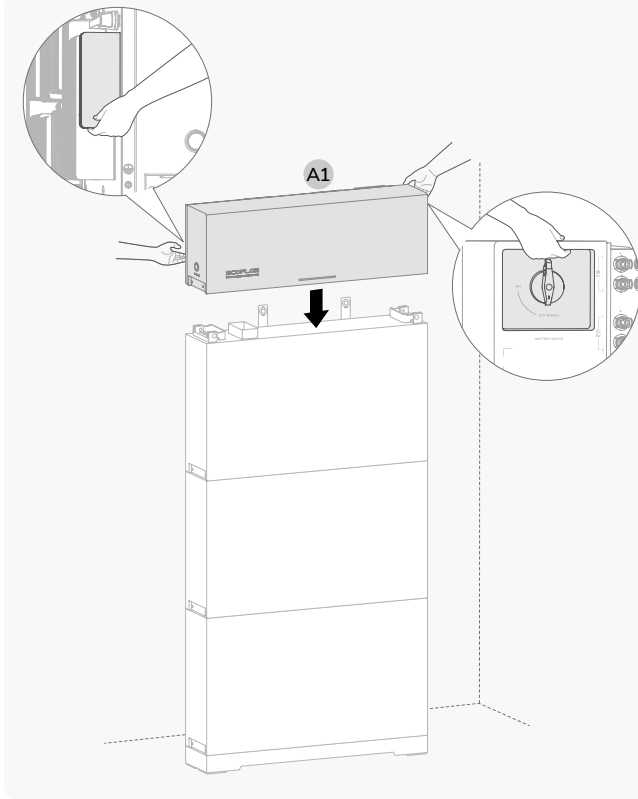
**3**C4  x1**4**

## Installing Battery Pack

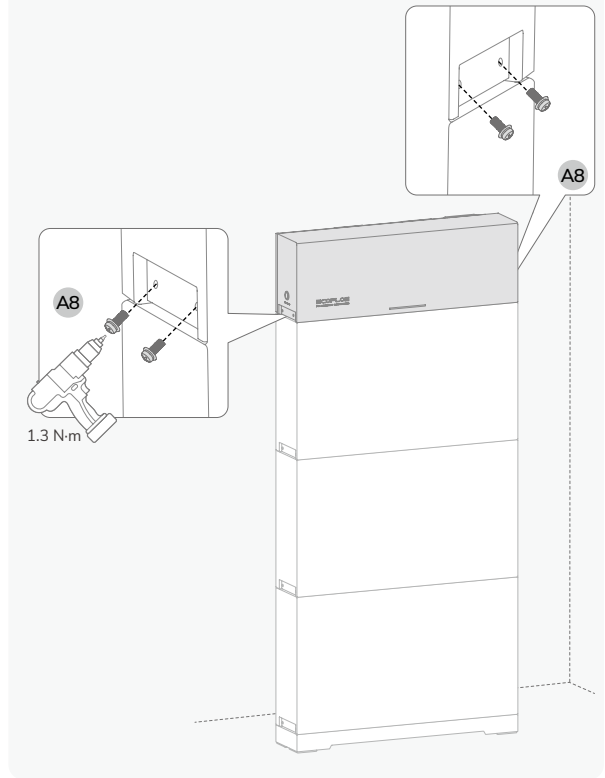
**1**B1  x1 B2  x2 B3  x4**2**B3  x4**3**A10  x2**4**B1  x1 B2  x2 A10  x2 B3  x8**5**B1  x1 B2  x2 A10  x2 B3  x8

## Installing PV Storage Converter

**1** A1



**2** A8 x4

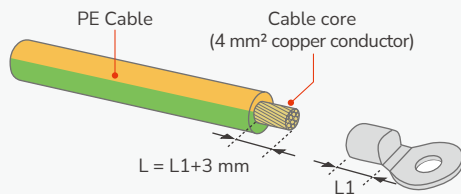


## Installing Protective Earthing Conductor

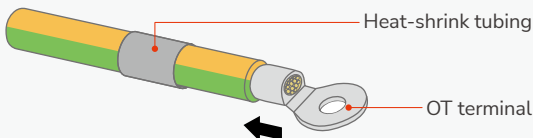
**⚠ DANGER**

• Grounding terminals should be fully connected.

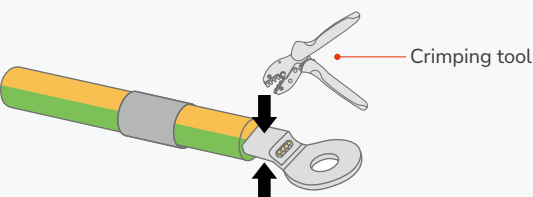
**1** A9 x2



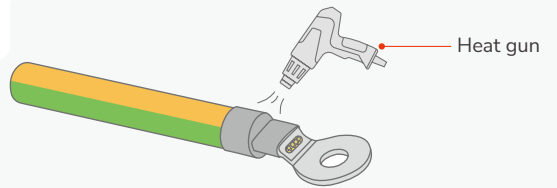
**2** Heat-shrink tubing  
OT terminal



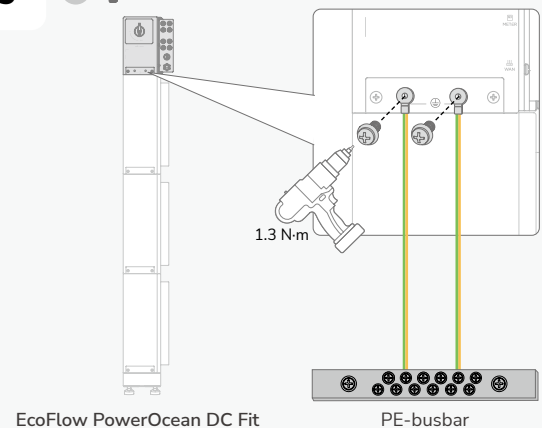
**3** Crimping tool



**4** Heat gun



**5** A9 x2



# Electrical Connection

**DANGER**

- Keep the protective cap of the unused terminal on the converter. Otherwise, the IP rating of the converter will be affected.

**CAUTION**

- Only qualified persons can perform the following operations.

**NOTICE**

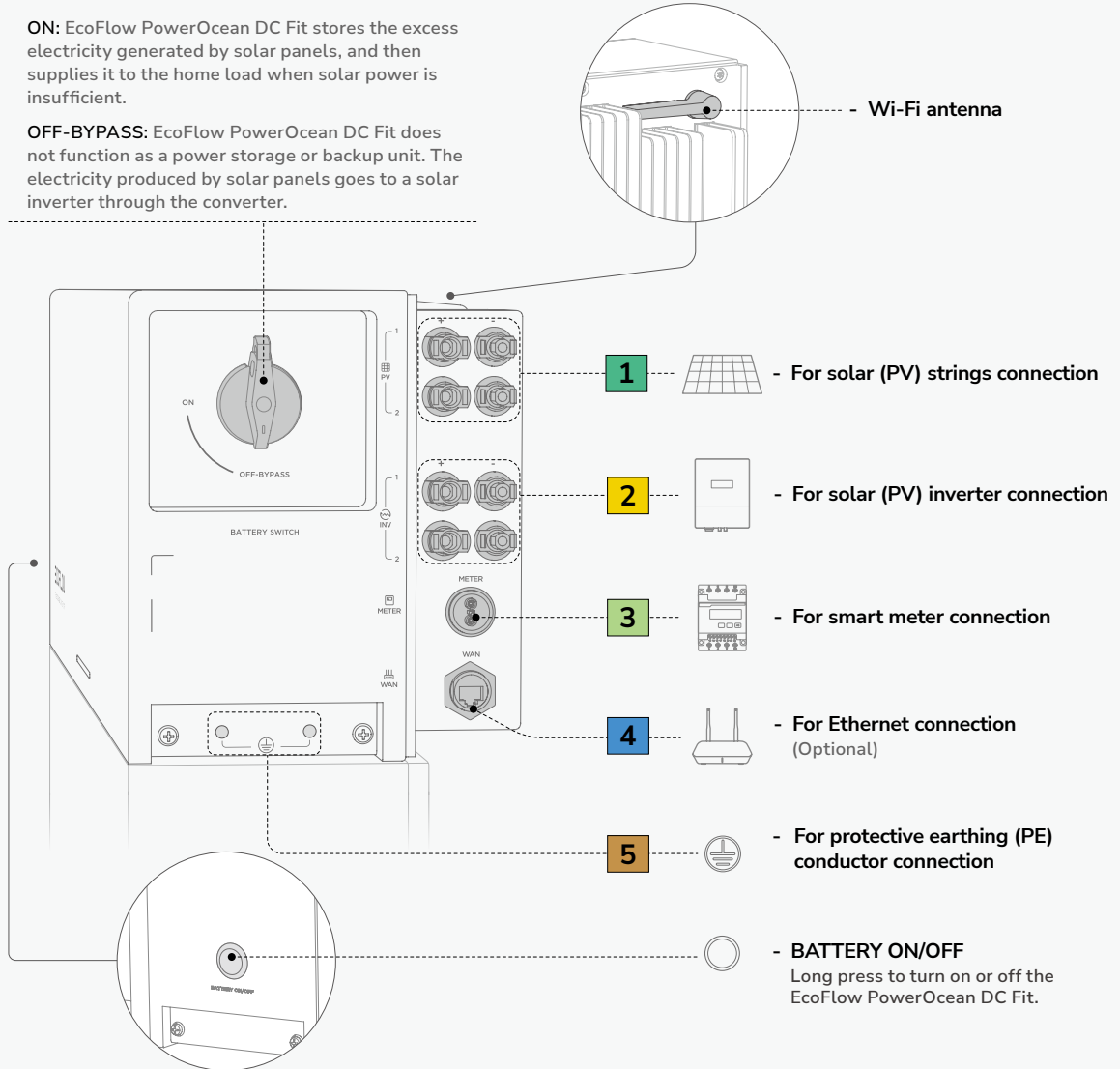
- Use cables that meet local regulations and the recommended specifications.

## EcoFlow PowerOcean PV Storage Converter

### - BATTERY SWITCH

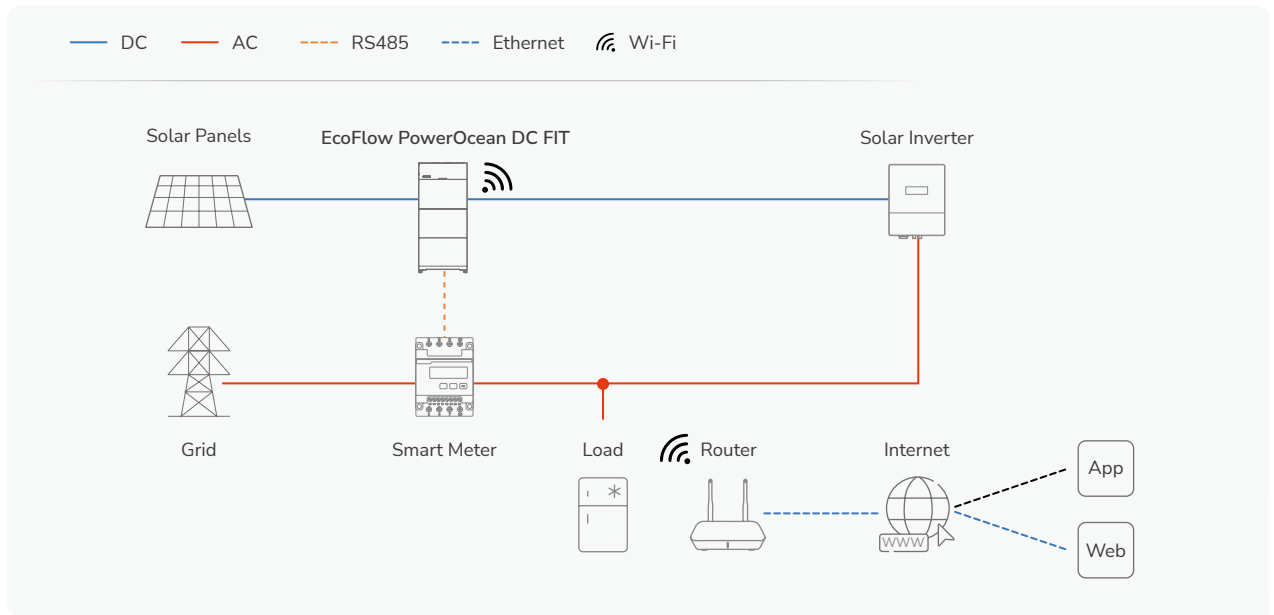
**ON:** EcoFlow PowerOcean DC Fit stores the excess electricity generated by solar panels, and then supplies it to the home load when solar power is insufficient.

**OFF-BYPASS:** EcoFlow PowerOcean DC Fit does not function as a power storage or backup unit. The electricity produced by solar panels goes to a solar inverter through the converter.



## Cable Requirements

- |   |  |
|---|--|
| <b>1</b> <b>PV input cable</b><br>4 mm <sup>2</sup> - 6 mm <sup>2</sup> conductor           | <b>2</b> <b>Inverter connection cable</b><br>4 mm <sup>2</sup> - 6 mm <sup>2</sup> conductor |
| <b>3</b> <b>Smart meter communication cable</b><br>Twisted-pair cable 2*0.5 mm <sup>2</sup> | <b>4</b> <b>Ethernet cable</b><br>Cat 5e or higher shielded network cable                    |
| <b>5</b> <b>PE cable</b><br>4 mm <sup>2</sup> copper conductor                              |  |



## Connecting to PV System

### ⚠ DANGER

- Power off the solar inverter from all voltage sources (both DC and AC sides) and disconnect it from the grid.
- If the PV string has no DC breaker or isolator to shut off DC input, do not cut all PV cables at once.
- Check if all equipment, components, cables, and terminals are in good condition.
- Do not hold the leads from "PV+" and "PV-" on the solar panels at the same time. The solar panels will generate lethal high voltage when exposed to sunlight.
- All terminals must be connected in the correct polarity to prevent damage to the system or risk of electric shock. Always connect positive (+) to positive (+) and negative (-) to negative (-).
- The DC input voltage and the short-circuit current of each PV string input must not exceed Max Input Voltage and Isc PV (Absolute Maximum).
- The impedance between the positive/negative terminals of the PV strings and earth should be larger than 1MΩ. Do not connect the PV strings to earthing or grounding conductor.

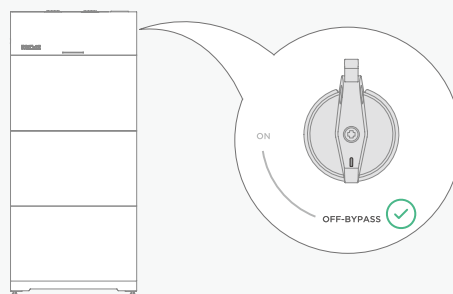
### ⚠ WARNING

- Use the solar connectors provided in the package. Avoid cross-mating solar connectors of different manufacturers.

### NOTICE

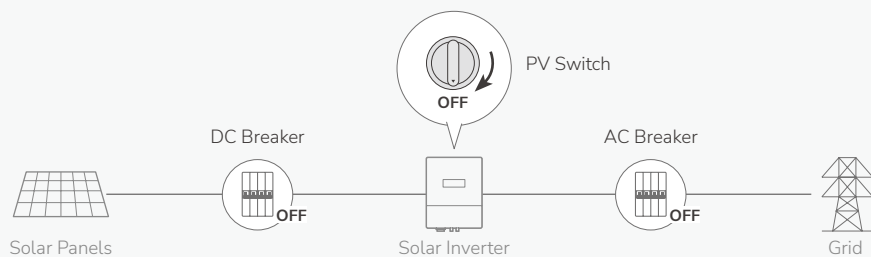
- To prevent lightning damage to the converter, add a surge protection switch at the PV junction box (if applicable).
- Avoid connecting any solar panels with a risk of leakage current to the converter.
- Avoid mixing solar panels that have different electrical characteristics to one PV string input. Also, avoid connecting solar panels with different orientations or angles.
- After the solar connectors have snapped into place, always check if the connection is secure.

**A** Check the BATTERY SWITCH status on the converter.

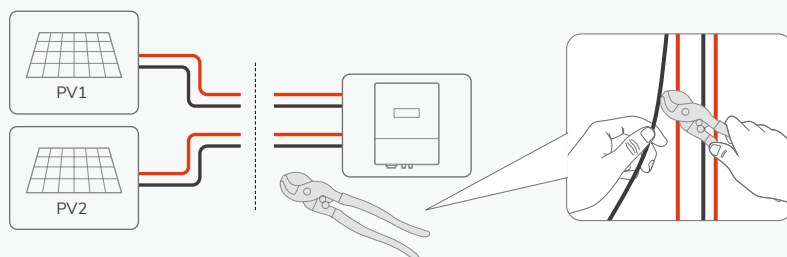


**B** De-energize all electrical equipment. All switches connected to the existing solar power system should be OFF status.

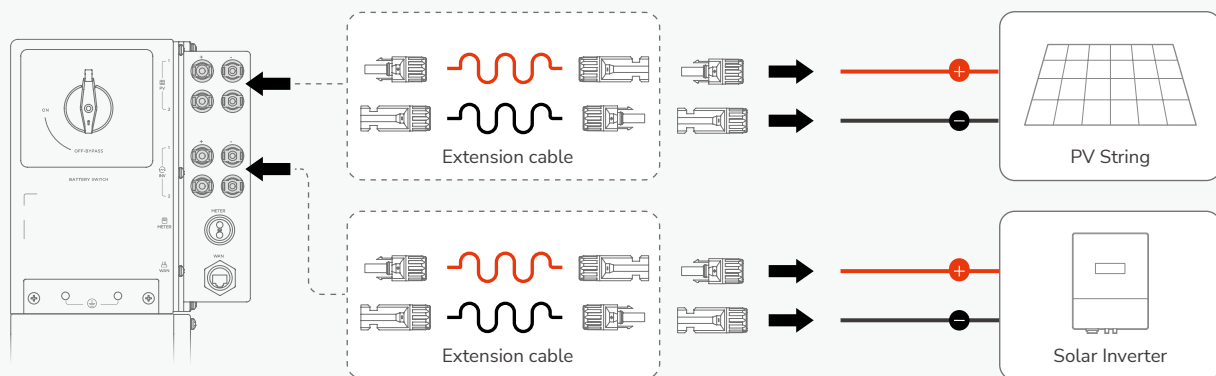
EN



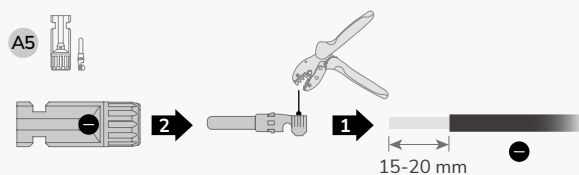
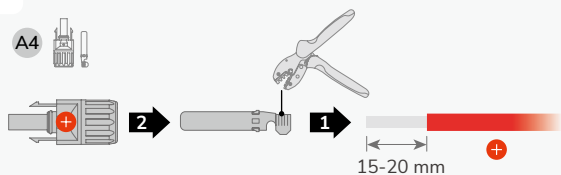
**C** Cut existing solar cables.



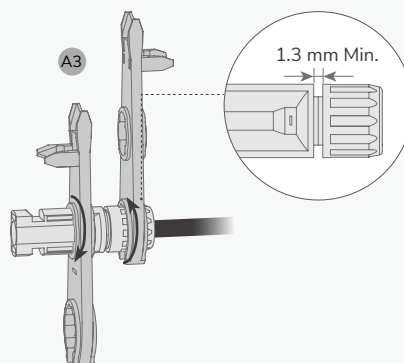
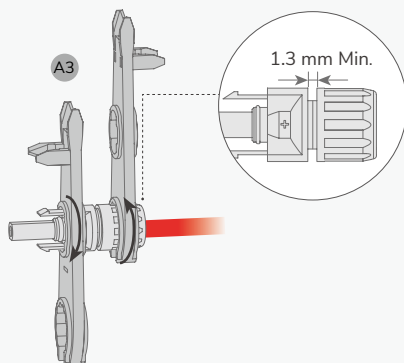
**D** Prepare solar connectors for the PV strings and the inverter.



1



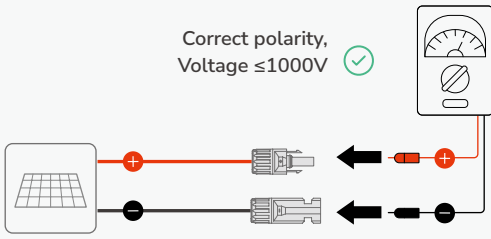
2



## E Check the polarities of the connection cables.

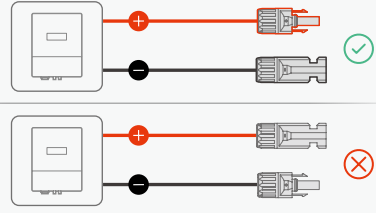
1

Correct polarity,  
Voltage  $\leq 1000V$  ✓



2

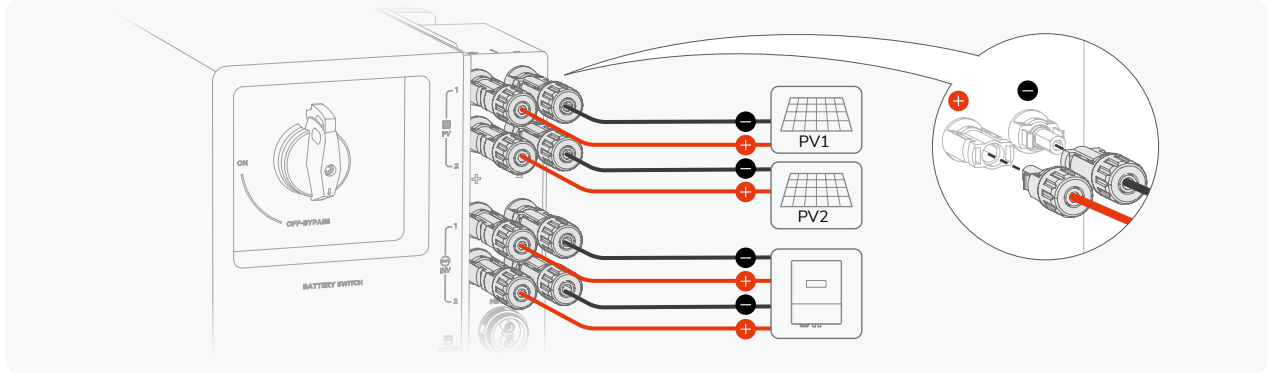
Inspect:



### NOTICE

- If the multimeter displays a negative value, the polarities of the leads are reversed. Correct them and try again.
- If the multimeter displays a voltage exceeding 1000V, remove some solar panels.

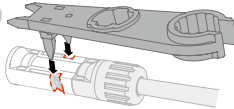
## F Connect to the converter.



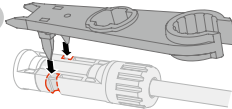
### NOTICE

- To remove or remake the solar connectors, use the provided solar connector spanner to remove them.

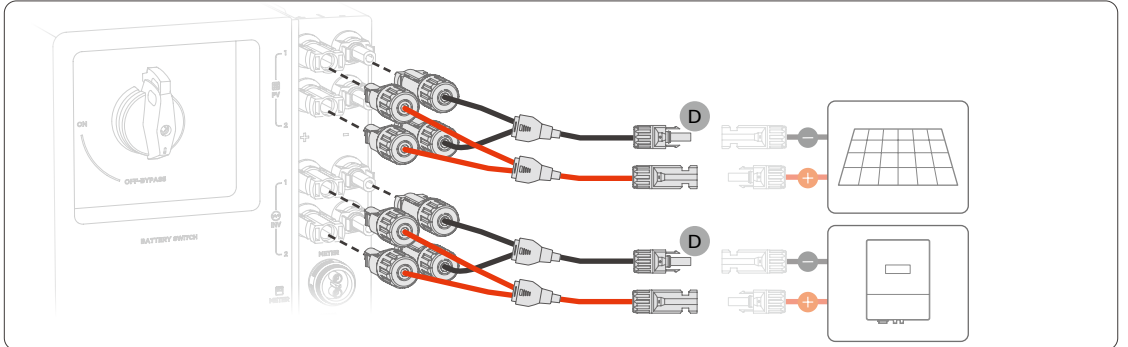
A3



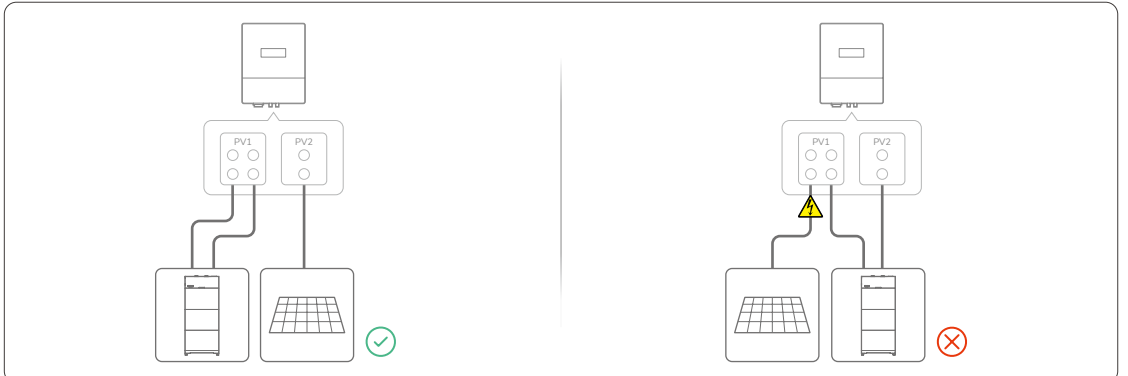
A3



- For an inverter that only supports single PV string input, adjust the connection using the EcoFlow Y-branch Solar Connector.



- For an inverter that supports multiple PV strings ( $\geq 2$  strings) in one input, avoid paralleling the EcoFlow PowerOcean DC Fit with a PV string to prevent potential damage to solar panels.



# Connecting Smart Meter

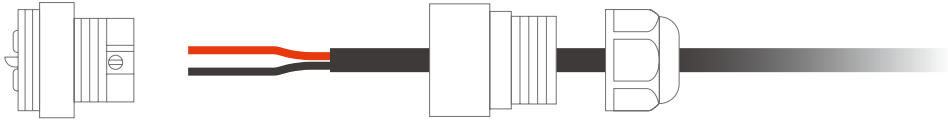
- NOTICE

  - Use the smart meter provided in the package.

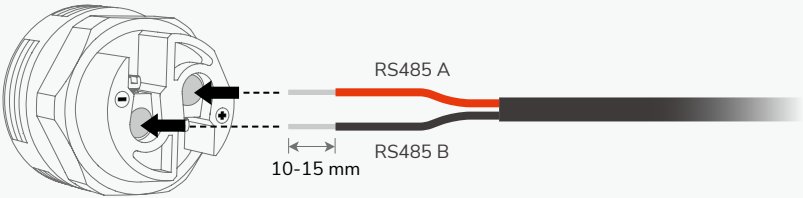
EN

A6

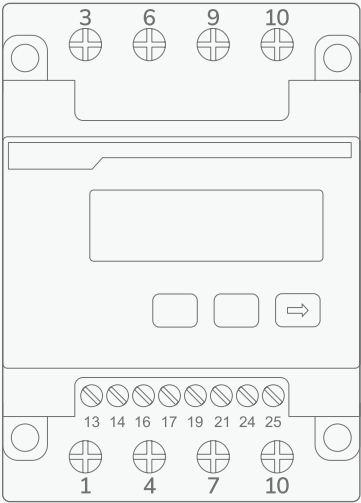
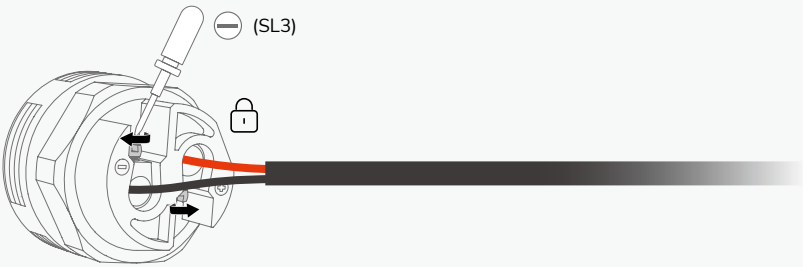
 x1



1



2



3	Load L1
6	Load L2
9	Load L3
10	Load N

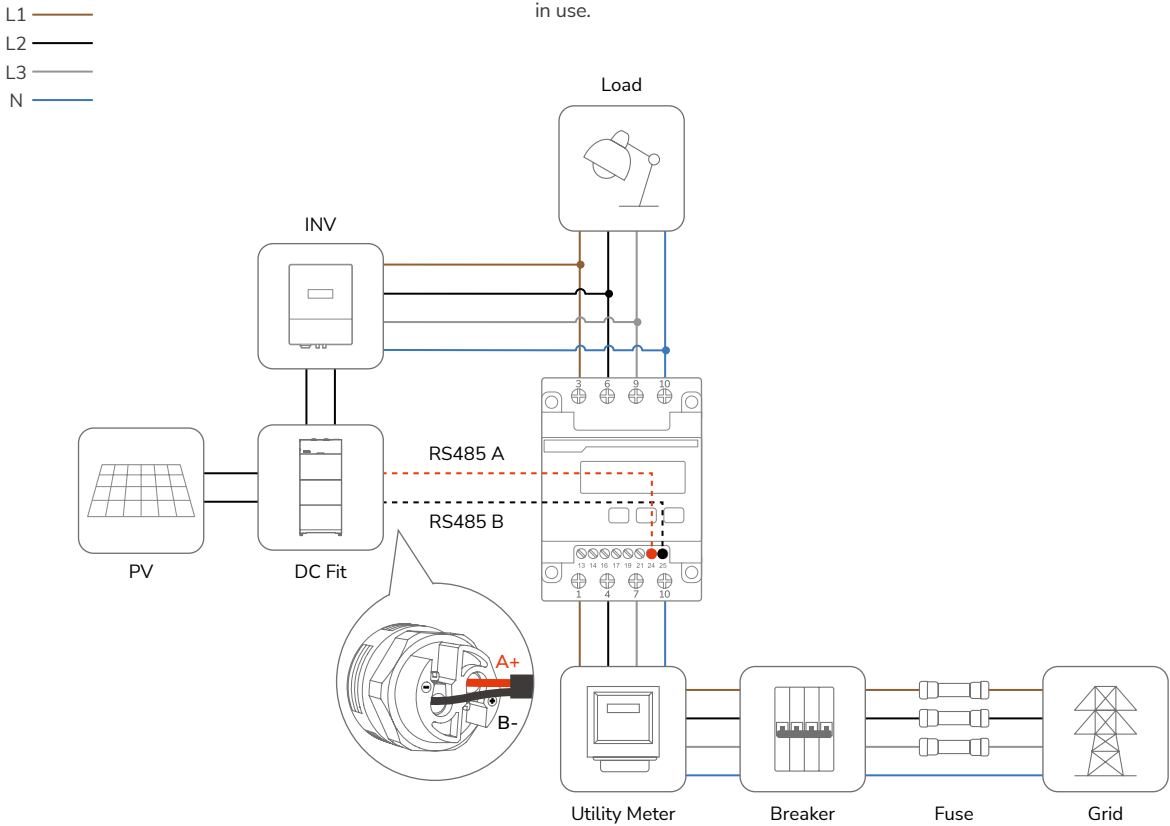
24	RS485 A
25	RS485 B

1	Grid L1
4	Grid L2
7	Grid L3
10	Grid N

· Wiring diagram (three-phase)

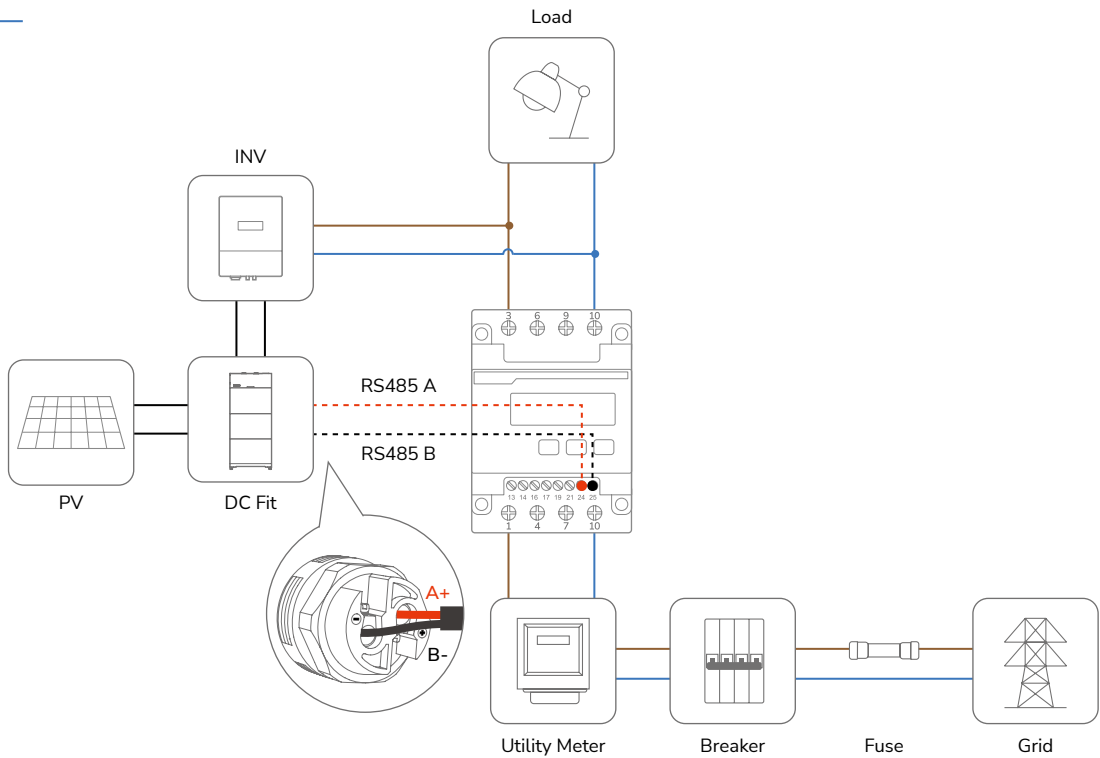
**NOTICE**

- For a three-phase house wiring, always adhere to the three-phase wiring diagram when installing the smart meter, irrespective of whether a single-phase inverter is in use.



· Wiring diagram (single-phase)

L1 —  
N —





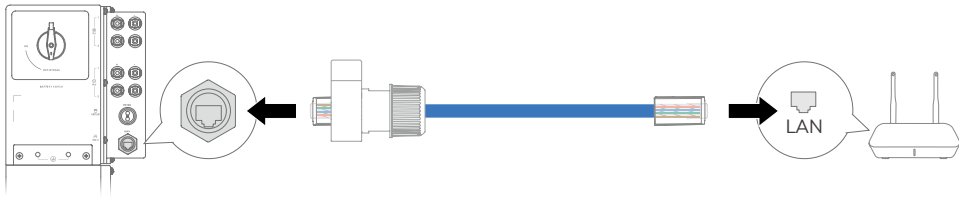
## Connecting to the Internet

### NOTICE

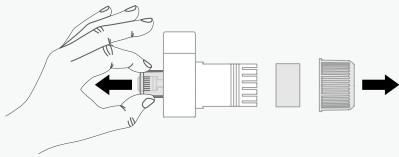
- Use Cat 5e or higher rating shielded network cable.

EN

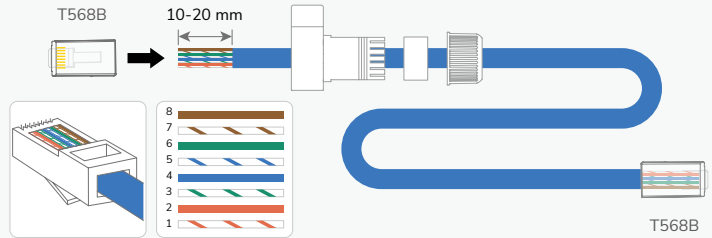
### • Method 1: Via a Wired Network



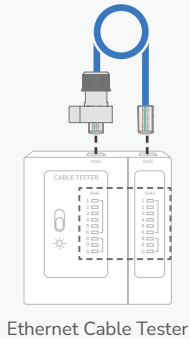
1 A7 ×1



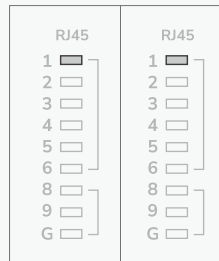
2 Both ends of the network cable use the T568B wiring standard (straight-through cable).



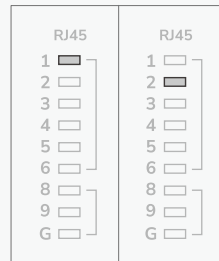
3 Test network cable connection. If the LEDs of the two RJ45 ports light up in sequence, it indicates that the network cable is correctly wired and should be fully operational.



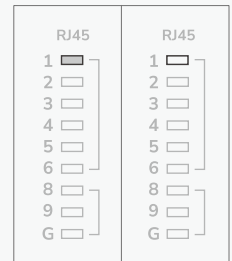
Ethernet Cable Tester



Ideal connection



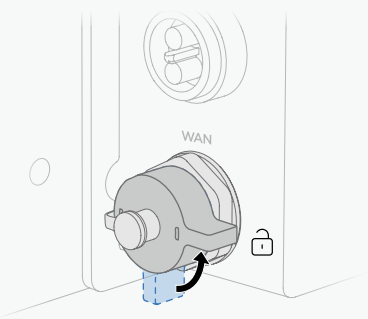
Incorrect wiring standard



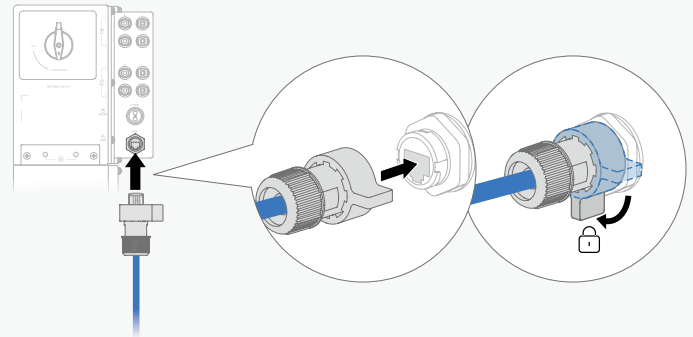
Poor connection



4

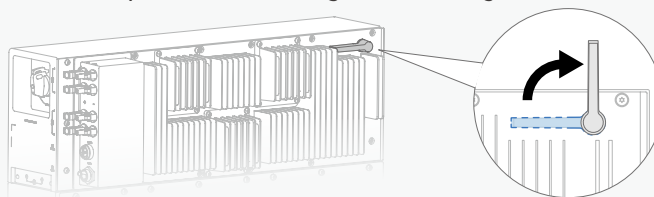


5



### • Method 2: Via a Wireless Network

Adjust the Wi-Fi antenna, then refer to **System Commissioning** section in this guide to connect the device to a wireless network.

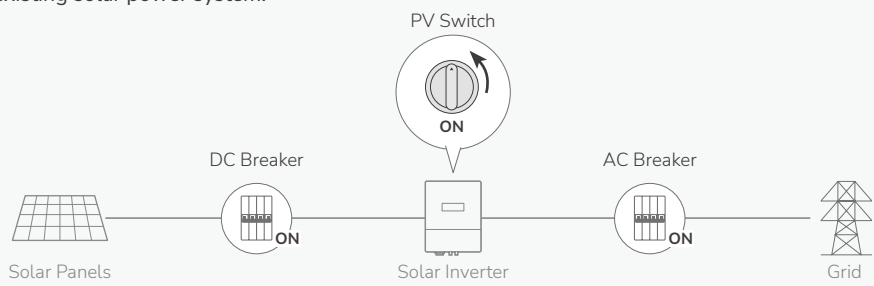


# Installation Review

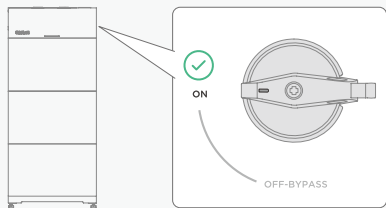
Check Item		Acceptance criteria
<input type="checkbox"/>	Equipment	All equipment is installed correctly and securely.
<input type="checkbox"/>	Cable routing	Cables are routed properly as required by the home owner.
<input type="checkbox"/>	Cable connection	All electrical cables are connected correctly and securely.
<input type="checkbox"/>	Grounding	The grounding terminals are connected securely.
<input type="checkbox"/>	Switch	All switches connected to the system are in off status.
<input type="checkbox"/>	Unused terminal and port	Unused terminals and ports are covered with watertight caps.
<input type="checkbox"/>	Environment	The installation space is proper, and the installation environment is clean and tidy.

## System Power-On

- 1 Turn on the existing solar power system.



- 2 Turn the **BATTERY SWITCH** on the converter to the **ON** position and verify the third-party solar inverter is functioning properly.



### NOTICE

If the inverter is not functioning, proceed with the following checks:

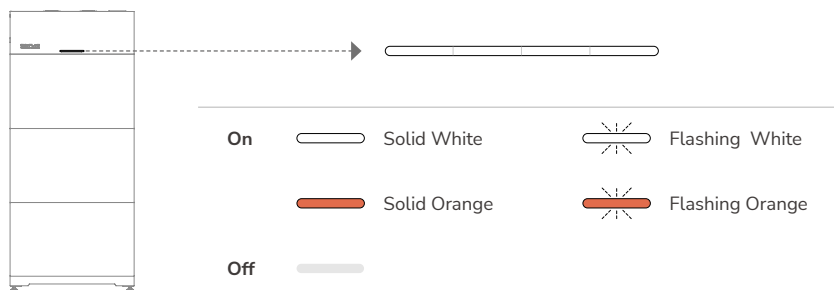
- 1 Confirm all hardware connections are firm and properly connected.
- 2 Inspect the inverter for an "Insulation Fault" message. If such a message appears, it suggests a compatibility issue. Please contact EcoFlow technical support.
- 3 If the problem persists after these checks, contact EcoFlow technical support.

- 3 Press and hold the **BATTERY ON/OFF** button on the converter for about 5 seconds. Wait until the LEDs light up and then flash twice, indicating a successful system power-on.



## System Power-Off

- 1 Shut down the EcoFlow PowerOcean DC Fit via the **EcoFlow** app.
- 2 Turn the **BATTERY SWITCH** on the converter to the **OFF-BYPASS** position.
- 3 Press and hold the **BATTERY ON/OFF** button on the converter for about 10 seconds.
- 4 Wait until the LEDs are completely off, indicating a successful system power-off.



## • System Reminder

LED Status	Description
	<p>The converter is energized by a DC voltage source (PV or battery pack), but the system is not functioning or is not completely powered-off.</p> <ul style="list-style-type: none"> <li>• <b>To turn on the system:</b> Press and hold the BATTERY ON/OFF button for about 5 seconds. Wait until the LEDs light up and then flash twice.</li> <li>• <b>To power off the system:</b> Turn the BATTERY SWITCH to OFF-BYPASS position.</li> </ul>

## • Discharge Status

LED Status	Battery Level
	<5%
	5%-25%
	25%-50%
	50%-75%
	75%-100%

## • Charge Status

LED Status	Battery Level
	0%-25%
	25%-50%
	50%-75%
	75%-99%
	100%

## • Faulty Status

LED Status	Description
	Abnormal system installation. Check if all equipment is installed correctly and securely.
	Abnormal smart meter communication.
	Battery is faulty.
	Converter is faulty.
	Abnormal IoT communication.
	Abnormal battery communication.
	Abnormal converter communication.

If the LED displays a faulty status, visit the **EcoFlow / EcoFlow Pro** app to retrieve the error code.

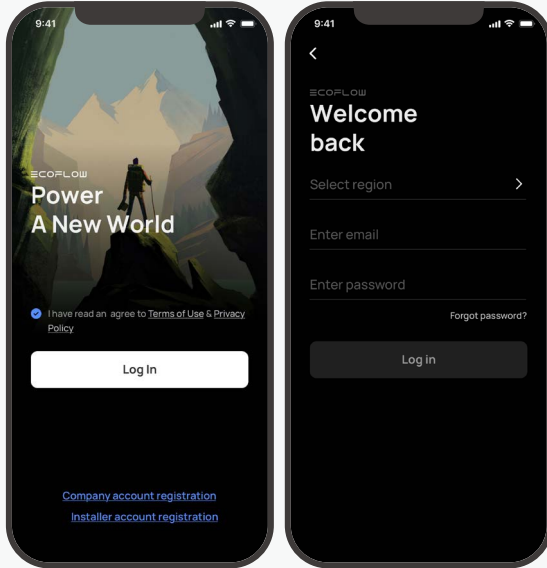
## 1 INSTALL ECOFLOW PRO APP (FOR INSTALLER )

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



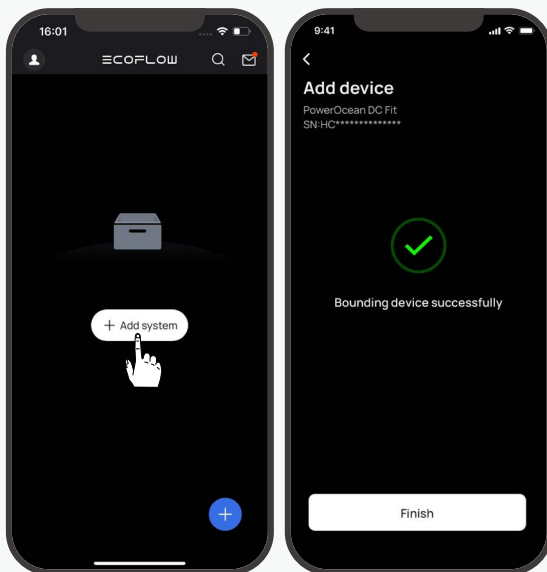
## 2 LOG IN & REGISTER

Enter the installer account and password.



## 3 ADD SYSTEM

Tap Add System or + to automatically search for Bluetooth devices nearby, and select EcoFlow PowerOcean DC Fit to bind.



- You can find the device serial number (S/N) in the product nameplate.
- If a firmware update prompt pops up, please follow it to upgrade the device to the latest version before proceeding.

## 4 COMMISSIONING

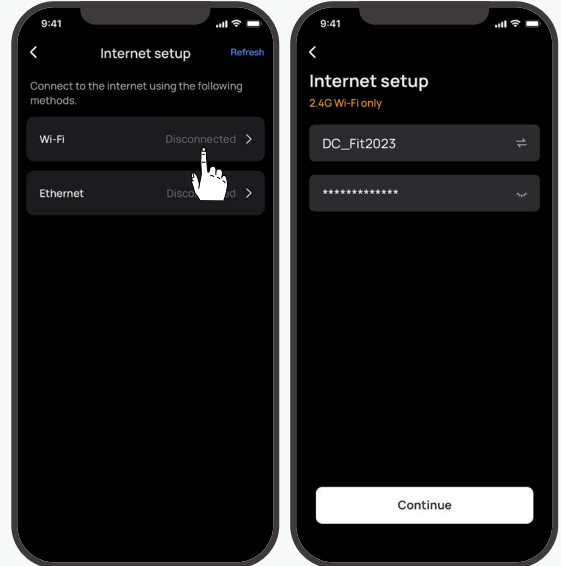
After binding the device successfully, the device enters the commissioning process.

### Step1: Internet Setup

Tap **Internet setup** to start the network configuration.

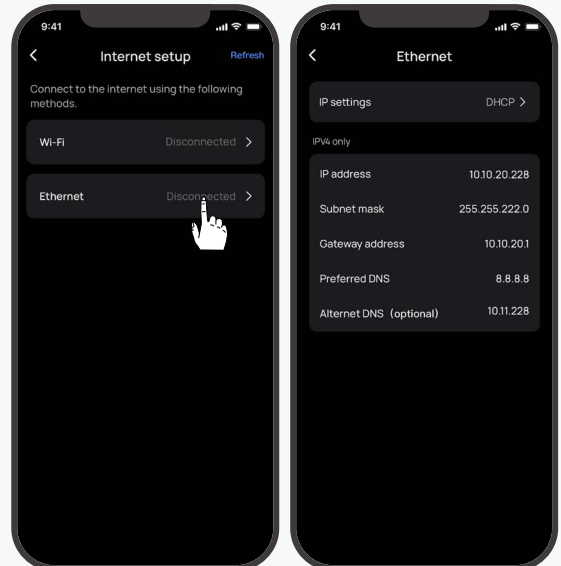
#### • Via a wireless network

Select **Wi-Fi**, enter the wireless network name and the password of the installation site.



#### • Via a wired network

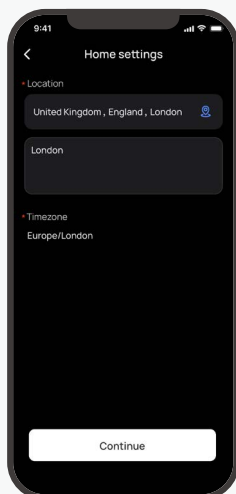
Select **Ethernet** to set IP mode.



- In DHCP mode, the device obtains IP address automatically.
- In 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.

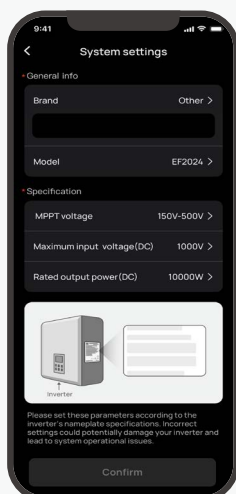
### Step2: Home Settings

Tap **Home Settings** to set necessary parameters.



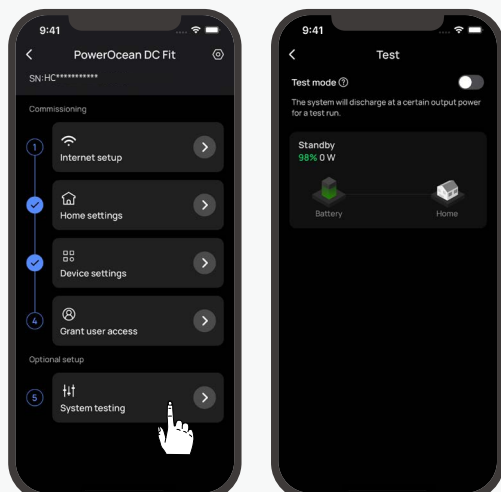
### Step3: Device Settings

Tap **Device Settings** to set necessary parameters.



### Optional: System Testing

After completing all the necessary settings, you can run a system test to ensure proper functionality.



### Step4: Grant User Access

Tap **Grant user access** to generate an accessing QR code for home owner.



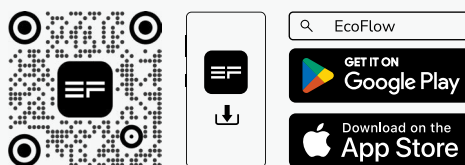
## 5 CUSTOMER SERVICE

Help the home owner to download the EcoFlow app and bind the device.

### Step1: Install EcoFlow App

(FOR USER)

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



### Step2: Scan user grant QR code

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

