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Download EcoFlow App



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Overview



Photovoltaic

1 module (Front) Face this side to the sun during use. It's recommended to use the panel on sunny days with ample sunlight.

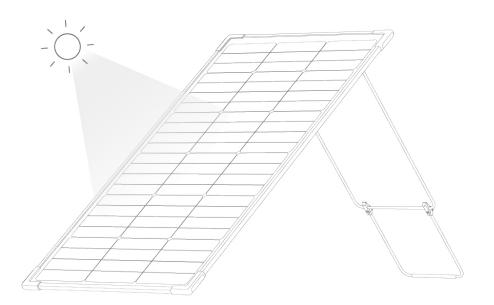
2 Solar Angle Guide Indicates the angle between the sunlight and the panel. When the sunlight's shadow point aligns with the center of the plate, it indicates a 90° angle.

3	Junction Box	Includes a solar panel output cable (350mm).
4	Support Bracket	Includes a bracket and extension for flexible adjustment of the solar panel angle.
5	Photovoltaic module (Rear)	This side is designed to harness sunlight reflected from the surroundings and works best on flat, light-colored surfaces.

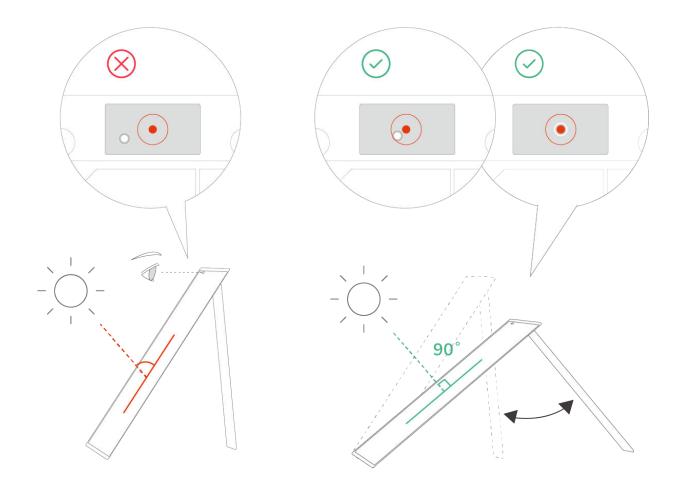
Get Started

Angle Adjustment

Face the front side to the sun, and unfold the bracket to place the panel.

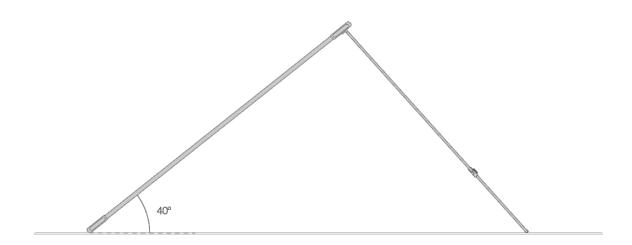


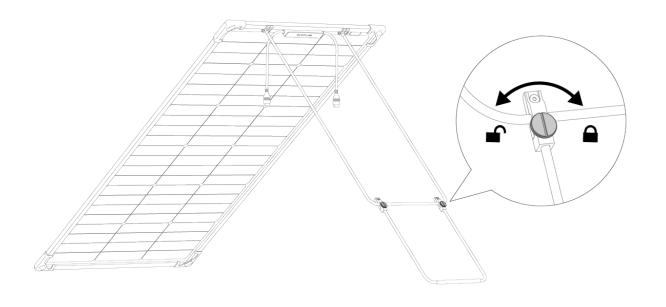
Check the shadow point on the solar angle guide to adjust the bracket, aiming to align the shadow as close to the center as possible.



Sunlight Optimization Tips

- 1. Ensure the shadow does not move outside of the red circle on the angle guide. Otherwise, the power output will decrease.
- 2. When the shadow point hits the center of the red circle, the sunlight is at a 90° angle to the solar panel (highest generating efficiency).





Bracket Adjustment Tips

- Adjust the bracket to fix the angle between the solar panel and the ground (30° to 60°).
- After adjusting to the desired angle, tighten the screws at the bend to prevent loosening.

Connection Steps

You can connect the panel to an EcoFlow portable power station to store power, or to an EcoFlow smart device to power the device directly.

During use, ensure that the input voltage and current are within the maximum output specifications of the solar panel to prevent damage.

When connecting a non-EcoFlow device, ensure that the device supports solar charging and has a charging input port (XT60) and electrical specifications compatible with the solar panel.



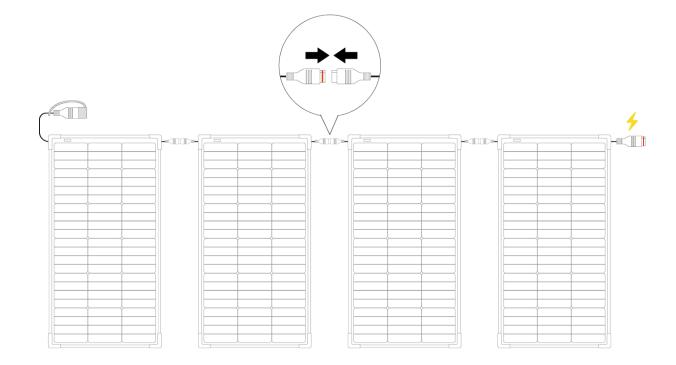
Maximum Output Specifications

The open circuit voltage (Voc) and short circuit current (Isc) values of the solar panel.

Connecting Solar Panels (Parallel)

It is recommended that multiple solar panels be connected in parallel. Connect each pair of solar panel output cables together tightly to complete the setup.

The solar panel output cable (male connector) at the furthest end does not need to be connected. Ensure that the waterproof cover remains tightly closed.





Due to wiring limitations, a maximum of 8 solar panels can be connected in parallel.

In a parallel connection setup, the total output voltage remains unchanged,

while the total output current and output power add up with the number of connections.

Quantity	Total Current (Isc)	Total Power
1	3.4A	125W
2	6.8A	250W
3	10.2A	375W
4	13.6A	500W
5	17A	625W
6	20.4A	750W
7	23.8A	875W
8	27.2A	1000W

Connecting to a Portable Power Station

Connect the XT60W end of the included cable (s) ¹ to the solar panel, and the XT60i end to the solar input port ² of the power station as shown in the diagram below.

A

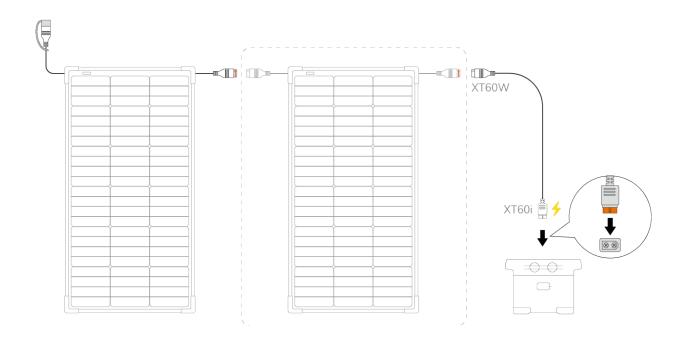
Included Cable (s) 1

Make sure you use the cable provided with the product. Do not connect the solar panel output cable directly to the portable power station.

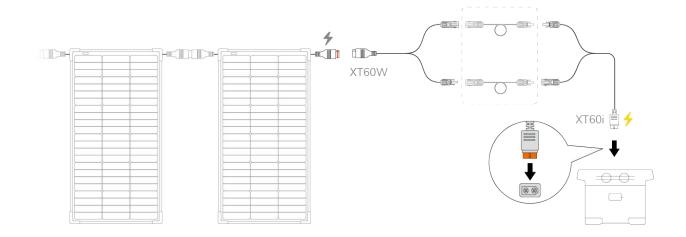
Solar Input Port (XT60) ²

Ensure that the cable is plugged in firmly during use to avoid port melting caused by poor connection.

• 1/2-Piece Set Connection Method



4-Piece Set Connection Method



Extension cables are not essential but can be used as required.

If the panel is connected to an EcoFlow device, you can check real-time input data on the screen of the device or on the device's homepage of EcoFlow app.





Maximize Power Output

Find an Ideal Environment

Use in clear, sunny weather conditions

On a sunny noon when sunlight is strong, the panel yields more power. On cloudy or rainy days with weaker sunlight, the panel's output decreases accordingly.

Minimize shading

Keep the panel free from shading, dust, leaves, droppings, or other debris. Otherwise, the panel's power output will decrease dramatically.

1 Keep perpendicular to sunlight

The direction of sun rays changes throughout the day. It's recommended to check the shadow point on the solar angle guide from time to time and make sure it remains in the middle.

Place on reflective surfaces

Smooth, light-colored surfaces (such as mirrors or sand) are more reflective. The rear side of a bifacial panel placed on such surfaces can harness more reflected rays.

Connect Multiple Sets in Series and Parallel

If you have multiple sets of 4-piece sets, you can first connect the panels in each set in parallel, then use the included cables to connect the sets together in series for improved output power.

In a series connection setup, the total output current remains unchanged, while the total output voltage and output power add up with the number of sets.

Connection Method	Total Voltage (Voc)	Total Current (Isc)	Total Power
4 parallel 2 series	100V	13.6A	1000W
4 parallel 3 series	150V	13.6A	1500W
4 parallel 4 series	200V	13.6A	2000W
8 parallel 2 series	100V	27.2A	2000W
8 parallel 3 series	150V	27.2A	3000W
8 parallel 4 series	200V	27.2A	4000W



- Due to system voltage limitations (≤ 600V), a maximum of 12 solar panel sets can be connected in series.
- When connecting in parallel, ensure that the solar panel quantity in each set is the same. Otherwise a 1 + 1 < 2 buckets effect may occur due to current mismatch.

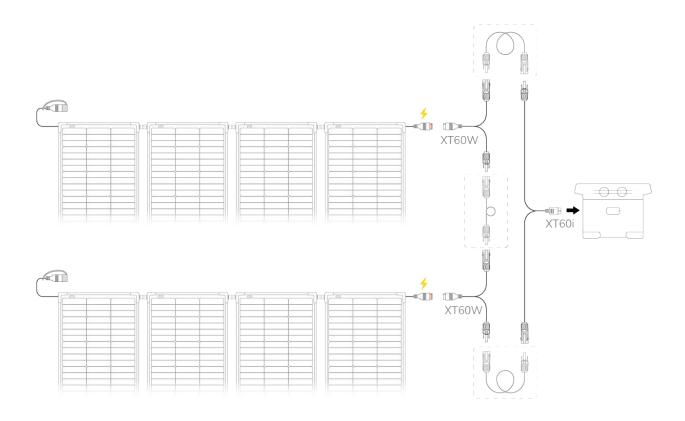
Connection Steps

Use the included cables to connect each of the sets of panels, then use a Solar to XT60i Charging Cable to connect the sets to the solar input port ² of the portable power station as shown in the diagram.

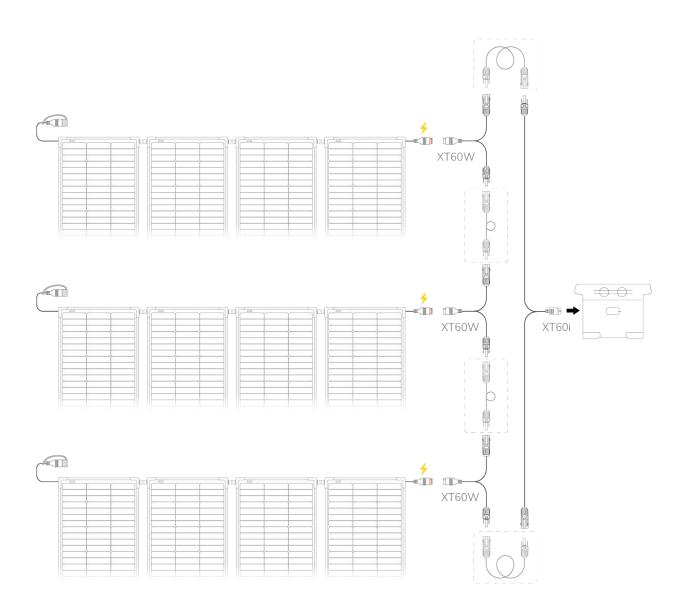
• Extension cables are not essential but can be used as required.



Series Connection of Two Sets of Solar Panels



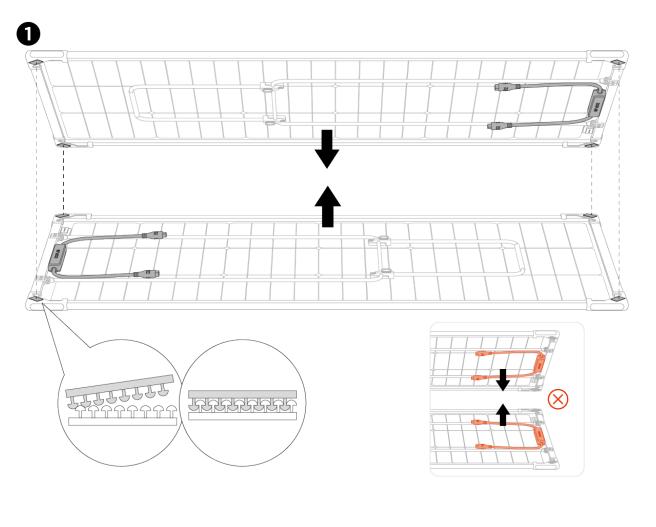
• Series Connection of Three Sets of Solar Panels

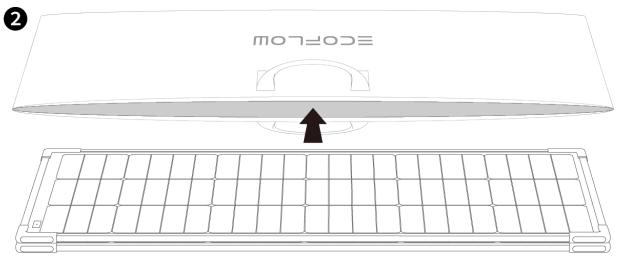


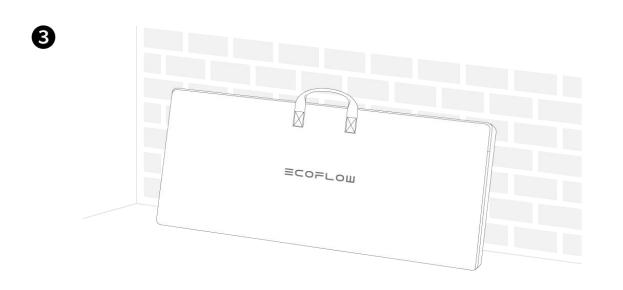
Care and Maintenance

Storage

- For transportation or storage, it is recommended to place solar panels in an upright position.
- For long-term storage, ensure that the waterproof cover of the output cable remains tightly closed, then attach the back of the panels together (as shown in the diagram) and put them into the bag.







Cleaning

 First ensure that the solar panel is not connected to a portable power station or other loads, and that the surface has cooled to room temperature.
 Then, dampen a soft cloth with clean water, wring the cloth dry, and use it to wipe the outer surface of the solar panel. Do not, in any circumstances, wipe or rinse the solar connector.

1. Is the solar panel waterproof?

The panel has an IP68 rating. If the panel gets wet in the rain or falls into water by accident, check if any water has got into the connectors immediately. If yes, dry the connectors with a cloth and the panel will function properly. However, pay attention not to soak the panel in water.

2. Why isn't my panel generating power?

Make sure the connection is correct, the terminals are tightly secured, and that the environmental conditions such as adequate sunlight are ideal for solar power generation. If the panel still generates no power after you checked and addressed the factors above, contact EcoFlow's official customer service for help.

3. Can the solar panel generate power with weak light, like on rainy days or under indoor lighting?

solar panels barely generate power under such circumstances as they are made of monocrystalline cells, whose performance is restricted under weak light.

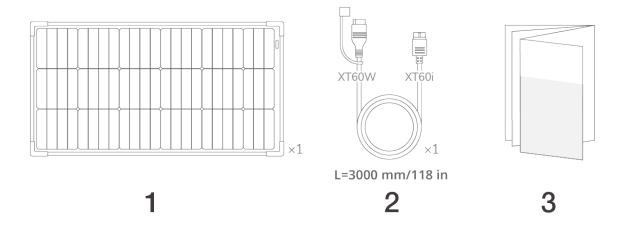
4. Is the panel compatible with all EcoFlow portable power stations?

It depends on the electrical parameters of the panel and the solar input parameters of the power station.



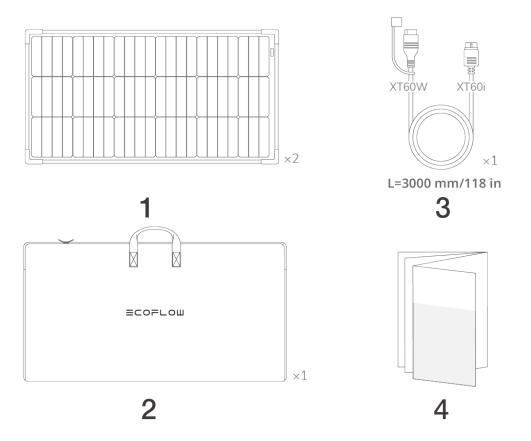
What's in the Box

• 1-Piece Set



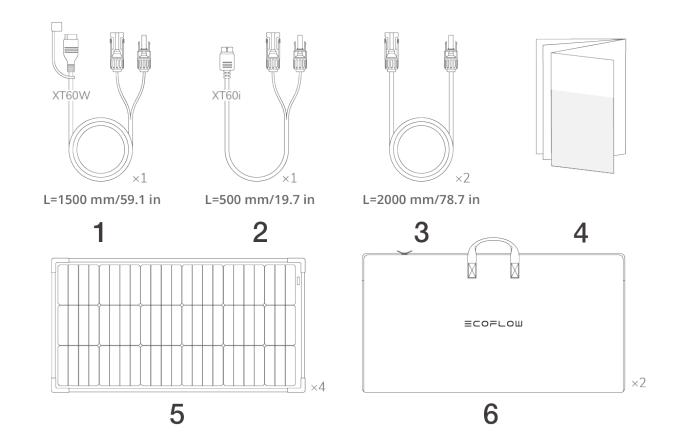
- 1. EcoFlow 125W Bifacial Modular Solar Panel ×1
- 2. EcoFlow XT60W to XT60i Extension Charging Cable ×1
- 3. Quick Start Guide, Safety Instructions & Warranty Card

• 2-Piece Set



- 1. EcoFlow 125W ×2 Bifacial Modular Solar Panel
- 2. Protective Bag ×1
- 3. EcoFlow XT60W to XT60i Extension Charging Cable ×1
- 4. Quick Start Guide, Safety Instructions & Warranty Card

• 4-Piece Set



- 1. EcoFlow XT60W to Solar Connector Extension Cable (MC4 Compatible) ×1
- 2. EcoFlow Solar Connector to XT60i Extension Cable (MC4 Compatible) ×1
- 3. EcoFlow Solar Extension Cable (2M) ×2
- 4. Quick Start Guide, Safety Instructions & Warranty Card
- 5. EcoFlow 125W ×4 Bifacial Modular Solar Panel
- 6. Protective Bag ×2

Technical Specifications

Basic Specifications				
Model	EF-SG-M125			
Rated Power	125W±3W (STC) 138W±3W (BNPI)			
Open Circuit Voltage	50V			
Short Circuit Current	3.2A (STC) 3.4A (BNPI)			
Optimal Operating Voltage	43V			
Optimal Operating Current	2.9A (STC) 3.2A (BNPI)			
Recommended Ambient Temperature	-40°C to 85°C (-24°F to 185°F)			
Efficiency	25%			
Bifaciality Coefficient	80%±5%			
Rated Power Temperature Coefficient	-(0.30±0.02)%/°C			
Open Circuit Voltage Temperature Coefficient	-(0.25±0.03)%/°C			
Short Circuit Current Temperature Coefficient	+ (0.045±0.015)%/°C			
IP Rating	IP68			
Dimensions				
Weight	Approx. 4.2 kg (9.26 lbs)			
Dimensions (L×W×H)	612×1154×22 mm (24.1×45.4×0.87 in)			
Battery Specifications				
Cell Type	TOPCon monocrystalline silicon			
Connector Type	XT60			

Cell Type	TOPCon monocrystalline silicon
Connector Type	XT60

- Standard Test Conditions (STC): 1000W/m², AM1.5, 25°C.
- Bifacial Standard Test Conditions (BSTC/BNPI): front 1000W/m², rear 135W/m², AM1.5, 25°C.
- When the temperature is too high or too low, the open circuit voltage and short circuit current of the solar panel will be affected.

Safety Instructions

Disclaimer

Please read these Safety Instructions and ensure that you understand them

fully before using the product. After reading this document, keep it for future reference. Improper use of this product may cause serious injury to yourself or others, or cause product damage and property loss. By using this product you agree that you have understood, approved, and accepted all the terms and content in this document. EcoFlow is not liable for any loss caused by the user's failure to use the product in compliance with these Safety Instructions.

In compliance with laws and regulations, EcoFlow reserves the right to the final interpretation of this document and all documents related to the product. This document is subject to changes (updates, revisions, or termination) without prior notice. Obtain the latest product information by visiting the official EcoFlow website at: https://www.ecoflow.com.

Safety Instructions

- 1. Do not wet the product, or leave it in a humid environment for an extended period of time. Do not allow the junction box or wire connectors to come into contact with liquids.
- 2. Do not expose any component of the product to highly corrosive materials such as corrosive organic solvents.
- 3. Do not use this product near open flames or flammable or explosive materials.
- 4. Do not poke or puncture the solar panel with sharp or pointed tools, or wipe the surface of the solar panel with hard materials such as sandpaper.
- 5. Do not knock, squeeze or bend the solar panel. It is recommended to place this product upright during transportation or storage.
- 6. Do not place heavy objects on the solar panel to avoid damage when using the product.
- 7. Do not disassemble any component of the product by yourself, as this will void the warranty.
- 8. When using this product to charge an energy storage power source, please make sure it complies with the requirements for parameters and specifications. If you connect multiple solar panels in series or parallel, please verify the maximum number of solar panels that can be connected to the power source in advance.
- 9. When connecting this product in series or parallel, it is recommended that you purchase connecting wires through EcoFlow's official sales channels. If you are using a third-party solar panel cable, make sure that the connector and the voltage and current of the cable are compatible.
- 10. Do not plug or unplug any connecting wires while the solar panel is operating.
- 11. Do not wear any metal accessories when plugging or unplugging the solar panel.
- 12. Do not apply any chemicals (such as paint, adhesives) to the sun-facing side of the solar panel.
- 13. Do not use devices such as magnifying glasses to focus sunlight on the solar panel.
- 14. Keep this product out of the reach of children and pets.
- 15. Do not dispose of waste solar panels at will, please follow local laws and regulations for their disposal.
- 16. The provided cable accessories are designed for EcoFlow solar products. Using them to charge or discharge third-party products may lead to equipment damage or personal injury due to overloading.

1	7. Ensure that the cable is plugged in firmly during use to avoid port melting caused by poor connection.
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