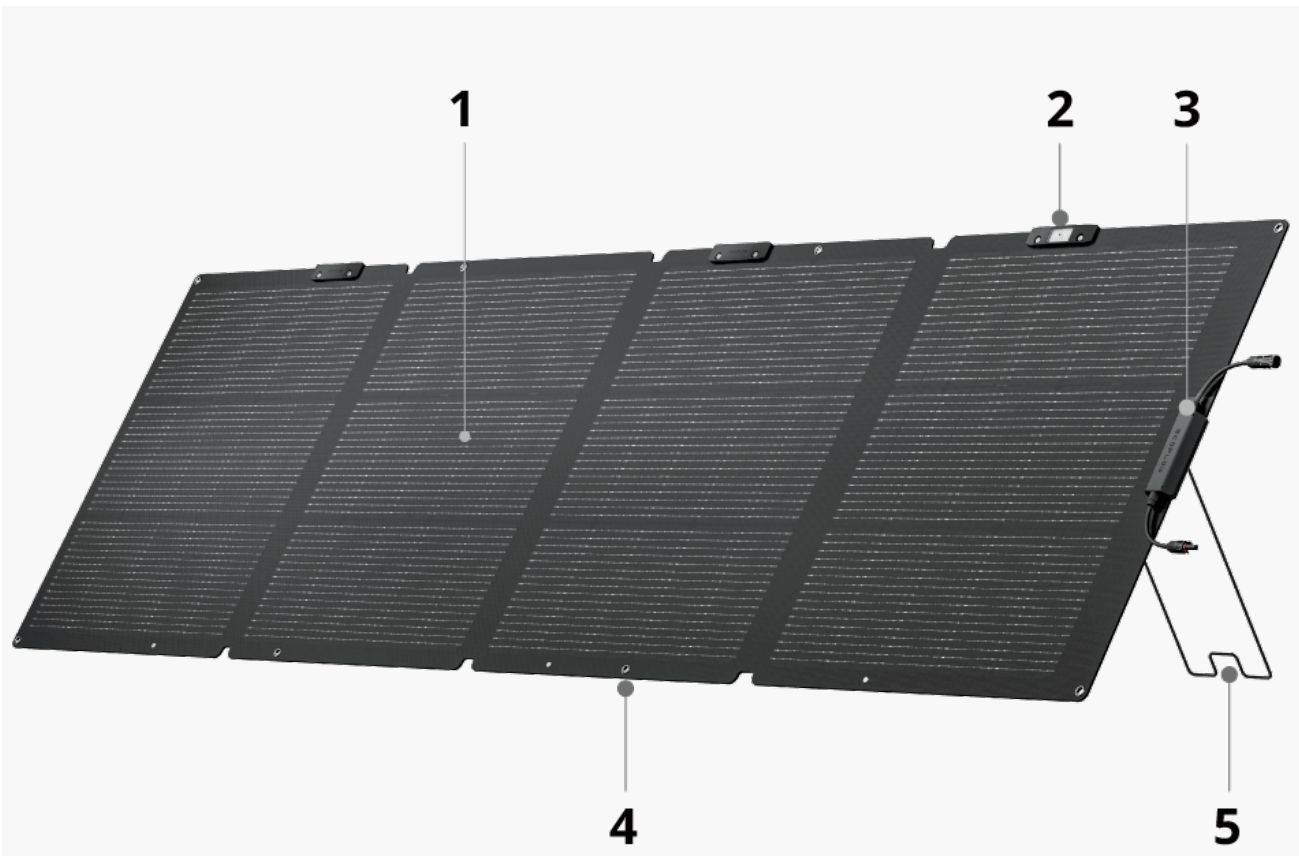


Contents

Overview
Get Started
Power Your Devices
Prerequisites
How to Connect
Maximize Power Output
Find an Ideal Environment
Wire Your Panels
Storage and Maintenance
Storage
Cleaning
FAQ
What's in the Box
Accessories
Specifications
Safety Instructions
Disclaimer
Safety Guidelines

FAQs | EcoFlow App | After-sales Policy | Downloads

Overview

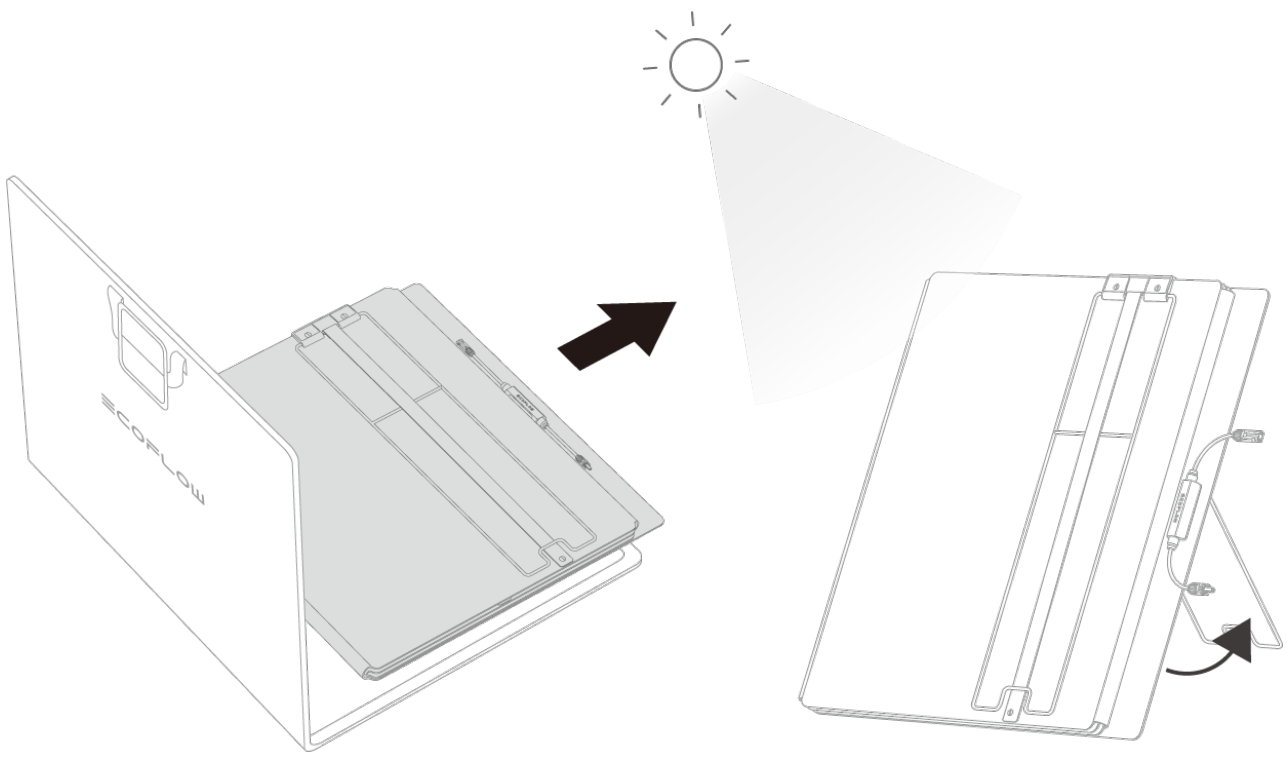


1	Photovoltaic module	Contains a solar angle guide and a junction box. Face this side to the sun during use. It's recommended to use the panel on sunny days with ample sunlight.
2	Solar angle guide	Indicates the angle between the sunlight and the panel. If the shadow of the black dot hits the center of the plate, you get a

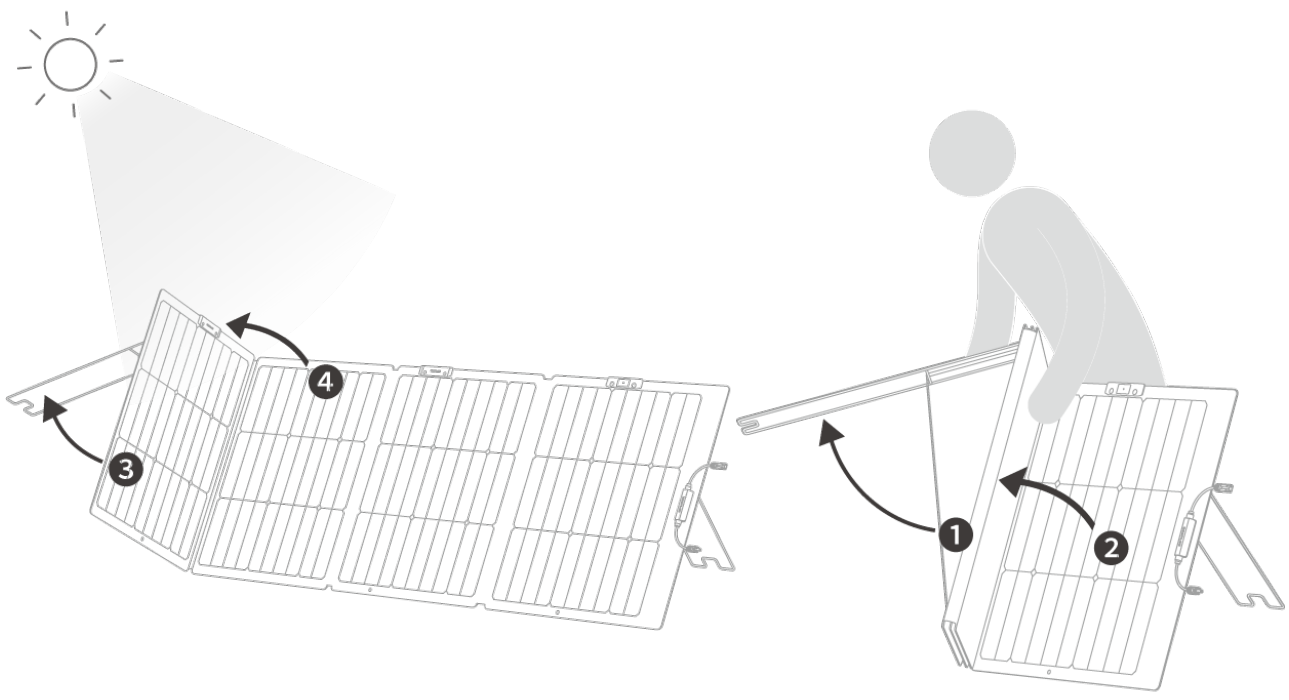
		90° angle.
3	Junction box	Contains a solar output cable (1.5 m long). Pay attention to the positive and negative labels when connecting.
4	Preset holes	The panel has preset holes with an internal diameter of 8mm. You can hang the panel with zip ties or hooks.
5	Bracket	Contains elastic straps, making it easy to adjust the panel's angle.

Get Started

1 Lay the solar panel flat and take it out of the case. Face the junction box to the sun, and unfold the bracket to place the panel.

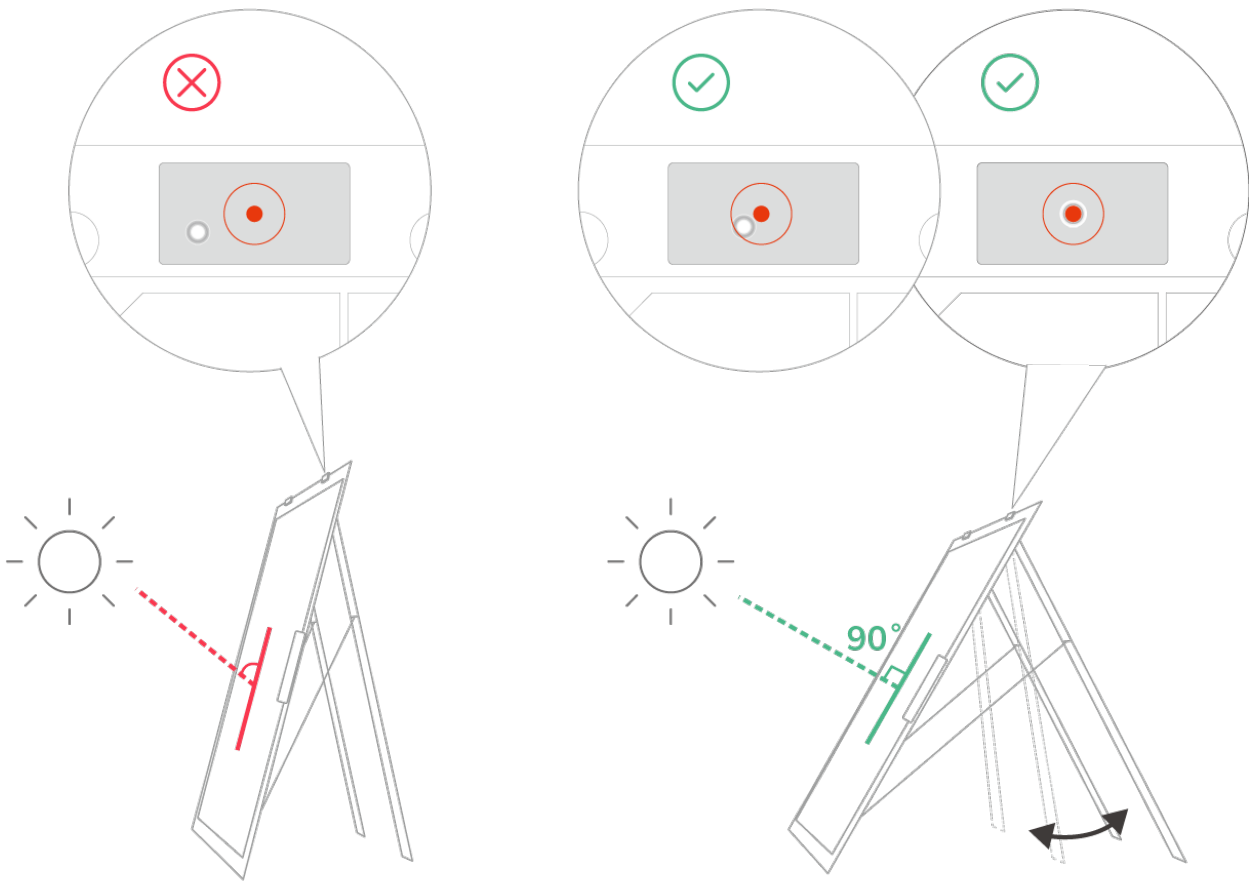


2 As shown in the picture, it's recommended to unfold the bracket first before unfolding the panel.



It's recommended to stand behind the panel when unfolding it to save effort.

3. Check the dot shadow on the solar angle guide to adjust the brackets, and let the shadow hit as close to the center as possible.



Tips

- Do not let the shadow leave the red circle on the angle guide. Otherwise, the power output will decrease.
- When the dot shadow hits the center, you get a 90° angle and the highest power output.

Power Your Devices

Prerequisites

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.

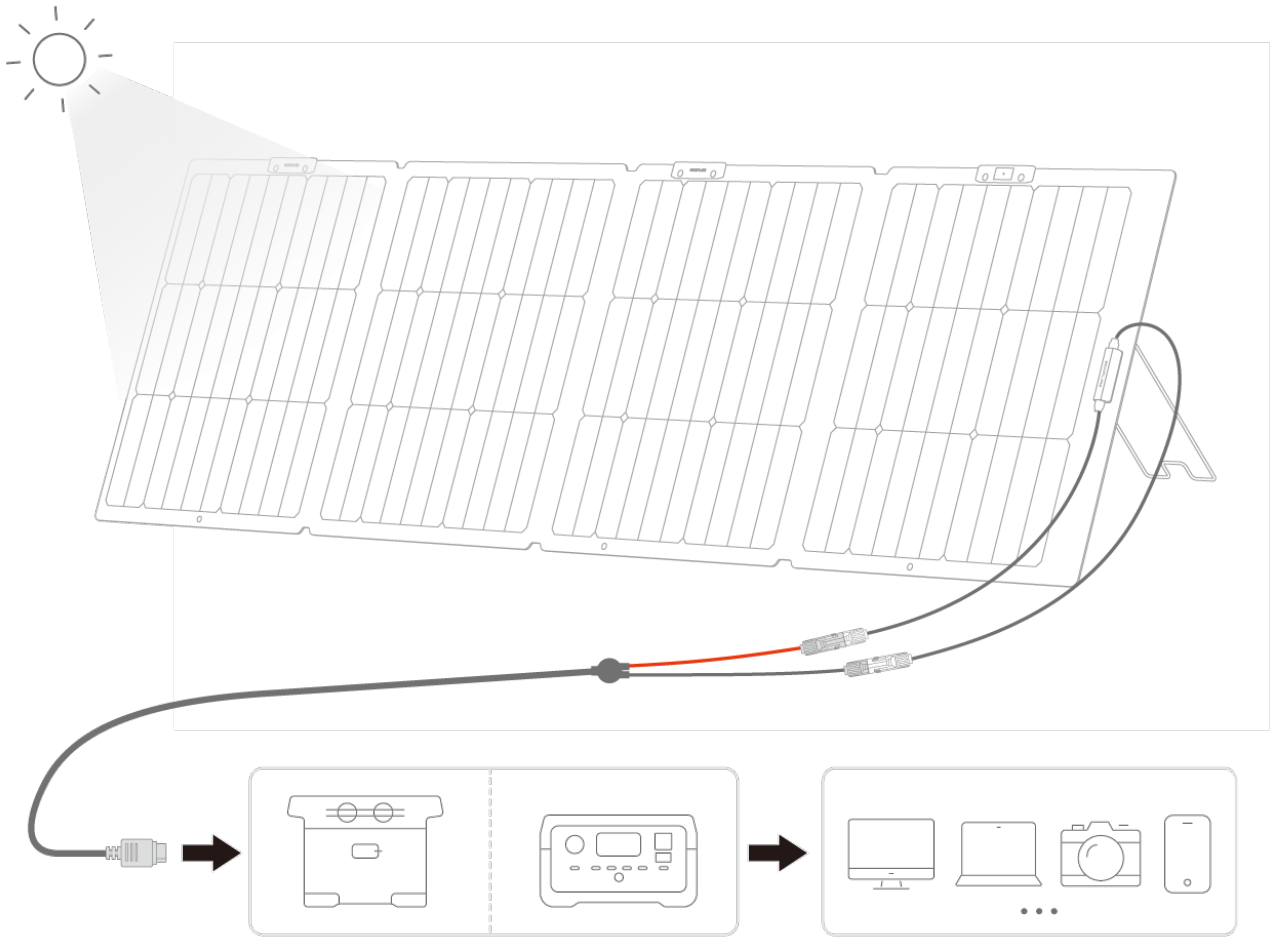
When using the panel with your devices, please make sure the **maximum output parameters**[1] of the panel are within the input range of the devices. Otherwise, your devices may be damaged. To connect the panel with a third-party device, please make sure that the device allows solar input, and that its output ports and electrical parameters meet the panel's requirements.

Maximum output parameters[1]
Refer to the open circuit voltage and the short circuit current of the panel.

How to Connect

1 When the panel is in place, connect the output cable to the connectors of the **solar to XT60i charging cable[1]**. To do so, **connect male connectors to female ones[2]**.

2 Connect the other end of the charging cable to the **solar input port (XT60)[3]** of the device to complete connection. If the port is not of the XT60 variety, refer to the device's user manual for connection instructions.



⚠️ **Solar to XT60i charging cable[1]**
Use the charging cable included in the box. Third-party cables are not recommended.

Connect male connectors to female ones[2]
Do not connect the output connectors of a panel to each other. Otherwise, short circuits will occur.

Solar input port (XT60)[3]
Make sure the cables were connected firmly before use to avoid port melting caused by bad connection.

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





Maximize Power Output

Find an Ideal Environment

Use the panel on sunny or mostly sunny days
On a sunny noon, sunlight is strong and the panel yields more power. On cloudy or rainy days, sunlight is weak and the panel's output decreases as a result.

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

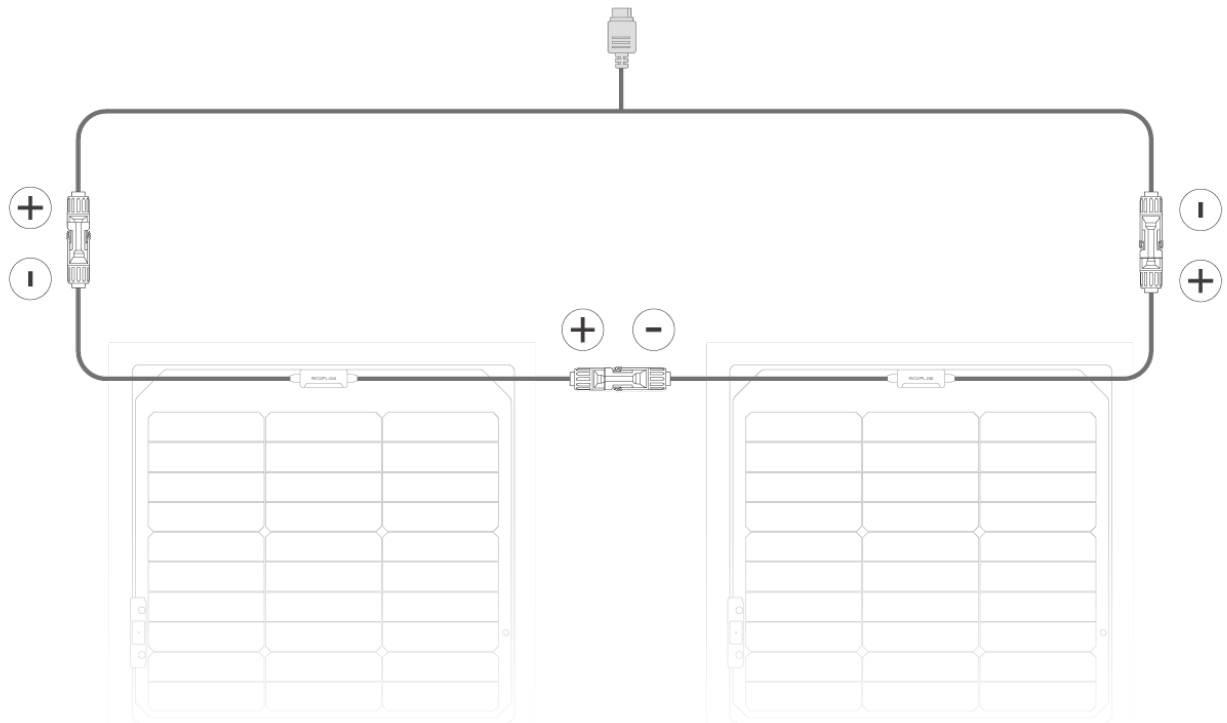
Ensure a 90° tilt angle
The direction of sun rays changes throughout the day. It's recommended to check the dot shadow on the solar angle guide from time to time and make sure it remains in the middle.

Wire Your Panels

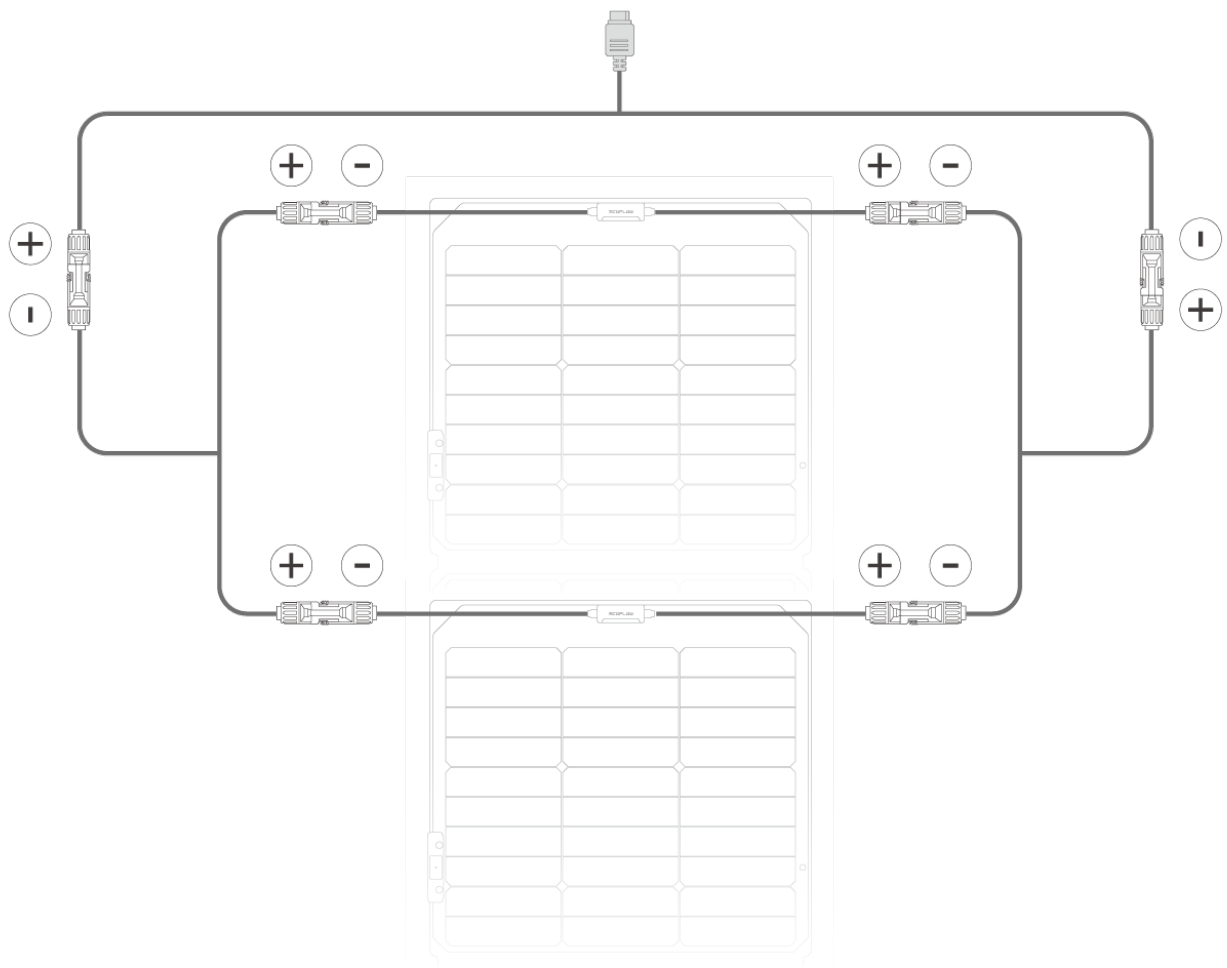
You can wire panels in series or in parallel to get higher output. When wiring, pay attention to the electrical parameters of your solar array and make sure that the parameters meet the requirements of the device that the panels will be connected to. Generally speaking, it's recommended to wire solar panels in series for connecting with a portable power station.

How to Connect

To wire **in series**, connect the male connector of the first panel to the female connector of the next, and so on. Then, connect the solar to XT60i charging cable with the output cables of the first and the last panels. If the cables fall short, you can use solar extension cables for extra distances.



To wire **in parallel**, connect all positive ends of the panels' output cables to a solar parallel connection cable, and do the same for the negative ends. Then, connect the solar to XT60i charging cable to the solar parallel connection cables. When connecting, refer to the instruction images to avoid misconnecting the male and female connectors of the parallel connection cables.

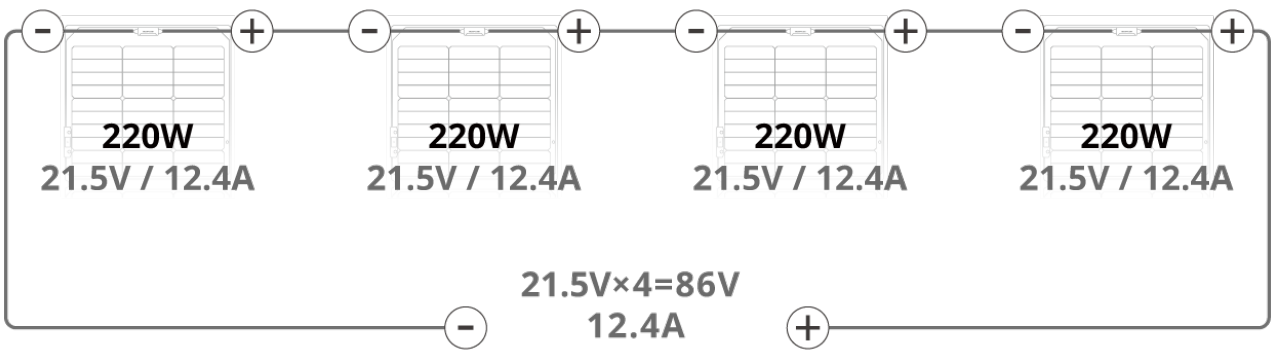


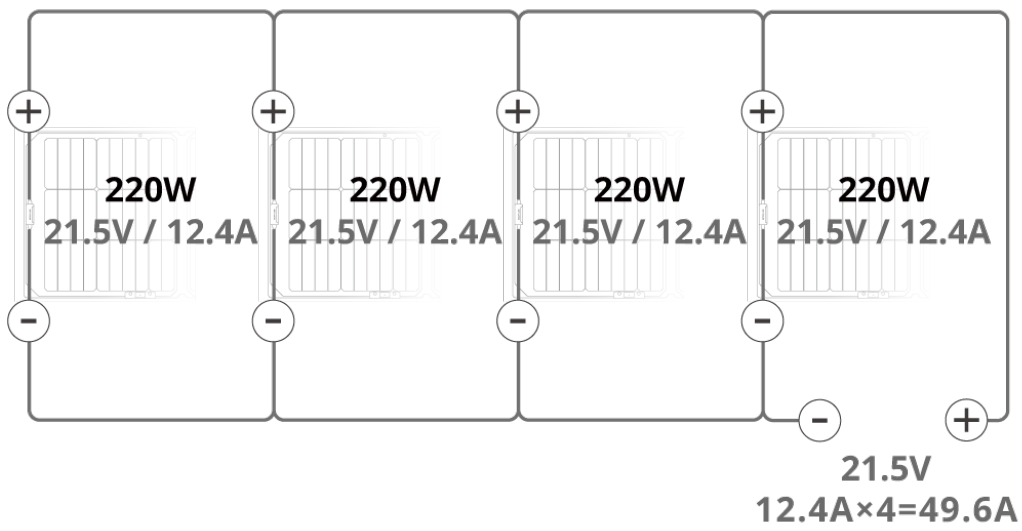
Resulting Array Parameters

- Wiring solar panels of same ratings

	In Series	In Parallel
Total Voltage	Adds up	Same as single panel

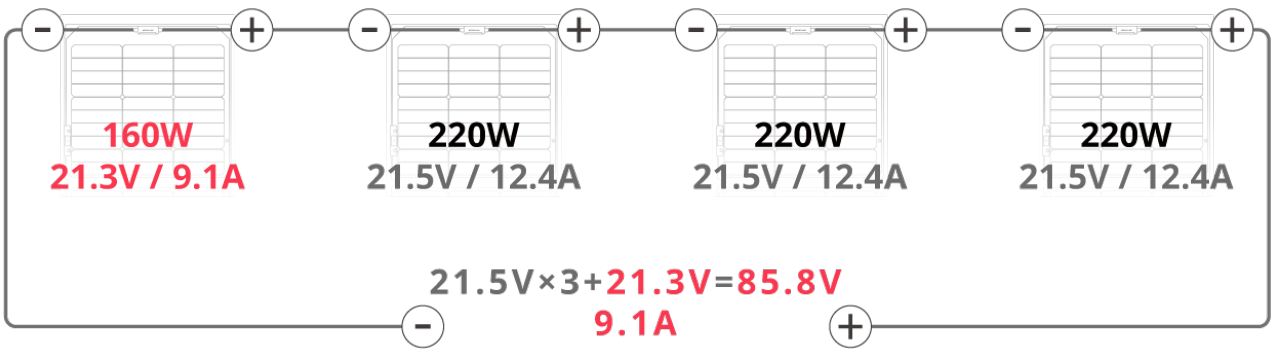
Total Current	Same as single panel	Adds up
Total Power	Adds up	Adds up

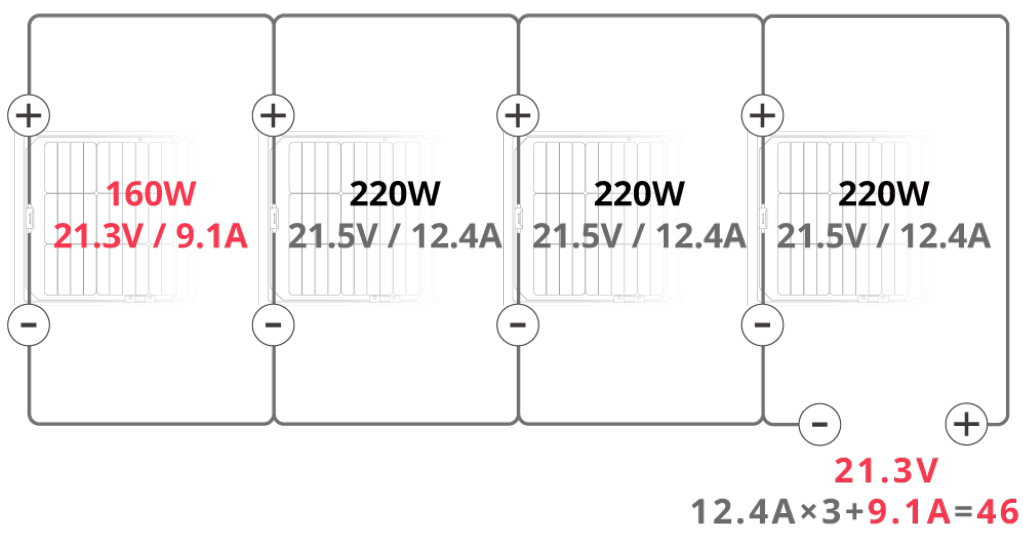




- Wiring solar panels of different ratings

	In Series	In Parallel
Total Voltage	Adds up	Same as the lowest value of the panels
Total Current	Same as the lowest value of the panels	Adds up
Total Power	Equals the lowest current times total voltage	Equals total current times the lowest voltage





Determine Wiring Plan

Take the following factors into consideration when determining whether to wire in series or in parallel.

Needed effort

- Series connection is simple and allows you to keep the total current at a relatively low level so that it will fall within the solar input range of the connected device.
- Parallel connection needs more effort and results in a higher total current, which, in turn, demands higher ratings for the solar cables and for the solar input of the connected device.。

Solar port ratings of connected device

The total voltage and the total current of the solar array should fall within the device's solar input range. When making your wiring plan, refer to the open circuit voltage and the short circuit current of the panels to calculate the total voltage and the total current.

Distance between panels and connected device

Long distances between panels and the device arouse needs for longer cables. Also, as currents add up in parallel connection, thicker cables are needed. As a result, the cost of cables increases. In this case, series connection is more economical.

Stability of solar array

For series connection, if one of the panels is shaded or damaged, the total output decreases noticeably. As for parallel connection, shaded or damaged panels barely influence the performance of other panels.

Storage and Maintenance

Storage

- If the panel is not in use, it's recommended to disconnect the panel, fold it, and put it away.
- For long-term storage, tie the output cable to avoid any contact with the photovoltaic module, and then fold the panel and put it back in the case.

Cleaning

- Make sure the panel is not connected to portable power stations or other loads, and that the panel's surfaces have cooled to room temperature. Then, wet a soft rag with clean water, twist dry the rag, and clean the panel's surfaces with it. Avoid wiping or washing the photovoltaic connectors when cleaning.

FAQ

1. Is the panel waterproof?

The panel has an IP68 rating. If the panel gets wet in the rain or falls into water by accident, check if water has got into the connectors immediately. If yes, dry the connectors with rags 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 tight, and the environmental conditions, including sunlight, are ideal for solar power generation. If the panel still generates no power after you exclude the factors above, contact EcoFlow's official customer service for help.

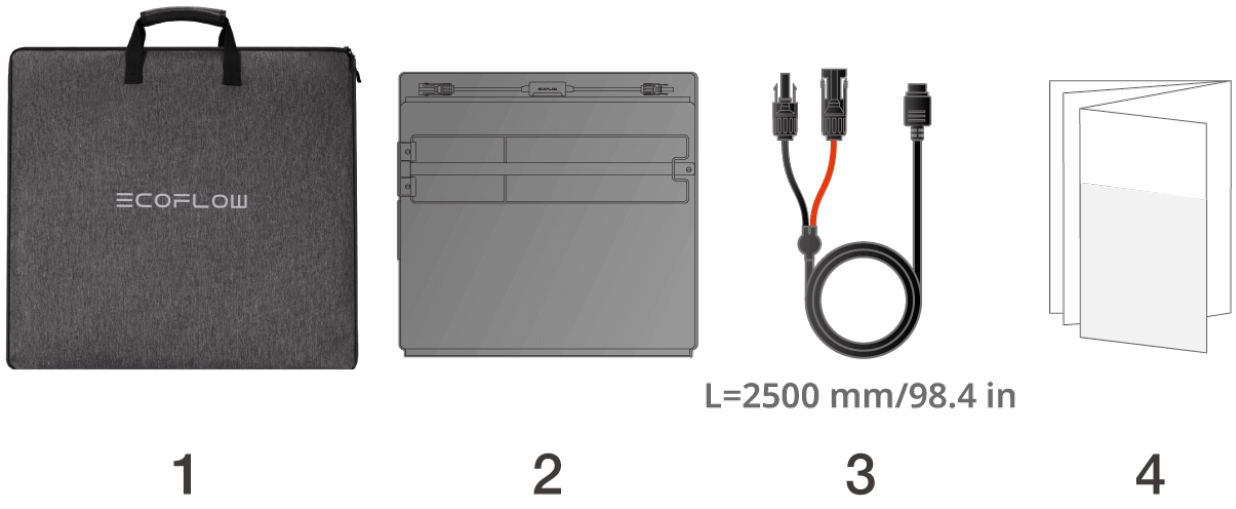
3. Can portable solar panels generate power with weak light, like on rainy days or under indoor lighting?

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



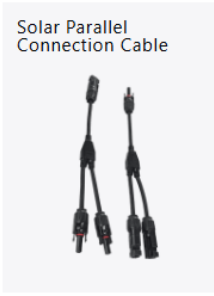
1. Storage case
2. EcoFlow NextGen 220W Portable Solar Panel
3. Solar to XT60i charging cable (2.5 m)
4. Quick Start Guide, Safety Instructions, Warranty Card

Accessories

View More →







Specifications

Parameters	
Model	EF-Fold-P220-04
Rated Power	220W (±5W)
Open Circuit Voltage	21.5V
Short Circuit Current	12.4A
Optimal Operating Voltage	18.4V
Optimal Operating Current	11.9A
Recommended Ambient Temperature	-20°C to 85°C (-4°F to 185°F)
Efficiency	25%
Temperature Coefficient of Rated Power	-(0.30±0.02)%/°C
Temperature Coefficient of Open Circuit Voltage	-(0.25±0.03)%/°C
Temperature Coefficient of Short Circuit Current	+(0.045±0.015)%/°C
Dimensions	
Weight	Approx. 7.2 kg (15.9 lbs)
Unfolded Dimensions (W×L×H)	600×2123×25 mm (23.6 × 83.6 × 1.0 in)
Folded Dimensions (W×L×H)	600×571×32 mm (23.6 × 22.5 × 1.3 in)

Battery Specifications	
Cell Type	TOPCon monocrystalline silicon
Connector Type	Photovoltaic connectors (adapted to MC4 connectors)

- Standard Test Conditions: 1000W/m² (92.9W/ft²), AM1.5, 25°C (77°F)
- When the temperature is too high or too low, the panel's open circuit voltage and short circuit current will vary.

Safety Instructions

Disclaimer

Please read the product document and ensure that you understand it 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. 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 the product in compliance with the product document.

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. Please visit EcoFlow's official website to obtain the latest product information: https://www.ecoflow.com/.

Safety Guidelines

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. Should you wish to store the product for an extended period of time, please tie the positive and negative wires of the solar panel properly to avoid any contact with the sun-facing side of the solar panel.
8. Do not disassemble any component of the product by yourself, as this will void the warranty.

9. 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.
10. 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.
11. Do not plug or unplug any connecting wires while the solar panel is operating.
12. Do not wear any metal accessories when plugging or unplugging the solar panel.
13. Do not apply any chemicals (such as paint, adhesives) to the sun-facing side of the solar panel.
14. Do not use devices such as magnifying glasses to focus sunlight on the solar panel.
15. Keep this product out of the reach of children and pets.
16. Do not dispose of waste solar panels at will, please follow local laws and regulations for their disposal.
17. Make sure the cables were connected firmly before use to avoid port melting caused by bad connection.