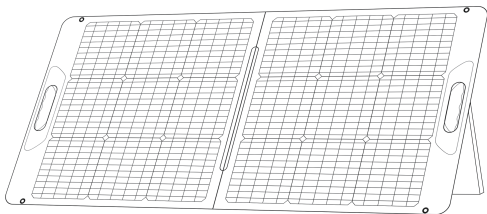


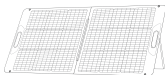
E-POWO

110W Solar Panel

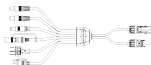


User Manual

■ What's in the Box



Solar Panel



MC4 Charging Cable



User Manual

■ Technical Specifications

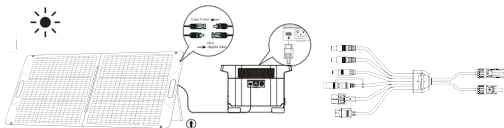
Model	WHF-EP-001
Peak Power	110W±5%
Solar Cell Lamination	ETFE
Power Voltage	20V
Power Current	5.5A
Open Circuit Voltage	25V
Short Circuit Current	6A
USB Output	USB-A (5/9/12V 3A), USB-C(5/9/12/15V 3A)
Cell Type	Monocrystalline Silicon
Cell Efficiency	23.5%
Solar Panel Weight	9.74 lbs. (4.42 kg)
Adapter Cable	DC5521, DC5525, DC7909, DC8020, Anderson, XT60, DC35135 Connectors
Dimensions (Folded)	24.09 x 23.23 x 0.8 inch (612 x 590 x 20mm)
Dimensions (Unfolded)	48.23 x 23.23 x 0.12 inch (1225 x 590 x 3mm)
Waterproof Rating	IP67
Operating Temperature	14 ~ 149 °F (-10 ~ 65 °C)
Best Working Temperature	77 °F (25 °C)
Folding Number	2
Warranty	18 Months

■ How It Works

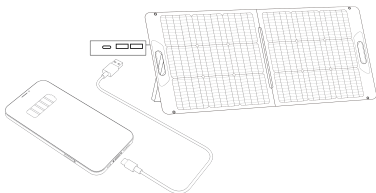
1. In order to increase the efficiency of the solar panel, position it perpendicular to the sunlight, and make sure there are no obstructions between the solar panel and sun.



2. Our solar adapter cable has MC4 connector to DC5521, DC5525, DC7909, DC8020, Anderson, XT60, and DC35135 Connectors suitable for power station connections.



3. Our solar panel is designed with USB-A and Type-C port connection. Easily charge smartphones, tablets, cameras, and more appliance via 2 USB-A ports and a USB-C port.



■ Safety Guidelines

As the efficiency of the solar panel depends upon light intensity and the tilt angle, the charging power of the panel may be affected by several factors such as weather conditions, seasonal changes and location. The installation and connection of this product should be carried out strictly in accordance with the instructions in the User Manual.

- Only the main body of the solar panel is waterproof. The junction box and connection points should not be immersed in water or any other liquid.
- The solar panel must not come into contact with highly corrosive substances, or be immersed in corrosive liquids.
- Do not use sharp objects on the surface of the panel, and do not knock or impact the product.
- Do not apply pressure to the panel or allow the panel to be dropped on any of its corners, sides or faces. Such actions may result in damage to the solar panel.
- The panel must not be knocked, exposed to heavy pressure, or bent during transport, rotation or installation. Please keep it in a vertical position when it is being moved or stored.
- Do not use the solar panel as a children's toy.
- Do not charge automotive battery directly.
- When storing the panel, always ensure that the positive and negative terminals of the junction box are not exposed to sunlight.
- To avoid the risk of injury, this product and its junction box must only be opened or disassembled by qualified personnel. Do not disassemble the solar panel by yourself in any way.
- Unwanted solar panel must be disposed of in accordance with the local legal requirements.

Q1: What kind of battery can be charged by this solar panel?

- A: 1) Lithium-ion batteries
2) Sealed lead-acid batteries
3) Gel lead-acid batteries
4) Portable power station

Tip: To confirm whether the solar panel's compatibility with the third party devices, please consult with the seller.

Q2: Does the solar panel produce power when the sun isn't shining?

A: Yes, but please keep in mind that the amount of power the solar energy system can generate depends upon sunlight. The solar panels will produce slightly less energy when the weather is cloudy, and no energy at night.

Q3: Can the solar panel work in winter?

A: Yes, but please keep in mind that the solar panel must be exposed to sunlight. Keep snow clear from the face of the solar panel. Colder temperatures increase voltage, which means the system is more efficient when it's cold & sunny meanwhile. However, there are fewer sun hours during the day in the winter, leading to an overall drop in production. Take steps to conserve energy to get the most out of the system in the winter.

Q4: How to decide the number of panels required to recharge?

A: 1) The output power of the solar panel should fit the recommended voltage. The max open circuit voltage must not exceed in the max input voltage of power station.

2) The gross output current of the solar panel should be between the recommended working voltage.

Tip: When using multiple solar panels in series or parallel, please make sure that the accumulated maximum voltage and current of the solar panels do not exceed in the maximum voltage and current of the power station.

Q5: Is it waterproof?

A: The main body of the solar panel is waterproof. Better Care, Longer Lifespan. In order to maximize lifespan of the solar panel, please don't put it into heavy rain or deeply soak the solar panel into water for long time. The junction box and connection points should not be immersed into water or any other liquid.

Q6: How to clean the solar panel surface?

A: To clean the solar panel:

- 1) First remove loose dust / dirt with a soft brush.
- 2) Wipe the surface gently with a damp cloth to remove remaining dust or dirt.
- 3) Promptly remove bird droppings (guano) or other sticky substances to maintain optimal performance.

Warranty Information:

This product is covered by an 18-month limited warranty (from date of purchase) against defects in materials and workmanship, subject to the following:

- 1) Exclusions: Normal wear and tear, misuse, accidents, unauthorized repairs, or force majeure events.
- 2) Warranty terms may vary according to local regulations.

For warranty service, please contact:

Email: support@e-powo.com

■ Disclaimer

Our company is not responsible for any failure or damage caused by fire, earthquake, wind, lightning, other natural or geological disasters, public hazards, abnormal voltage, or other external factors.

Our company is not responsible for any damage caused by non-compliance with the contents of the user guide. Our company is not responsible for any damage (business interruption, loss of profit, etc.) caused by the using of this machine or the inability to connect with other equipment.