

Portable Solar Charger



Power for outdoor
Easy to carry

User manual!

Thank you for purchasing our product. For your safe use of this product, please read this manual carefully before use.

Instructions

1. Open the buckle of the solar folding bag to take out the internal accessories of the waterproof bag, and place the solar panel facing the sun at a 45° angle or flat, and the LED indicator of the output power box is on.

At this time, the solar charger starts to work, and the USB port outputs a DC voltage of 5.0V. DC or Anderson port output voltage > 18.0V.

2. This product is not recommended to charge the mobile phone directly. It needs to be used with a power bank. The power bank can charge mobile phones, tablets and other electronic products.

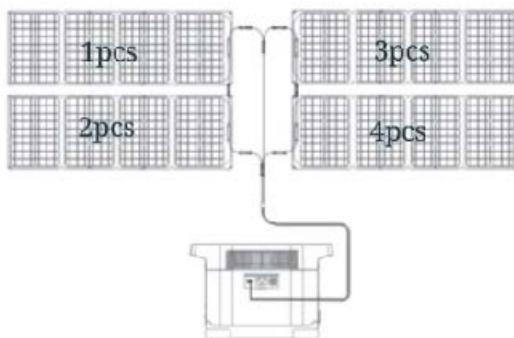
3. When charging the battery, connect the positive and negative wires of the matched DC terminal wires, and the positive and negative black and red wires output a DC voltage of 18V (20V when there is no load) to charge the 12V battery. Reminder: The high-voltage output port of this product does not have MPPT charging protocol and needs to be purchased separately.

Schematic diagram of car connection



4. The output voltage of the solar charger DC or Anderson is $> 18.0V$. Use 2-4 products in parallel to expand the output power or in series to expand the output power to $36.0V-72.0v$.

Tip: It can only be achieved by purchasing a professional converter and MPPT controller.



5. If the product is equipped with MPPT solar controller, you must first connect the battery and then the solar panel to work, otherwise there is no display on the controller and it does not work. Before use, please make sure that the positive and negative poles of this product and the load positive and negative poles are connected together. Tip: Do not connect or touch the red and black wires of the positive and negative poles during use, as this will cause short-term heating or burning. The selection of MPPT charging system can increase the charging speed, solar energy conversion efficiency, and protect the output state of the solar charger. Not choosing charging is not ideal.

Solar charger charging range



Tips

1 If there is no professional and technical personnel, please do not change the circuit or use method of the product, which may cause the product to be used next time. Our company is not responsible.

2 The product is not suitable for low-current charging products (standard charging current is below 100mA), and it is prone to constantly shutting down and restarting. Although the USB output port has an identification IC, it cannot be guaranteed to be compatible with 100% of the devices on the market. host.

3 When the input voltage power is low when the solar light is insufficient, it may cause the low-voltage port to have no fast charging. According to the light situation, it is determined that the charging device will be powered off and other devices need to be used for charging.

4 The combination of solar panel and light and the surface temperature of solar panel is too high 50° will affect the actual output power and efficiency of solar products.

5 When the device is fully charged or due to insufficient light intensity, the output port may be continuously turned on/off. This situation belongs to the normal working range of the product.

6 This product is suitable for outdoor use in the sun, not suitable for rainy days and indoor charging. Best working hours: 9:00-16:00. Tip: It is not recommended that people charge the device at the same time in the sun.

Precautions

The output voltage power of the solar cell depends on the load working voltage factor.

1. Please do not scratch the surface of the solar panel with sharp objects.
2. When using the solar panel to charge the charger, please place the solar panel facing up in direct sunlight to ensure the best charging effect.
3. Please do not use it in rainy days or indoors.
4. Put the charger outdoors for emergency charging, and the surface of the product is waterproof. (The front of the solar panel is not afraid of rain, and the USB and DC ports are not waterproof to avoid short circuits and affect the next use)
5. Do not use corrosive liquids to wipe the product. Scratch the surface of the battery panel, bend over 45°, or squeeze and other undesirable actions. Will cause the output power of the solar charger to decrease.
6. When opening this product or folding product, please handle it gently. The operation must touch the power generation solar power generation panel, try to hold the cloth area to operate.

How solar panels work

The solar radiant energy is converted into electric energy through the solar panel. It uses the photoelectric effect inside the solar panel. When the sun shines on a kind of semiconductor called the "PN junction" in the solar panel, light with extremely short wavelengths is easy Absorbed inside the semiconductor and collide with the "valence electrons" in silicon atoms, the "valence electrons" gain energy to become free electrons and escape the lattice, thereby generating electron flow.

The function of this product is to supply power to 5.0V-18.0V devices such as mobile phones, storage batteries, lithium battery packs, and

energy storage power supplies. The device has 4 major charging protection functions: short-circuit protection, charging protection, overload protection, and load identification function. This is a great help to the life of the rechargeable battery and maintains the life of the battery. Very suitable for outdoor work, travel or camping training use.

Please use it in accordance with the manual. Any improper use will cause problems to the product. We will not be responsible for this. Thank you for your cooperation and understanding.



60*40MM