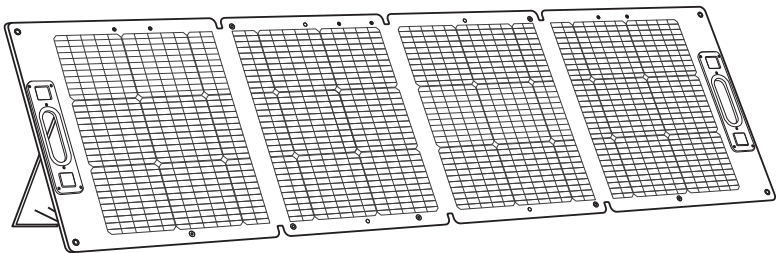


DABBSSON

Portable Solar Panel

User Manual



DISCLAIMER



Read all safety tips, warning messages, terms of use, and disclaimers carefully. Refer to the terms of use and stickers on the product before use. Users take full responsibility for all usage and operations. Familiarize yourself with the related regulations in your area. You are solely responsible for being aware of all relevant regulations and using our products in a way that is compliant.

Warm Tips



The conversion efficiency of solar panels depends on a variety of factors, such as the amount of solar radiation, cloud thickness, dust deposition, angle of solar radiation, etc. It is generally difficult to achieve ideal conditions. Therefore, we recommend that you keep the panel surface clean and adjust the angle of the solar panel with the sun position when using it to maximize the efficiency of energy conversion.

Safety Tips



- Do not disassemble, repair, or modify the unit. Disassembly, repair and modification will not only prevent the product from functioning properly, but may also result in failure to use it at all.
- Please do not connect medical equipment directly related to human life or equipment that may cause personal injury on a dedicated circuit.
- Do not use, maintain, or place it in a hot place, for example near a fire, this may cause fire, burns, or injury; or cause equipment deformation, malfunction, performance degradation or shorter life expectancy.
- Please keep it away from moisture and corrosive substances, and store in a dry environment.
- When the surface of the solar panel is stained with dirt, the sunlight cannot be fully received, resulting in weak power generation. Please wipe the surface of the solar panel with a soft cloth to keep the surface clean.
- Do not drop things on the glossy surface of the solar panel or get a scratch.
- In order to ensure that the light receiving surface (board surface) of the solar panel can receive sunlight for a long time, please place it to the south. Do not place in shadows around obstacles (especially trees, telegraph poles, etc).

Certification



Technical Parameters

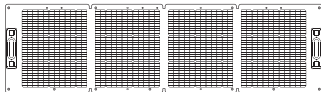


This user manual is suitable for the Dabbsson's DBS105S, DBS120S, DBS210S, DBS420S series.

Model Number	DBS105S	DBS120S	DBS210S	DBS420S
Cell Type	Monocrystalline	Monocrystalline	Monocrystalline	Monocrystalline
Peak Power	105W	120W	210W	420W
Max Operating Voltage	19.44V	19.44V	19.44V	40.30V
Max Operating Current	5.40A	6.2A	10.8A	10.4A
Open Circuit Voltage (Voc)	24.48V	24.48V	24.48V	48.90V
Short Circuit Current (Isc)	5.80A	6.80A	11.67A	11.40A
Cell Efficiency	Up to 23.4%	Up to 23.4%	Up to 23.4%	Up to 23.4%
Working Temperature	-20°C~+60°C	-20°C~+60°C	-20°C~+60°C	-20°C~+60°C
Ingress Protection (IP) Rating	IP67	IP67	IP67	IP65
Fold Dimensions	475*426*42mm	483*470*42mm	597*610*42mm	590*930*50mm
Unfold Dimensions	1740*426*27mm	1762*470*27mm	2220*610*27mm	2338*930*27mm

* Standard Test Conditions: 1000W/m²(92.9W/ft²), AM15, 25°C(77°F)

Package Contents



Foldable Solar Panel

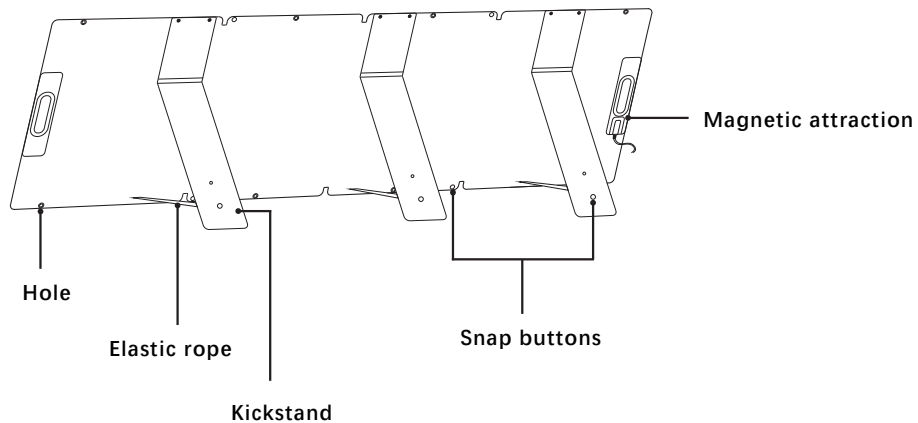


User Manual

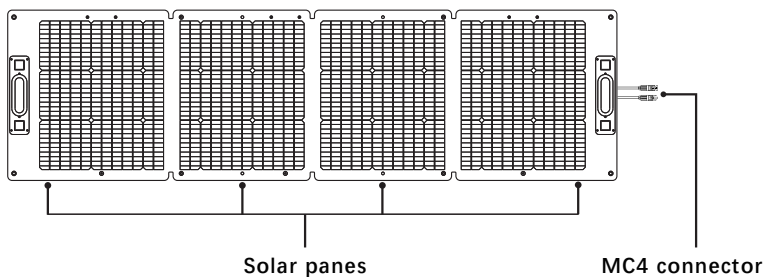
* Products or accessories excluded in this package contents are sold separately.



Back Side:



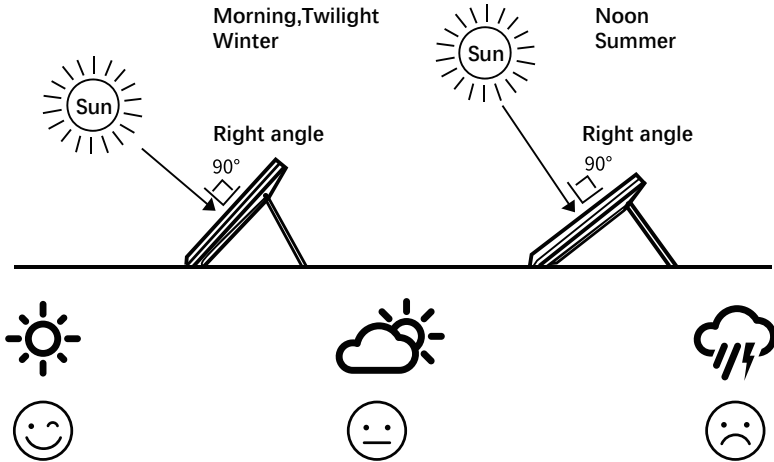
Front Side:



About the Use



1. Expand the solar panel and expose it to direct sunlight.
2. Connect electronic devices or MC4 6-in-1 cable to the MC4 connector.
3. Do not put the solar panel in a shady place or near a fire source.

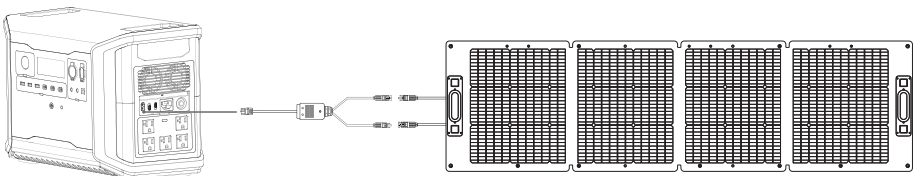


Charging Method



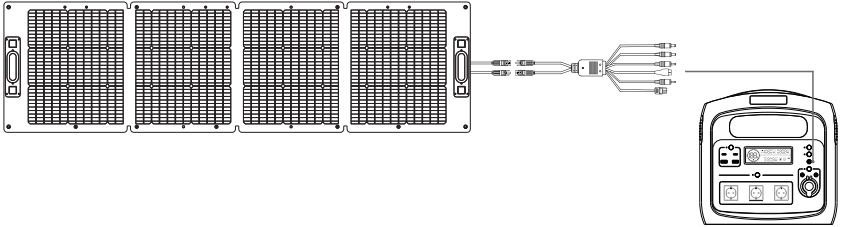
Sample 1: Portable Power Station (With MC4 port)

1. Pull out the MC4 connector on the solar panel;
2. Connect the MC4 port of the device to the MC4 connector on the solar panel.



Sample 2: Portable Power Station (Anderson/XT60/DC6530/DC7909/DC5521/DC35135 port)

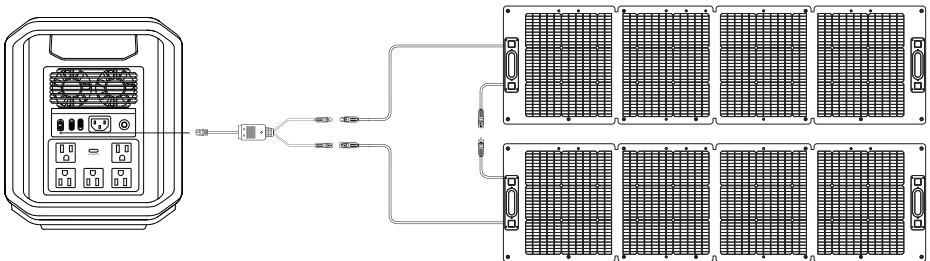
1. Pull out the MC4 connector on the solar panel;
2. Connect the MC4 6-in-1 cable to the MC4 connector on the solar panel;
3. Connect the DC port (Anderson/XT60/DC6530/DC7909/DC5521/DC35135 port) of the MC4 6-in-1 cable to the input port of the device.



Parallel Connection of Solar Panels

Sample 3A: Portable Power Station (With MC4 port)

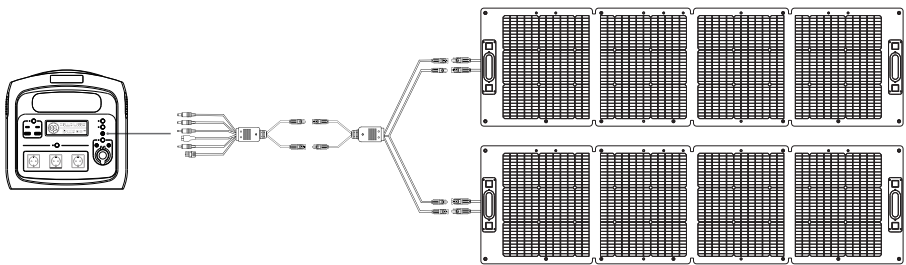
1. Pull out the MC4 connectors on both solar panels;
2. Connect the positive terminal of one solar panel to the negative terminal of the other solar panel;
3. Connect the MC4 port of the device to the other terminal of each solar panel respectively.



Sample 3B: Portable Power Station (Solar panel connection adapter+ MC4 6-in-1 cable)

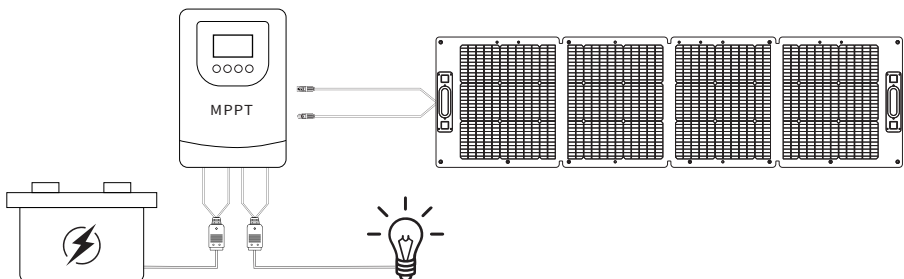
1. Pull out the MC4 connectors on both solar panels;
2. Connect the connection adapter to the MC4 connectors on the solar panel;
3. Connect the other side of the connection adapter to the MC4 6-in-1 cable;
4. Connect the DC port (Anderson/XT60/DC6530/DC7909/DC5521/DC35135 port) of the MC4 6-in-1 cable to the input port of the device.

Note: The maximum input depends on the device to be charged. If a device has an input limit of 200W, then the maximum input power is 200W regardless of whether a 200W or 400W solar panel is connected.



Sample 4: MPPT Solar Charge Controller

1. Pull out the MC4 connector on the solar panel;
2. Connect the MC4 port of the MPPT solar charge controller to the MC4 connector on the solar panel;
3. Connect the DC port of the device to the MPPT solar charge controller.



Frequently Asked Question



Q: Why it cannot be used to charge electronic equipment?

1. Has electronic equipment or output interface been connected well?

Plug it again.

2. Does solar panel face the sunlight in the correct direction?

After the position of the sun is confirmed, please readjust the direction.

Do not place it in the shadow of trees, telegraph poles and other obstacles.

3. Is the surface of the the solar panel contaminated with dirt?

If the surface becomes dirty, wipe it with a soft wet cloth. Never use thinner or benzine.

4. Confirm the environment or weather. The generating capacity is low in cloudy weather.

Q: Can the solar panel generate power in cloudy weather?

Yes, it can, even though it generates much less power than in sunny weather.

Q: What is the difference between nominal output and actual output of solar panel?

The nominal maximum output power (rated output) of solar battery is a value calculated according to standard state. "Standard state" means that surface temperature of solar battery module is 25°C and sunlight intensity is 1000 W/m².

Generally actual output is lower than the nominal maximum output power due to the following reasons:

- ① Installation environment or weather.
- ② Characteristics of solar battery.
- ③ Dirt on the panel surface.
- ④ The generating capacity decreases due to energy loss.
- ⑤ When only a part of the solar panels are exposed to sunlight, the power generation efficiency decreases and the power output becomes weak. Please fully expand the solar panel and do not shade it from the sun.

In fact, the output power is only 70-90 % of the rated power when the solar power system runs even in sunny weather.

Warranty



The product is covered by a limited warranty from Dabbsson for the original purchaser that covers the product from defects in workmanship and materials for 24 months from the date of purchase (damages from normal wear and tear, alteration, misuse, neglect, accident, service by anyone other than authorized service center, or act of God are not included).
During the warranty period and upon verification of defects, this product will be replaced when returned with proper proof of purchase.

Declaration of Conformity



We, SHENZHEN DAIPUSEN NEW ENERGY TECHNOLOGY CO., LTD. declare under our sole responsibility that the above referenced product is in conformity with the applicable requirements of the following directives:

RED Directive:	2014/53/EU
RoHS Recast Directive:	2011/65/EU (EU)2015/863
REACH Regulation:	2006/1907/EC

Read the declaration of conformity and access the download link here at <https://dabbsson.com/pages/eu-compliance>

Have any question? Chat with a specialist today.

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