

Violetta Solargear VS12-M100SP Solar Panel

Operating Instructions

Thank you very much for purchasing our product. Please read this manual thoroughly before using this product, and retain it for future reference in order to use the product safely, and to make the most of its features. If you use other products together with this product, please read the operating instructions of those products thoroughly before use as well.

Product Summary

A mono crystalline silicon flexible solar panel for stationary home PV systems designed for powering a broad range of appliances. Composed of a combination of a light yet impact resistant solar panel with MC4 connectors and a high capacity and long life battery compartment for versatility, expandability and weather resistance at low cost in disaster preparedness, leisure and everyday living.

Applications

Charging the built-in 12V batteries with solar panels or with built-in AC charger and powering a broad range of appliances through AC100V, DC12V and DC5V output.

Features

- A light yet impact resistant flexible solar panel.
- Highly efficient mono crystalline solar cells.
- Interconnection of solar panels in series or in parallel for quick charging.
- MC4 connectors with a solar panel, extension cables and a battery compartment for easy mating and a Universal tool for easy un-mating.

Important Safety Instructions

Caution Please follow the instructions below. Failure to comply may damage this device, cause the built-in battery to burst or result in leakage, fire and injury.

- Charge only the specified batteries.
- Do not allow metal objects to touch the input/output connectors.
- Do not allow metal objects to touch the terminals of the batteries.
- Do not short circuit, or disassemble this device.
- Do not put this device into water.
- Do not use or leave this device near fire.
- Do not use or leave this device in enclosed spaces.
- Do not use or leave this device in unstable high places.
- Stop charging in case of leakage from the battery.
- Stop charging in case the battery becomes unusually hot.

Important Note

We are not responsible for any physical damage to appliances, any loss of memorized data, any interruption of business, and any loss of business opportunities caused by this product.

Specifications

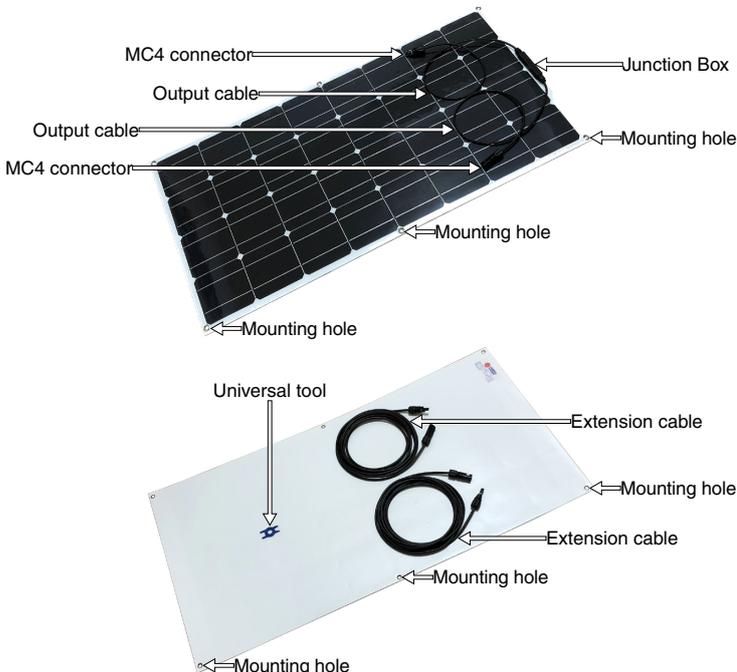
- Max. power*: 100.0W (18.0V 5.56A)
- Open circuit voltage*: 21.6V
- Short circuit current*: 6.66A
- Operating temperature: -40 - 80°C
- Dimensions (WXDXH): 1070X530X approx. 2.8mm (excl. protruding parts)
- Weight: approx. 2.0kg (excl. accessories)
- Mounting holes: 8mm grommet X 6
- Output cable: H-CV cable X0.8m+MC4
- Safety features: a bypass diode
- Accessories: H-CV extension cable X5m+MC4
Universal tool for un-mating MC4

*Panel temperature 25°C AM1.5 1kW/m2

Warranty

- 1 year from the date of purchase

Feature Diagram



How to Use

Connecting the battery compartment

- 1 Connect the output cables of the solar panel to the extension cables. Align the connectors and mate them together by hand until a "click" is heard and/or felt. If the length is not enough, add other extension cables (sold separately).
- 2 Connect the extension cables to the **VS12-B230LA battery compartment**. Align the connectors and mate them together by hand until a "click" is heard and/or felt.



Note: Pull the connectors lightly to make sure they are locked.

- 3 The Universal tool is used to disconnect the connectors once mated as pictures below.



Charging the built-in Batteries

- 1 Face the solar panel towards the sunlight, and charge the built-in battery. To mount the solar panel on the fence or on the ground, s-hooks, fixing ties or fixing pegs can be used. For the most efficient charging, adjust the direction and angle of the solar panel 90 degrees in opposition to the sun rays.



Note: The whole area of the solar panel needs to be irradiated. If there is a shaded area on it, the battery cannot be charged efficiently due to low output current.

- 2 You can connect 2-4 solar panels in series or in parallel for quick charging. Series connection for 2-3 panels and 2S2P connection for 4 panels are the most efficient.

Caution To avoid damaging the built-in charge controller, do not connect 5 solar panels to **VS12-B230LA battery compartment**



Powering Appliances

- Please read the operating instructions manual of the battery compartment.

Maintenance

- Clean this product with a dried or dampened cloth. Do not use oil, solvents, petrol or paint thinners for cleaning.

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