

Violetta Solargear VS12-M90MN 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 monocrystalline solar panel for IP67 dust and waterproof mobile PV systems designed for powering a broad range of appliances. Composed of a combination of an ultra-thin, light and efficient solar panel and a compact, lightweight yet rugged battery compartment for ultimate portability, reliability, safety, impact resistance, weather resistance and ruggedness in business, disaster prevention, leisure and everyday living.

Applications

Charging the built-in 12V battery by sunlight, and powering a broad range of appliances through AC100V, AC230V, DC12V and DC5V output.

Features

- TUV and UL certified highly efficient monocrystalline solar panel.
- A lightweight aluminium stand foldable without tools.
- Angle of the solar panel can be adjusted at 30 or 60 degrees.
- 2 output cables can charge 2 battery compartments simultaneously.
- An IP67 dust and water proof input connector for weather resistant outdoor installations.

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 block the automatic pressure equalization valve on the battery compartment.
- 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

Solar panel

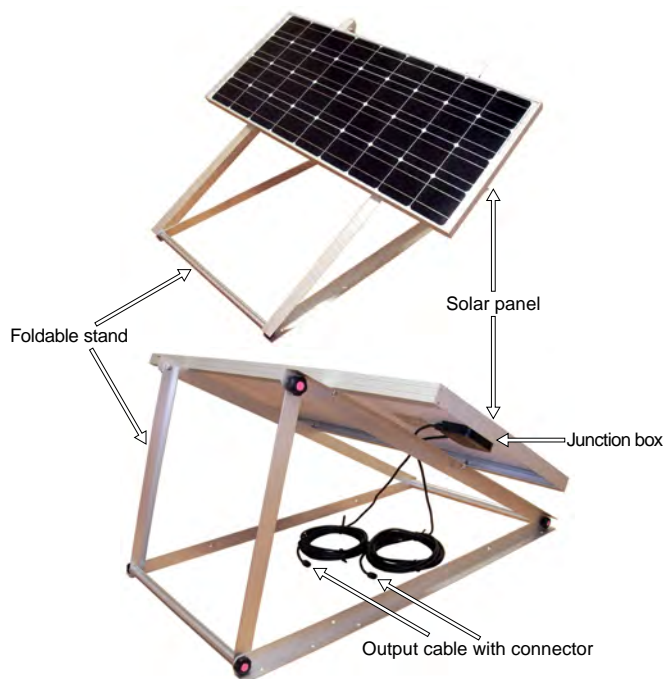
- Panel Structure: monocrystalline solar cells, super straight structure
- Max. power*: 90W (18.5V 4.87A)
- Open circuit voltage*: 22.4V
- Short circuit current*: 5.3A
- Operating temperature: 40 - 85°C
- Dimensions (WDXH): 541X1195X40mm
- Weight: approx. 8.0kg
- Mounting holes: 14*9X8
- Output cable: 10m jacket cable with IP67 dust and water proof connector X2

Foldable stand

- Dimensions (WDXH): 1195X1165X615mm (at 30 degrees, incl. solar panel)
- Weight: approx. 12.2kg (incl. solar panel)

*Panel temperature 25°C AM1.5 1kW/m2

Feature Diagram



How to Use

Charging the built-in Battery

- 1 Connect the solar panel to the battery compartment. Open the caps of the input connectors of the battery compartment, and connect both of 2 output cables from the solar panel. Tighten up the lock nut at the end of the input connector of the battery compartment clockwise.



- Caution** To avoid short circuit at a open connector, make sure to connect both of 2 cutout cables to battery compartment.

- 2 Face the solar panel towards the sunlight, and charge the built-in battery. In Japan, you can usually get maximum output by facing it to south and tilting it 30 degrees. In winter, you can get larger output by tilting it 60 degrees in some area.



- 3 You can charge 2 battery compartments simultaneously by connecting 2 output cables to both, and can charge VS12-B80LI, VS12-B100LA, VS12-B160LI or VS12-B200LA battery compartment quickly by connecting 2 solar panels to it.



- Caution** To avoid overcharging the built-in battery, do not charge VS12-B07NH or VS12-B08NH battery compartment.

- 4 To keep away from dust and water, and to avoid short circuit, close the cap of the input connector once you have finished charging the built-in battery.

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.

Warranty

- 2 years from the date of purchase

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Design and specifications are subject to change without notice. Made in Japan 01-12-14