

Violetta Solargear VS12-B07NH Battery Compartment

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 Ni-MH rechargeable battery compartment 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 Ni-MH battery by sunlight, and powering a broad range of appliances through AC100V, DC12V and DC5V output.

Features

- An IP67 dust and water proof Pelican Case with a fail-safe automatic pressure equalization valve as the battery compartment.
- A built-in 12V 7Ah Ni-MH battery with superior charge efficiency at high temperatures under the sun, excellent overcharge endurance, long service life and high safety for air transport.
- IP67 dust and water proof input connectors for weather resistant outdoor installations.
- 2 input connectors for DC Power Cable (sold separately) to double the output capacity.
- A DC12V cigar lighter receptacle as output terminal.
- A 64W modified sine wave (square wave) DC-AC inverter with an AC100V outlet and a DC5V USB receptacle.
- A battery checker with 6 LEDs for easy monitoring of battery state.

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

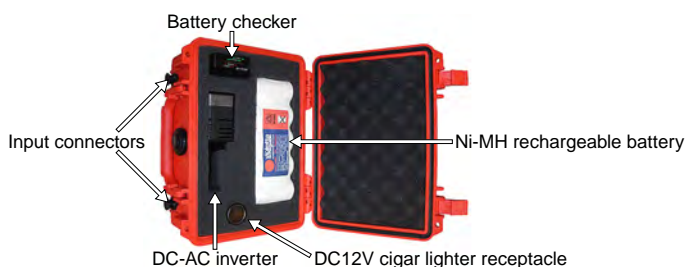
- Built-in battery: Ni-MH rechargeable battery
- Nominal capacity**: 84Wh (12V 7Ah)
- Charge time*: approx. 5 hours
- Max output: 64W (AC100V inverter outlet)
800mA (DC5V USB)
10A (DC12V cigar lighter receptacle)
- Operating temperature (charge)**: 0 - 50°C
- Operating temperature (discharge)**: *20 - 40°C (AC100V inverter outlet and DC5V USB)
-20 - 70°C (DC12V cigar lighter receptacle)
- Operating temperature (storage)**: -20 - 60°C (less than 1 week)
-20 - 35°C (1 week or more)
- Dimensions (WXDXH): 235X111X192mm
- Weight: approx. 2.5kg (incl. accessories)
- Input terminals: IP67 dust and water proof connector X 2
- Output terminals: AC100V inverter outlet X 1
DC5V USB receptacle X 1
DC12V cigar lighter receptacle X 1
- Safety features: a thermostat for overcharging prevention
a thermostat for short circuit prevention
- Cycle life: 500 cycles
- Accessories: Cellstar MPU-80B 64W DC-AC Inverter
Car Mate CT731 Battery Checker

*Panel temperature 25°C AM1.5 1kW/m2

**Discharge at 0.2C to 10.0V at 20°C

***No freezing

Feature Diagram



How to Use

Charging the built-in Battery

- Please read the operating instructions manual of the solar panel.



Powering Appliances

- 1 After charging the built-in battery, open the lid of the battery compartment.
- 2 To power appliances with AC100V or DC5V input, connect the provided DC-AC inverter to the built-in cigar lighter receptacle, and the appliance to the inverter. To power appliances with DC12V input, connect the cigar lighter plug of the appliance directly to the built-in cigar lighter receptacle.

AC100V

DC5V (USB)

DC12V



- ⚠ **Note:** You do not need to fully charge the built-in battery before powering appliances, but the operating time varies widely depending on the battery status and the power consumption of appliances.

- ⚠ **Note:** To power appliances with AC100V input that consume more than 64W, use other DC-AC inverters with higher capacity.

- ⚠ **Note:** To power appliances that cannot be powered through the provided modified sine wave (square wave) DC-AC inverter, such as scientific testing equipments and rapid-start fluorescent lamps, use other pure (true) sine wave DC-AC inverters.

- 3 You can connect another battery compartment with **DC Power Cable** (sold separately) to double the output capacity.



- 4 To monitor the battery status, connect the provided battery checker to the cigar lighter receptacle, and refer to the LED indicator. 3 green LEDs turn on when battery level is full. Green and yellow LEDs turn on when battery level is medium. Green, yellow and red LEDs turn on when battery level is low. Only red or no LEDs turn on when battery is empty.

- ⚠ **Note:** When you are in an emergency or mission critical operations, monitor the status of the battery frequently.

- 5 After you have finished powering appliances with AC100V or DC5V input, disconnect the appliance from the inverter, and the inverter from the cigar lighter receptacle. After you have finished powering appliances with DC12V input, disconnect the cigar lighter plug of the appliance from the cigar lighter receptacle.

- 6 To keep away from dust and water, and to avoid short circuit, close the lid of the battery compartment, once you have finished powering appliances.

Maintenance

- To protect the built-in battery from over-discharging, charge it at least once a year.
- The life of the built-in battery varies widely depending on the operating environment. Replace the battery every 3 - 5 years, or when the operating time becomes notably short.
- Clean this product with a dried or dampened cloth. Do not use oil, solvents, petrol or paint thinners for cleaning.

Warranty

- 1 year from the date of purchase

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