



Powerology Portable Solar Power Generator 300W

SKU: PPBCHA38

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Thank you for purchasing our products. We appreciate your trust and choice. For optimal performance and safety, please read the following instructions thoroughly before using the product.

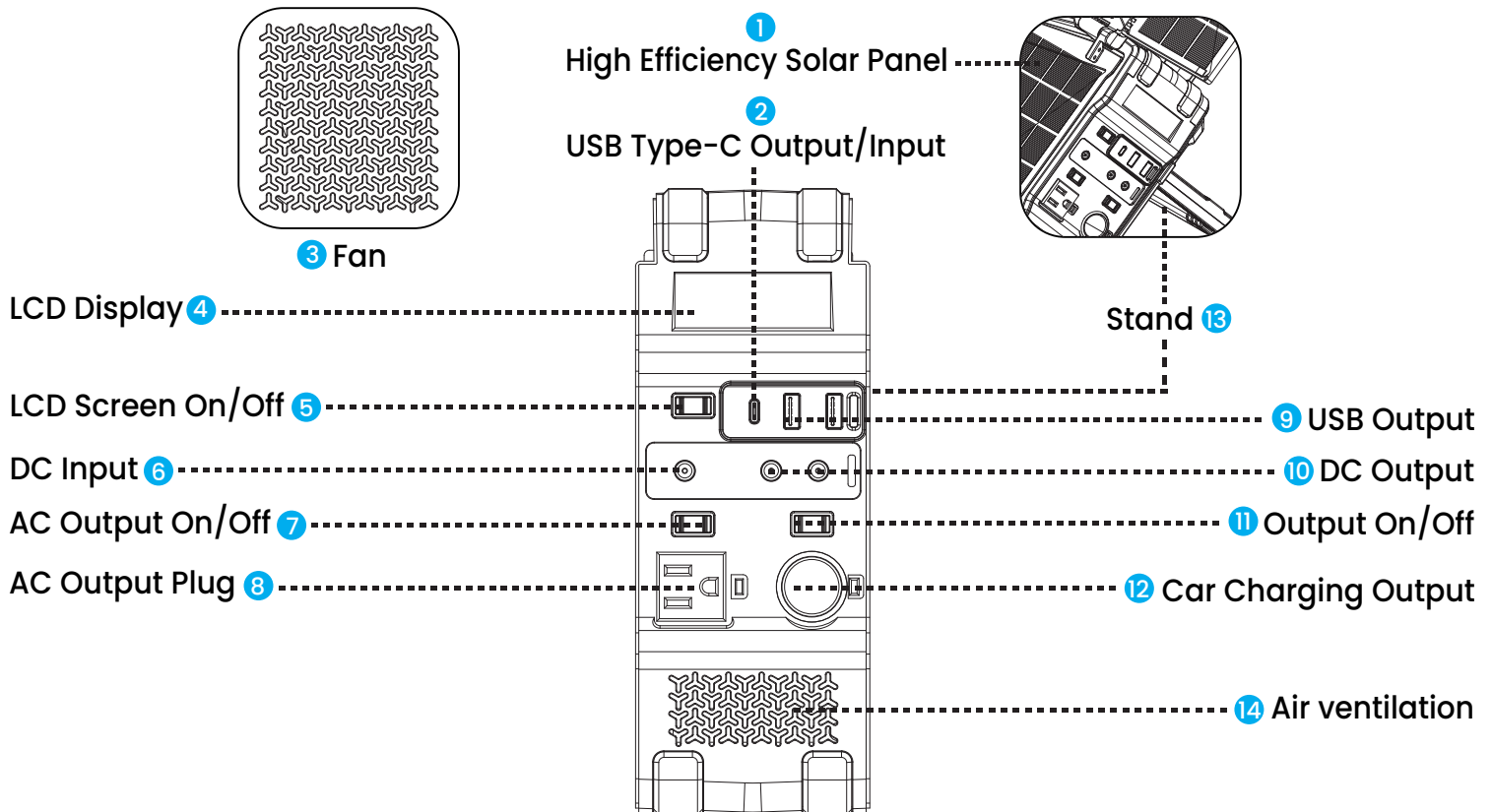
Product Overview











This Power Supply unit is designed to support multiple outputs, including DC, USB, and AC. It is versatile and can be utilized for an array of devices such as smartphones, tablets, portable lighting solutions, portable fans, TV, and rice cookers, among others.

Note:

This product is engineered to be compatible with most appliances with a power of up to 300 watts.

Schematic View of the Power Generator



 DC Charging Input Display	 Fan Indicator
 Solar Panel Charging Input Display	 Percentage of Power
 Short Circuit Protection	 IN 888W Charging Input Power
 Overload Protection	 OUT AC 8888W Discharge Output Power
 Over Temperature Protection	 888V 88Hz Exchange Side Power

Features

1. Modern and ergonomic design.
2. Utilizes UL-certified high-capacity battery cells for enhanced safety and stability.
3. Offers large capacity and portability, supporting simultaneous power output from multiple ports for a variety of electrical appliances.
4. Equipped with four high-efficiency solar panels, enabling device charging anytime, anywhere.

Operational Safety Guidelines

1. Upon pressing the button **5**, the display will illuminate to indicate the current battery level and will automatically power off after 15 seconds to conserve energy.
2. Activating button **11** will display "OUT DC" on the screen which indicates that the two USB, TYPE-C, DC outputs, and car charger ports are active and ready to deliver power to connected devices. To conserve battery when these outputs are not in use, press the button **11** once more to deactivate them.

- 3** .Pressing the button **7** will prompt the display to show “OUT AC” signifying that the AC output is enabled and capable of powering devices. To deactivate and save energy when not in use, simply press button **7** again.
- 4** .Please note that low temperatures can impact the discharge capacity of the product. It is optimized for charging within an environmental temperature range of 0°C to 45°C and can power devices within a temperature range of -10°C to 45°C.
- 5** .The AC output specification for this product ranges from 100V to 240V. To prevent the risk of electric shock, ensure that the product is stored safely out of children’s reach.
- 6** .When using the built-in solar panel **1** to charge the device, please open the stand **13** to facilitate efficient thermal dissipation and place the product steadily on the ground.
- 7** .This product is not waterproof. Avoid using the solar panel charging feature in wet conditions to prevent water ingress that could potentially damage the device.
- 8** .Refrain from exerting excessive force on the product's stand or when the solar panel cover is open to prevent damage.
- 9** .Before starting to use, verify that the voltage stated on the product's parameter label complies with that of the electrical appliance to avoid voltage incompatibility issues.
- 10** .Disassembling the product is strictly prohibited as it may result in dangerous situations, including fire, explosion, or electric shock.
- 11** .Avoid exposing the product to open flames or temperatures exceeding 100°C to mitigate the risk of fire or explosion.
- 12** .The product should not be placed in or used under hightemperature conditions, such as inside a stationary vehicle under direct sunlight, as this could cause the internal battery to overheat, potentially damaging the battery or other components and reducing their lifespan.
- 13** .Ensure that when charging the device or powering electrical appliances, the environment is well-ventilated and that the air inlet

and outlet are not obstructed by any objects.

14. For optimal performance, it is advisable to fully charge the product before its initial use to prevent any inconvenience due to low battery power. If the product will not be in use for an extended period, it is recommended to charge it every 3 months.

15. The battery capacity of this product surpasses the 100Wh restriction for air travel and therefore, it is not permitted to be carried on an aircraft.

16. It is a normal occurrence for the charger to produce heat while charging. The provided standard charger meets all relevant safety standards, ensuring that you can use it with confidence.

Specifications

Battery Type	Lithium-ion Battery
Capacity	19.2Ah / Voltage: 14.8V / 284.16Wh
Dimensions	384x294x146mm
Net. Weight	6.2kg
Input	DC 5-24V/3A Type-C: 5V/3A - 9V/2A - 12V/1.5A - 15V/3A - 20V/3A
Charging Time	Via adapter (DC20V/3A): ~ 5.5 hours Via USB-C (PD60W): ~ 5.5 hours Via car charger DC12V: ~ 8.5 hours Via car charger DC24V: ~ 5 hours Via built-in solar panel: ~ 30 hours (may vary)
DC Output	2*DC5525 / 12-16.8V / 10A (Max.)
USB Output	USB: 5V/3A - 9V/2A - 12V/1.5A Type-C: 5V/3A - 9V/3A - 12V/3A - 15V/3A - 20V/3A

Car Charger Output	16.8-12V / 10A (Max.)
AC Output	230V / 300W (Max. 600W) sinusoidal waveform
Working Temperature	-10°C to 45°C
Cycle Life	≥ 500 times

Package Contents

- 1 . Portable Power Station
- 2 . Car Charging Cable
- 3 . DC Output/Input Cable
- 4 . DC Plug Conversion Adapters
- 5 . Bag for Accessories
- 6 . Power Adapter
- 7 . Black Adapter

Usage Guidelines

Checking Battery Level

Gently press the screen display button to activate it. The screen will showcase the current battery level of the device, then automatically switch off after 10 seconds to conserve energy.

Charging Instructions

- 1 . Insert the standard charger plug into the DC input of the device to commence charging. The display will animate the battery icon, and the percentage will rise as the device charges. The steady battery icon indicates a full charge. Disconnect the charger once charging is complete.
- 2 . Connect the car charger to the vehicle's cigarette lighter socket to the DC charging port of the device. To avoid depleting the car's battery, start the engine while charging.
- 3 . For charging via a smartphone charger, plug it into the USB-C port of the device. The charging efficiency is contingent on the charger's

output, with a maximum capacity of 20V/3A.

4 . To charge with solar power, open the product cover and unfold the product's solar panel. Adjust the panels towards direct sunlight for optimal exposure. The charging efficiency will vary according to sunlight intensity.

Power Supply for DC Appliances

To activate the DC output, press the corresponding On/Off switch gently. The LCD will display "OUTPUT DC". Connect the equipment requiring power to the appropriate DC output.

Power Supply for AC Appliances

Activate the AC output by pressing the AC On/Off switch lightly. When the LCD indicates "OUTPUT AC", connect the appliance that needs power to the device's AC port.

Warning

1 . Before utilizing the AC function, ensure that the AC output voltage and frequency of this product are compatible with those of your electrical appliance to prevent potential damage.

2 . Operate AC electrical appliances with a maximum power consumption of 300W or lower, as supported by this product.

3 . To conserve energy, promptly turn off the AC output switch when it is not in use.

Battery Protection Mode

1 . Battery Low Voltage Protection

This feature safeguards the battery from over-discharge. When the battery level is critically low, the product turns off automatically. Please recharge the device when this occurs.

2 . DC Overcurrent Protection

If the current drawn by DC electrical appliances surpasses the maximum allowable limit, the DC output will automatically turn off, and a “beep” sound will alert you to an overcurrent condition. Remove some appliances to reduce the load, then press the button to reset and resume output.

3 . DC Short-Circuit Protection

When the DC output port is short-circuited, In the event of a short circuit at the DC output port, the output automatically turns off to prevent damage, accompanied by a buzzer sound signaling an error. Resolve this issue and press the button to activate the output.

4 . AC Overload Protection

If the current drawn by AC electrical appliances surpasses the maximum allowable limit, the AC output will automatically turn off, and a “beep” sound will alert you to an overcurrent condition. Remove some appliances to reduce the load, then press the button to reset and resume output.

5 . AC Short-Circuit Protection

In the event of a short circuit at the AC output, the system will automatically cut off the power, and a warning beep along with a notification icon will prompt you to address the issue. After troubleshooting, you can reactivate the output by pressing the button.

6 . Over-Temperature Protection

During AC operation, if the ambient temperature is high or the connected electrical appliances are drawing significant power, the internal fan will engage to dissipate excess heat, ensuring the unit's continuous operation. If the internal temperature exceeds safe limits, the over-temperature protection shuts off the AC output, and emits a beep sound, and the temperature warning icon will be displayed on the screen. This is to prevent any damage to the product's components. Normal use can resume once the temperature has decreased or the power load has been diminished.

Maintenance

- 1 . Protect the product from moisture and corrosive materials. Avoid using chemicals for cleaning.
- 2 . To preserve the product's lifespan, charge it promptly when the battery level is low to prevent damage from over-discharge.
- 3 . Battery performance diminishes in cold environments, resulting in reduced discharge capacity. Operate the device in suitable conditions. Regular charging and discharging can help maintain the product's temperature, optimizing battery capacity.
- 4 . The battery operates most efficiently at ambient temperatures between 5°C and 30°C, ensuring the best charging and discharging results.

Troubleshooting

Problem 1: The device does not charge.

Possible Reason:

1. No connection between the unit and the device.
2. The display does not light up upon charging.

Solution: Check if the charger is correctly and securely connected to the device.

Problem 2: The unit has no output.

Possible Reason:

1. The DC/AC outputs are switched on.
2. No connection between the unit and the device.
3. The battery level is low.

Solution:

1. Press the AC/DC switch to turn on the AC/DC output.
2. Re-connect the power generator to the device.

3. Charge the power generator

Problem 3: The charging process is interrupted.

Possible Reason:

The rated power exceeds the device's output.

Solution: Choose other devices with higher-rated power.

Warranty

Products that you buy directly from our **Powerology** website or shop come with a 24-month warranty. The 24 months warranty applies to products purchased directly from our **Powerology** website or store. If **Powerology** products are bought from any of our verified retailers, then the product is eligible for only 12 months warranty. To extend your product's warranty, visit our website powerology.me/warranty and fill your details in the provided form along with an uploaded picture of the product to process your request. Once approved, you will receive a confirmation email of the extended product warranty. Upload the required information within 48 hours of purchase to be eligible for 24 months of warranty period.

For more info, please check:

powerology.me/warranty

Contact Us

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