POWEROLOGY

Powerology

Dynamic800 Portable Power Station

SKU: PWP800WBK

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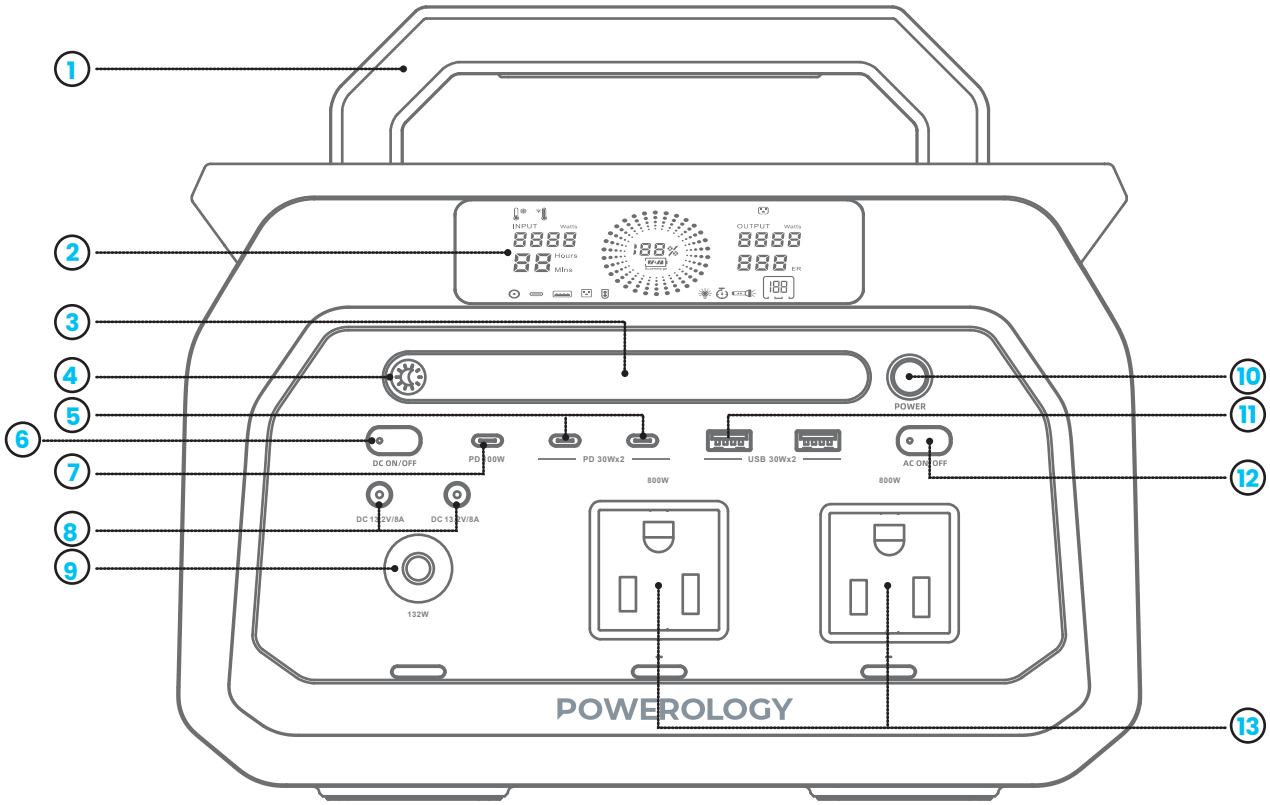
Warning

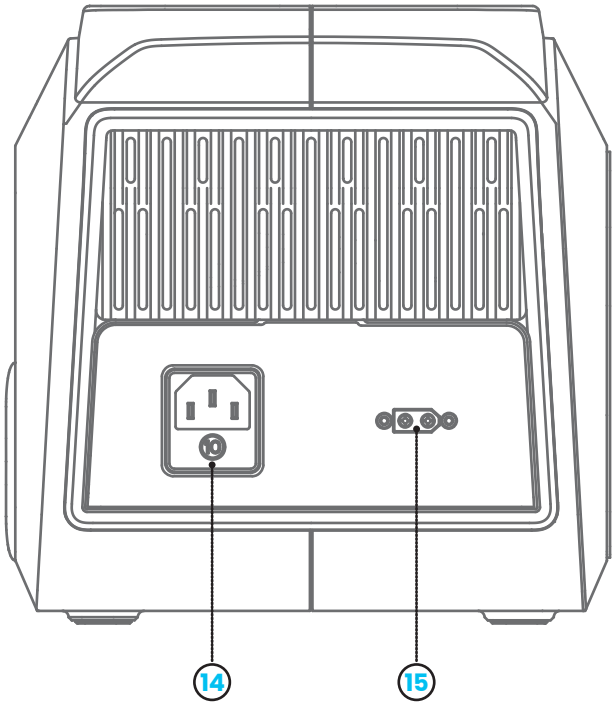
1. Keep the portable power station dry and away from fire or heat sources.
2. Do not disassemble, puncture, or apply excessive pressure to the device.
3. Dispose of the product responsibly in accordance with local laws and regulations.
4. Hand over the portable power station to a certified recycling company for proper disposal.
5. Children and individuals with disabilities should use this product only under adult

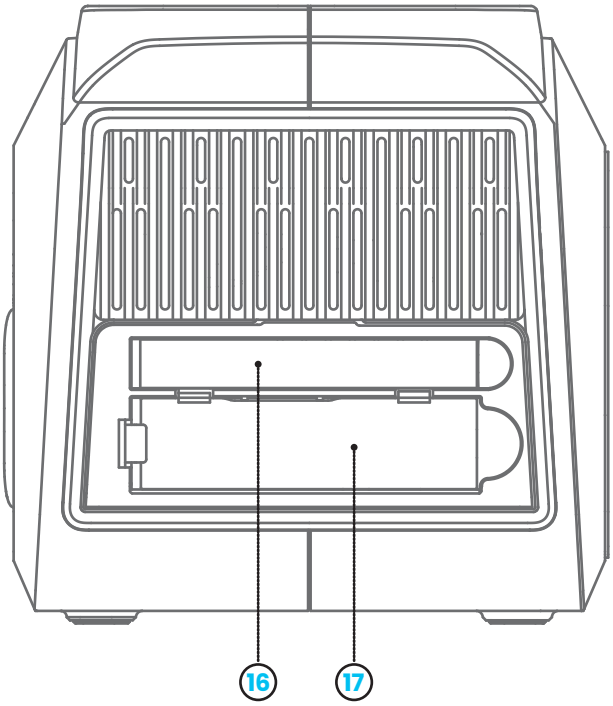
Attention

1. This product is intended for emergency use only and is not a standard replacement for regular AC household power. Actual AC outlets may vary depending on the customer's location.
2. Fully charge the product before first use.

Schematic View







1. Handle
2. LCD Display
3. LED Indicator
4. LED Control Button
5. PD USB Type-C Output Port 30W
6. DC On/Off Switch
7. PD USB Type-C Output Port 100W
8. DC Output Port
9. Car Port
10. Power Button
11. USB-A Output Port
12. AC On/Off Switch
13. AC Output Port
14. AC Input Port
15. DC Input Port (XT60)
16. 4-in-1 Data Cable
17. Flashlight

Charging Your Product

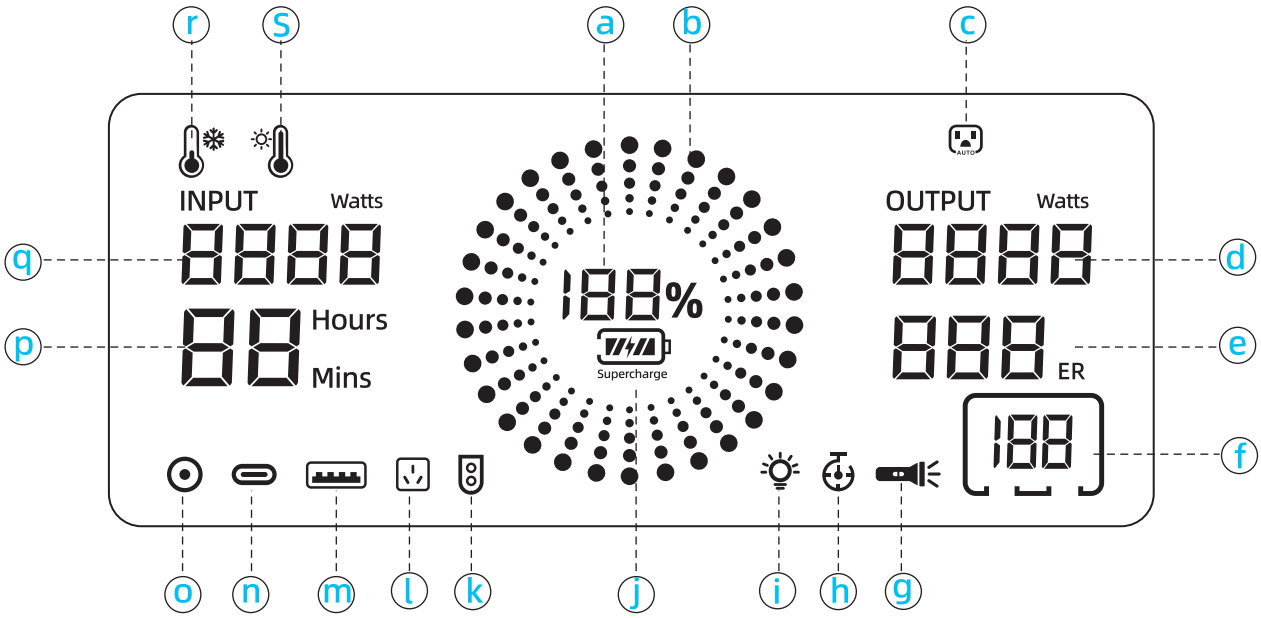
⚠ Attention

If the ambient temperature or the battery temperature exceeds safe limits, the battery charging circuit will automatically deactivate to prevent damage. Charging will resume automatically once the temperature decreases below 122°F (50°C).

For optimal battery maintenance, it is recommended to fully charge the product every three months during periods of inactivity. If the device has remained unused for six months or longer, a full charge is required prior to operation. Completing a full charge cycle is advised to ensure optimal battery performance and longevity.

LCD Battery Display

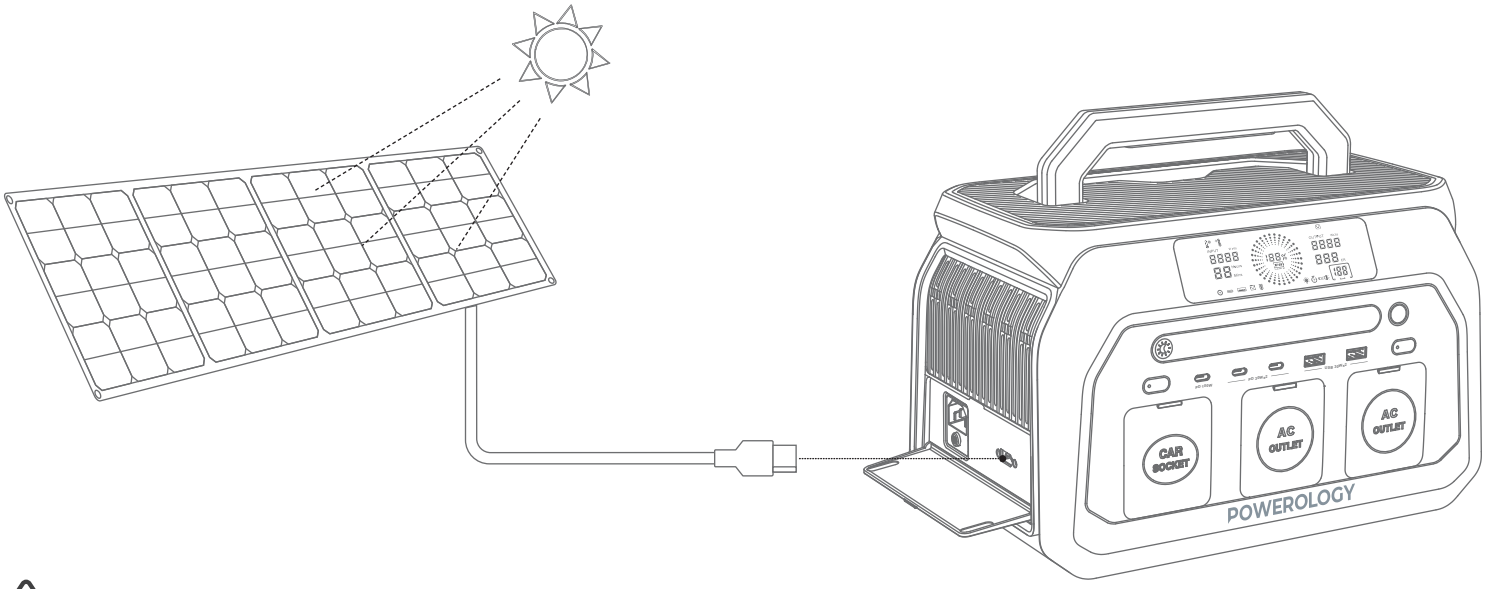
The screen displays the remaining charging time and the current battery power level as a percentage. When the battery level reaches 100 %and the charging power reads 0, the product is fully charged.



ⓐ 188%	Battery Power Level %	ⓗ	xBoot Mode	ⓞ	DC Output
ⓑ	Battery Power Level	ⓘ	LED	ⓟ 88 Hours Mins	Remaining Usage Time / Remaining Charging Time
ⓒ	AC Automatically Shuts Off	ⓙ Supercharge	Fast Charging	ⓠ INPUT Watts 8888	Output Power
ⓓ OUTPUT Watts 8888	Output Power	ⓚ	Solar Panel Input	ⓡ	Low Temperature Protection
ⓔ 888 ER	AC Output Voltage and Error Codes	ⓛ	AC Input	ⓢ	Over Temperature Protection
ⓕ 188	AC Output Frequency	ⓜ	USB-A Output		
ⓖ	Flashlight	ⓝ	Type-C Output		

Charging via Solar Panel

1. Position the solar panel in a location with strong, direct sunlight to ensure efficient charging.
2. Connect the solar panel's output port to the product's input port to begin charging. The LCD will display a charging icon to confirm the process has started.
3. Charging is complete when the battery capacity reaches 100 %and the "INPUT" icon on the LCD display flashes.



⚠ Attention

1. Actual charging efficiency may vary significantly based on weather conditions, ambient temperature, sunlight intensity, the angle of the solar panel relative to direct sunlight, and other factors.
2. Use solar panels with a voltage below 60V for charging. The system will automatically shut off if the input voltage exceeds 60V.

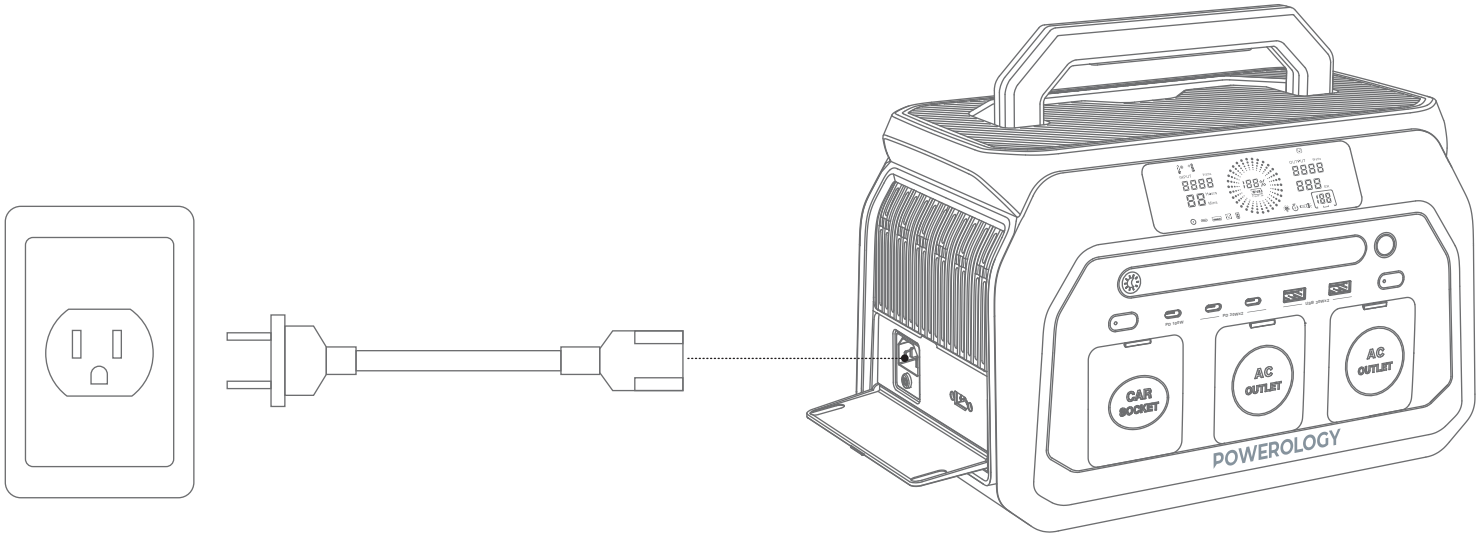
Charging via AC

⚠ Attention

Connect the AC outlet to the power station AC input port using the original AC charging cable. The LCD display will indicate the charging status, input power, remaining charging time, and current battery power level.

1. The battery is fully charged when the battery percentage reaches 100 %, and the input power reads 0 and remains stable.
2. It is recommended to unplug the charging cable once the battery is fully charged. Although the battery is protected from overcharging, disconnecting the charger is the best practice.

3. When charging via AC, the process typically takes approximately 1 to 1.2 hours to complete a full charge.

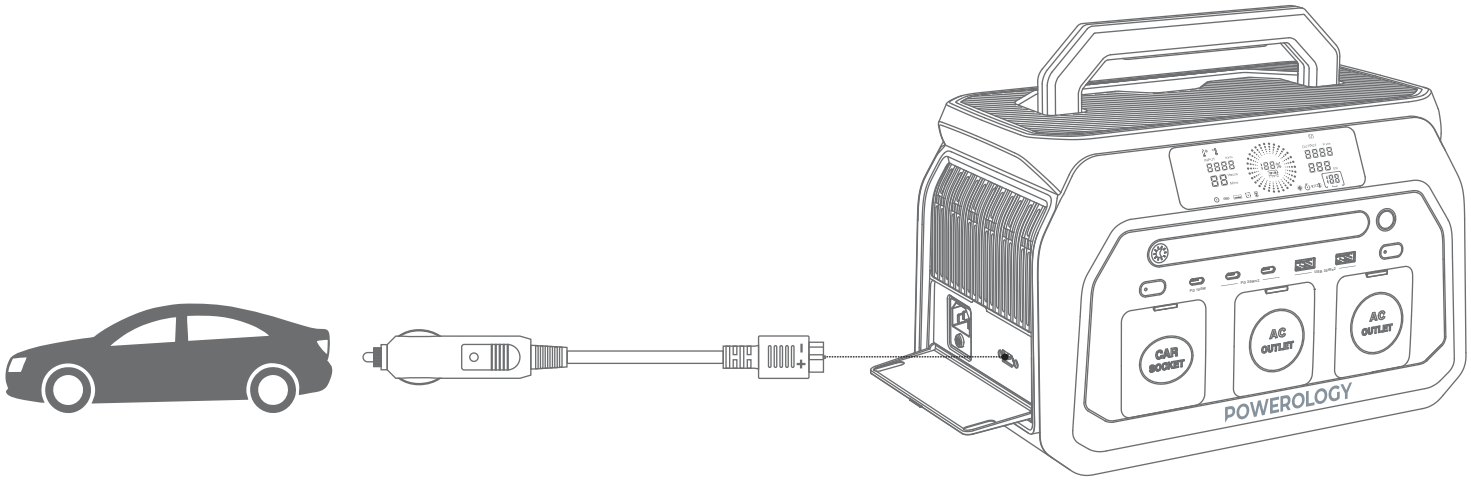


Charging via Car

1. Insert the provided car charging cable into the cigarette lighter socket of your vehicle. Connect the opposite end to the DC input port of the battery unit.
2. The car charging cable includes a 10A fuse for protection, ensuring the safety of your vehicle's electrical system.
3. During charging, the LCD screen will display the input power and the estimated remaining charging time.

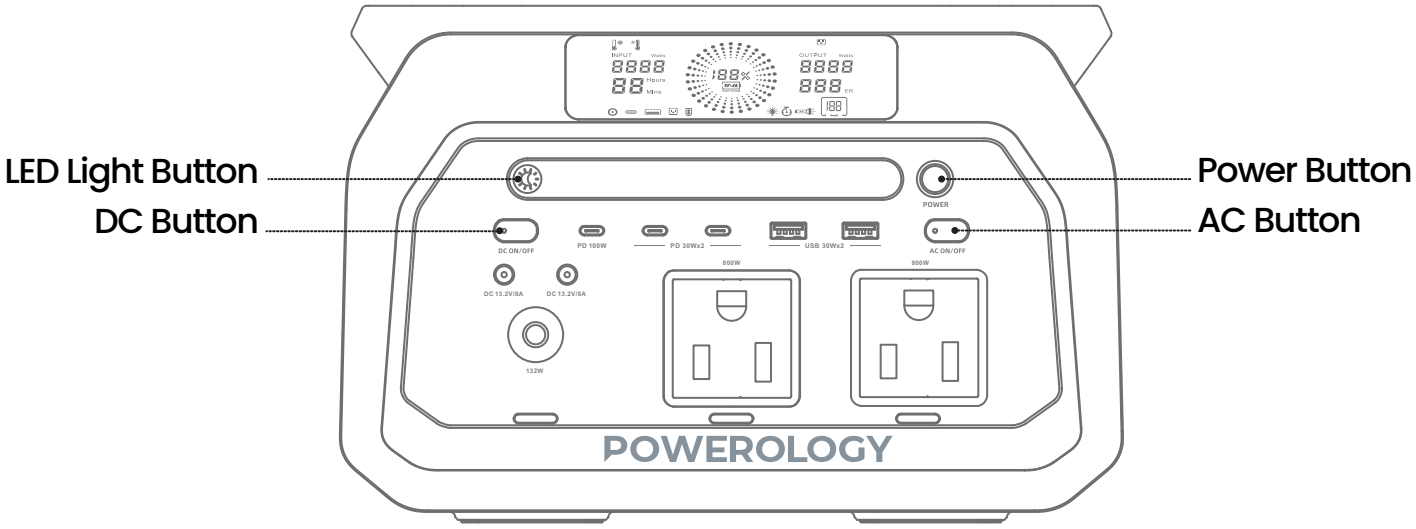
Attention

To avoid depletion of your vehicle's battery, ensure the engine is running while charging via the cigarette lighter socket. This charging method is designed exclusively for 12V and 24V vehicles.



Instructions for Use

1. Button Guide



1.1 Power Button

a. Press and hold the power button for 3 seconds to turn the station on or off.

b. The machine will automatically shut down after 10 minutes of standby to save power.

c. After use, press and hold the power button for 3 seconds to turn it off.

⚠ **Attention:**

1. When the product is on, double-click the power button to turn on the AC automatic shutdown function, and the icon (AUTO) will light up at the same time. To turn off this function, double-click the power button again and the icon (AUTO) will go off. If you need to use electrical appliances with intermittent power supply for a long time, please make sure to turn off the AC automatic shutdown function.

2. About the AC auto-off function:

When the icon (AUTO) is lit and the load on the AC interface is below 10W, the AC interface will shut down after 2 hours.

1.2 AC on/off Button

Press the AC button briefly to activate the AC function (the AC icon (AUTO) will appear on the screen simultaneously). Press the AC button briefly again to deactivate the AC function.

Attention:

Press and hold the AC button to enter xBoot mode. Press the AC button five times consecutively to change the AC output voltage. Press both the AC and DC buttons simultaneously to switch the AC output frequency.

1.3 DC on/off button

Press the DC button briefly to turn on the DC output (the DC output icon will be displayed on the LCD). Press the DC button briefly again to turn off the DC output.

The number displayed when pressing and holding the DC button is the firmware version number.

⚠ **Attention:**

To turn off the buzzer, press and hold the DC button for 2 seconds, then press the AC button briefly to toggle the buzzer on or off.

1.4 LED Light Button

Press the LED button ( ) briefly to turn the LED on or off, adjust the brightness levels (100 %,50 %), or activate the SOS mode.

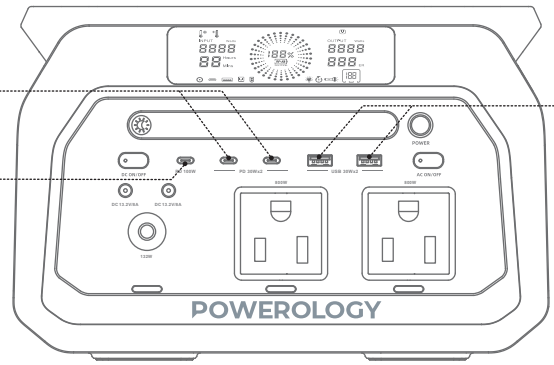
⚠ **Attention:**

Press and hold the LED button to enable or disable the silent charging function.

2. USB Outputs

2 × TYPE-C Output:
5V = 3A, 9V = 3A, 12V = 2.5A, 15V = 2A, 20V = 1.5A

TYPE-C Output:
5V, 9V, 12V, 15V = 3A, 20V = 5A



2 × USB Output:
5V=3A, 9V=3A, 12V=3A

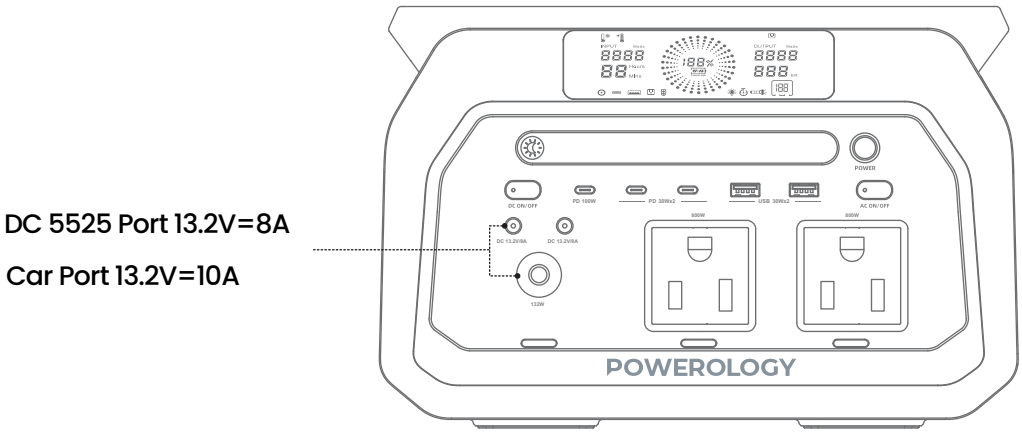
⚠ Attention:

The above Type-C and USB output specifications apply to single-channel output only. If Type-C port 2 and USB port 2, or Type-C port 3 and USB port 1 are used simultaneously, the corresponding ports will only output 5V = 3A. This configuration may limit the use of high-power devices depending on the actual usage scenario.

Protection Mode (USB Output):

1. Overcurrent Protection: If the USB output port becomes overloaded, unplug the device and reconnect it. The product will reset and return to normal operation.
2. Short-circuit Protection: If a short circuit occurs at the USB output port, unplug the device and reconnect it. The product will reset and return to normal operation.

3. DC Outputs



1. The two DC5525 (5.5 mm diameter) 13.2V ports provide a maximum current of 8A.
2. The DC 5525 13.2V ports automatically distribute current based on the connected devices to ensure the shortest charging times.
3. Each DC5525 port can be connected to a cigarette lighter cable; however, the maximum output is limited to 120W.

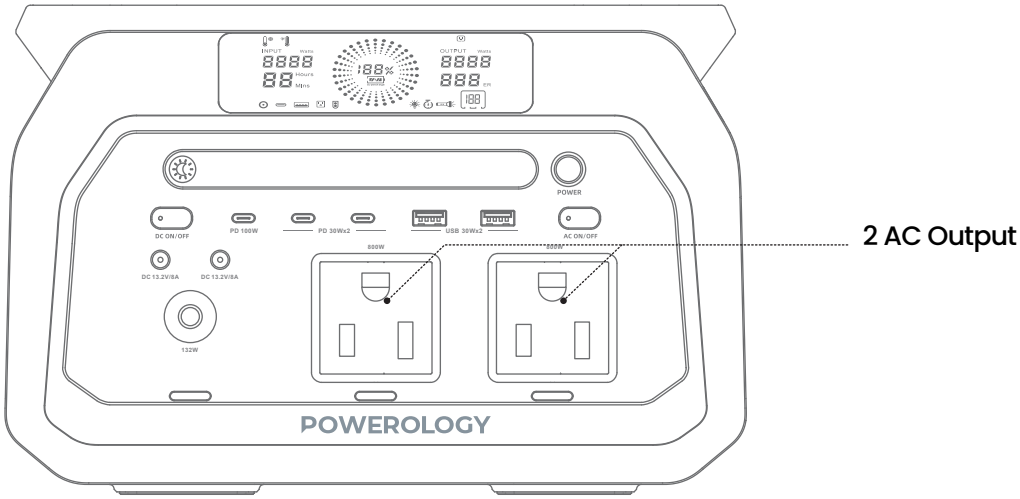
⚠ **Attention:**

Protection mode (DC outputs)

1. Overcurrent protection: If the DC output port is overloaded, the device will emit a buzzer sound and the DC icon on the screen will blink. Please disconnect the device, then press the DC button to reset the product.

2. Short-circuit protection: If the DC output ports are short-circuited, disconnect the device and press the DC button to reset the product.

4. AC Outputs



1. Plug the power cable of the AC appliance into the AC outlet of the product. Press the AC power button to activate AC mode.

2. Ensure the power rating of the connected AC appliance is below 800W.

⚠ **Attention:**

If the battery voltage drops below 22.4V, the AC output function will automatically shut down. It will resume normal operation after recharging.

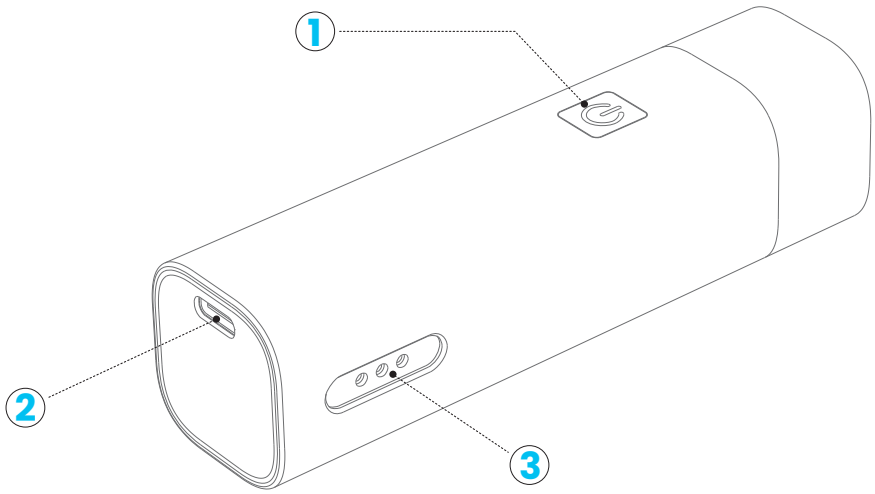
Protection mode (AC output):

A. This product includes under-voltage protection, overload protection, short-circuit protection, and over-temperature protection. It features a double isolation circuit that ensures safety, reliability, and high efficiency.
B. In the event of overload, over-temperature, or short-circuit, the AC icon will blink, and the AC output will automatically shut down to maintain safety.

Specifications

Battery Type	LiFePO4 (Lithium Iron Phosphate)
Battery Capacity	512Wh (20000mAh@25.6V)
Battery Voltage	25.6V nominal
Voltage	230Vac (180-260V)
Frequency	60/50Hz
AC Input	600W
MPPT Solar Input	300W max (12-60V)
XT60 DC Input	120W max (12-60V)
AC Output	800W (Nominal Power) 1600W (Surge Power)
USB-C1 Output	5V/3A, 9V/3A, 12V/3A, 15V/3A, 20V/5A, 100W Max
USB-C2/USB-C3 Output	5V/3A, 9V/3A, 12V/2.5A, 15V/2A, 20V/1.5A, 30W Max
USB-A1/USB-A2 Output	5V/3A, 9V/3A, 12V/3A, 30W
USB-C2 + USB-A2 Output	5V/3A
USB-C3 + USB-A1 Output	5V/3A
Car Port Output	13.2V/10A, 132W Max
x5525 2 DC Output	13.2V/8A
Operating Temperature	0°C-40°C (Charge), -15°C -40°C (Discharge)
Humidity	0-95 % (Non-condensing)
Weight	6.55kg
Product Dimension	299 x 197×191mm

Using the Flashlight



①	Power Button	Press the power button briefly to cycle through high -brightness mode, low-brightness mode, and shutdown. Press and hold the power button while the device is on to activate SOS mode. Press the power button briefly again to exit SOS mode.
②	Type-C Input	5V = 1A
③	Pin Charging	Place the flashlight into the storage slot on the power station to begin automatic charging.

⚠ Attention:

1. This product is a precision instrument. Avoid dropping it or subjecting it to collisions or strong impacts.

2. Do not expose the product to heat, fire, water, or other liquids. Keep it away from high ambient temperatures and direct sunlight.

3. Do not place the product near flammable or combustible liquids, as this may cause fire or generate smoke.

4. After use, do not place the product into the storage box until it has fully cooled. Residual heat may damage the white LED.

5. Use only a charger with the specified voltage to charge this product. Our company is not responsible for any accidents caused by using chargers that do not meet the specifications.

Error Code Description

Flashing Icon or Displayed Code	Description
	The battery is experiencing over-temperature during discharge or charging.
	The battery is experiencing under-temperature during discharge or charging.
	The battery is overheating during charging caused by photovoltaic (PV) charging.
	The battery is overheating during charging caused by grid charging.
	The battery is overheating during charging caused by both grid and PV charging.
	PV charging failure has occurred due to battery charging under-temperature.
	AC charging failure has occurred due to battery charging under-temperature.
	Grid and PV charging failure has occurred due to battery charging under-temperature.
	Charging voltage or over-current has been detected during PV charging.
	Grid under-voltage, over-frequency, or over-current has been detected during grid charging.
	The Type-C port is overloaded or short-circuited.
	The USB port is overloaded or short-circuited.
E01	The inverter bus has experienced a soft start fault.
E02	The inverter output has experienced a short circuit fault.
E03	The inverter bus has experienced an under-voltage fault.

E04	The inverter bus has experienced an over-voltage fault.
E05	The inverter bus has experienced a short circuit fault.
E06	The inverter output has experienced an over-current fault.
E07	The inverter DC component voltage is too high, causing a fault.
E08	The inverter has experienced an over-temperature fault.
E09	The inverter has experienced an over-current fault during discharge.
E10	The inverter has experienced an over-current fault during charging.
E11	The inverter current sensor has malfunctioned.
E12	The inverter output has experienced over-voltage, under-voltage, over-frequency, or under-frequency faults.
E13	An AC load short circuit has occurred.
E14	The inverter main relay has malfunctioned.
E15	The inverter fan has malfunctioned.
E16	The inverter DSP and main-control MCU have communication faults.
E17	The active MCU and BMS have communication faults.

⚠ Attention:

1. This product contains an internal, non-removable $LiFePO_4$ rechargeable battery. Do not attempt to remove the battery, as doing so may damage the device.

2. The battery supports over 4000 charge and discharge cycles.

Caution

1. Do not short-circuit the product. To prevent short circuits, keep the product away from all metal objects.
2. Do not expose the product to heat, fire, water, or other liquids. Keep it away from high ambient temperatures and direct sunlight.
3. Store the product in a dry, dust-free environment.
4. Do not disassemble or reassemble the product.
5. Avoid dropping the product or placing heavy objects on it, and protect it from strong impacts.
6. This product is not intended for use by individuals with reduced physical, sensory, or mental capabilities.
7. Keep the product out of reach of children.
8. Do not cover the product with towels, clothing, or other items that may obstruct ventilation.
9. Do not overcharge the product.
10. Once fully charged, disconnect the product from the power source immediately.
11. If the product will not be used for an extended period, fully charge it before storage.
12. For charging some portable electronic devices, you may need to set those devices to charge mode first. Please refer to the user manual of those devices for confirmation.

Cold Weather Usage

Cold temperatures (–20°C to –10°C) can reduce the battery capacity due to the chemical properties of the battery. If you plan to live off-grid in sub-zero conditions, it is recommended to keep the product

in an insulated cooler and connect it to a power source (such as a 12V /24V car or wall outlet, or a solar panel). The natural heat generated by the product inside the insulated cooler will help maintain the battery capacity at its highest level.

Disposal and Recycle

This product should not be disposed of with household waste. Please dispose of or recycle this product and its battery in accordance with local regulations and guidelines.

Disclaimer

1. Our company is not liable for damages caused by fire, earthquakes, third-party use, accidents, intentional misuse by the customer, abuse, or other abnormal conditions.
2. Do not attempt to repair any damage to the AC plug or power supply yourself.
3. We assume no liability for damages resulting from incorrect use or failure to comply with this user manual.

Intended Use:
This portable power station is designed to supply power to electronic devices with a maximum consumption of 800W. It is not suitable for equipment related to personal safety or critical operations relying heavily on electricity, such as medical devices, nuclear facility equipment, or aerospace manufacturing. We disclaim liability for any accidents, personal injuries, fires, or equipment failures resulting from the use of our product with such devices.

Warranty

Products that you buy directly from our **Powerology** website or shop come with a 24-month warranty.

The 24-month 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 a 12-month warranty. To extend your product's warranty, visit our website **powerology.me/warranty** and fill in 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 a 24-month warranty period.

For more info, please check:

powerology.me/warranty

Contact Us

If you have any questions about this Privacy Policy, please contact us at: **hey@powerology.me**
Website: **powerology.me**
Instagram: **powerology_official**
Facebook: **powerology.ME**