POWEROLOGY

Powerology

Dynamic 1800 Portable Power Station

SKU: PWP1800WBK

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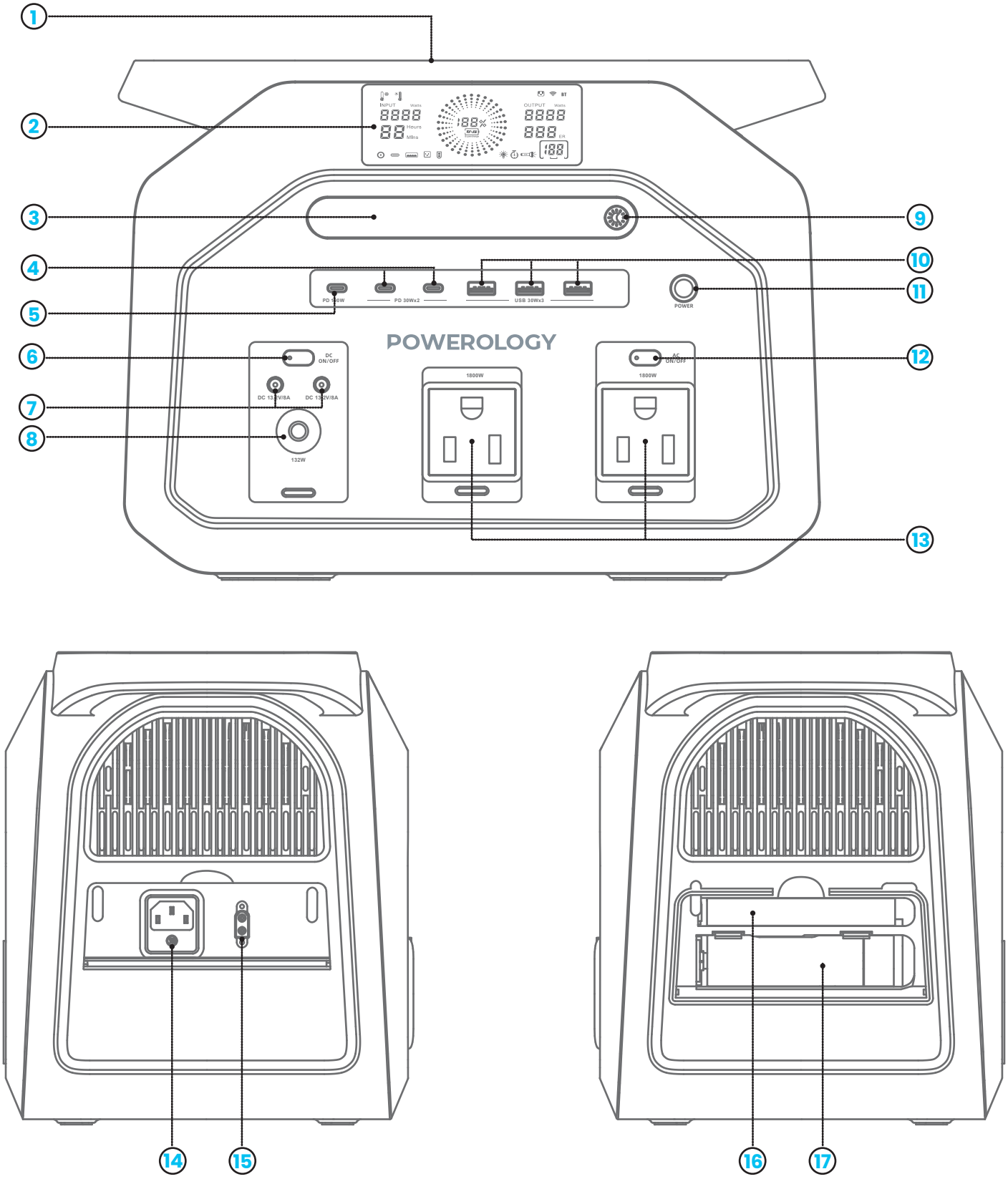
Warning

1. Keep the device dry and away from fire or extreme heat sources.
2. Do not disassemble, puncture, or compress the portable power station.
3. Dispose of or recycle the product according to local laws and regulations.
4. Always hand over the portable power station to a professional recycling company for proper disposal.
5. Children and individuals with disabilities should use this product only under the supervision of a guardian.

Attention

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

Schematic View



1. Handle
2. LCD Display
3. LED
4. PD Type-C Output Port
5. PD Type-C Output Port
6. DC On/Off Switch
7. DC Output Port
8. Car Port
9. LED Button
10. USB-A Output Port
11. Power Button
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

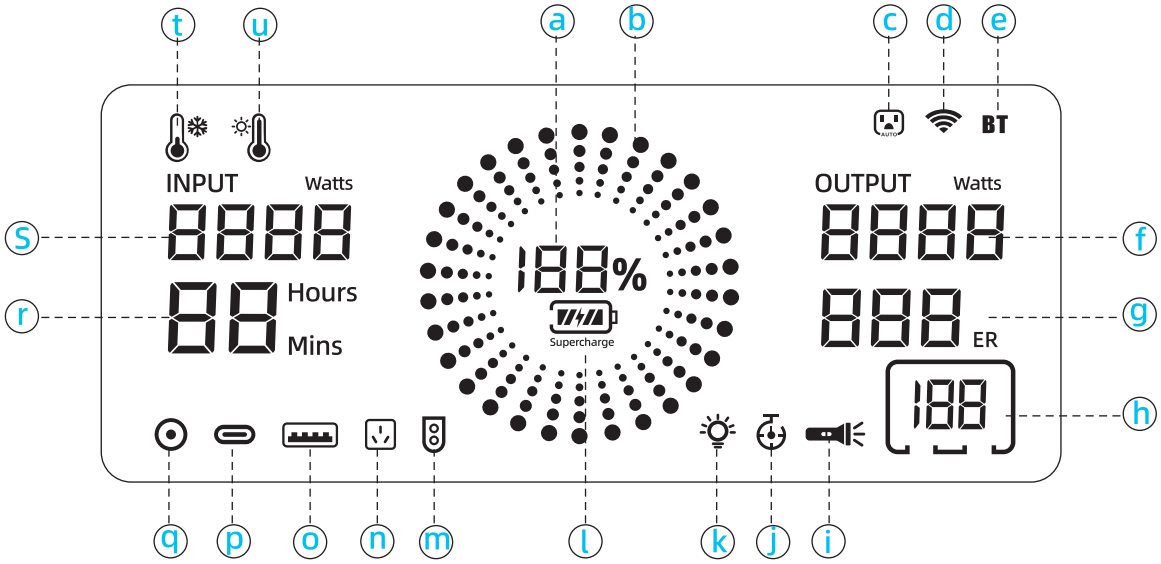
Charging Your Product

⚠ Attention

If the ambient room temperature or the battery temperature becomes too high, the battery charging circuit will automatically shut down. When the temperature drops below 50°C (122°F), charging will resume automatically. For long-term storage, it is recommended to fully charge the product every three months. If the product has not been used for six months, please fully charge it before use. It is best to ensure the battery is fully charged each time.

LCD Battery Display

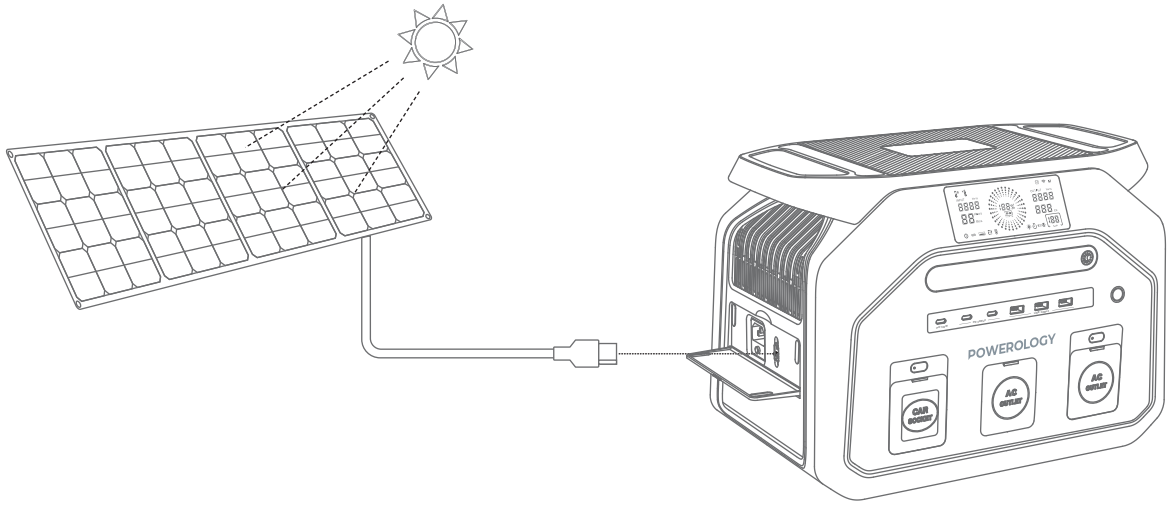
The screen shows the remaining charging time and the battery power level as a percentage. When the power level reaches 100 % and the charging power is zero, the product is fully charged.



ⓐ 188%	Battery Power Level %	ⓗ 188	AC Output Frequency	ⓞ	USB-A Output
ⓑ	Battery Power Level	ⓘ	Flashlight	ⓟ	Type-C Output
ⓒ Auto	AC Automatically Shuts Off	ⓙ	xBoot Mode	ⓠ	DC Output
ⓓ	WiFi Status	ⓚ	LED Indicator	ⓡ 88 Hours Mins	Remaining Usage Time / Remaining Charging Time
ⓔ BT	Bluetooth Status	ⓛ Supercharge	Fast Charging Status	ⓢ INPUT Watts 8888	Input 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

Charging via Solar Panel

1. Place your solar panel in a location that receives the strongest direct sunlight possible.
2. Connect the output port of the solar panel to the input port of the product to begin charging. You will notice the product is charging when the corresponding icon on the LCD screen lights up.
3. The product is fully charged when the battery capacity reaches 100 %and the input icon blinks.



⚠ Attention

1. Charging efficiency may vary significantly depending on weather conditions, ambient temperature, sunlight intensity, the angle of the solar panels relative to the sun, and other factors.
2. Use solar panels rated below 52V for charging. The system will automatically shut off if the input voltage exceeds 52V.

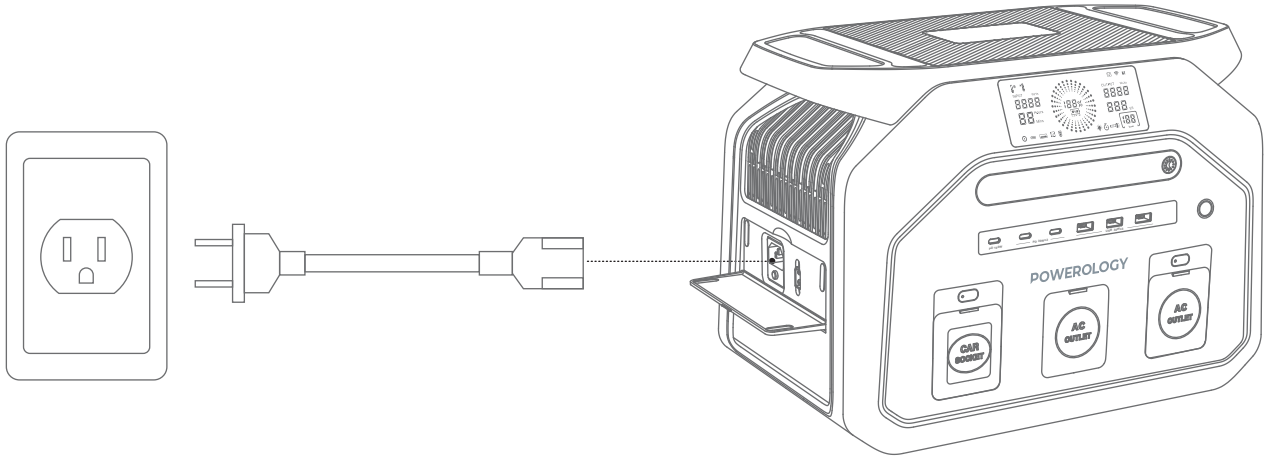
Charging via AC

⚠ Attention

Connect the AC outlet to the power station's AC input port using the original AC charging cable. The battery charging status will be displayed, showing the 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 drops to zero. At this point, the battery remains stable.
2. Once fully charged, it is recommended to unplug the charging cables to prolong battery life. Although the battery will not overcharge, disconnecting the cables is the best practice.

3. When charging via AC, it typically takes approximately 1 to 1.2 hours to fully charge the battery.

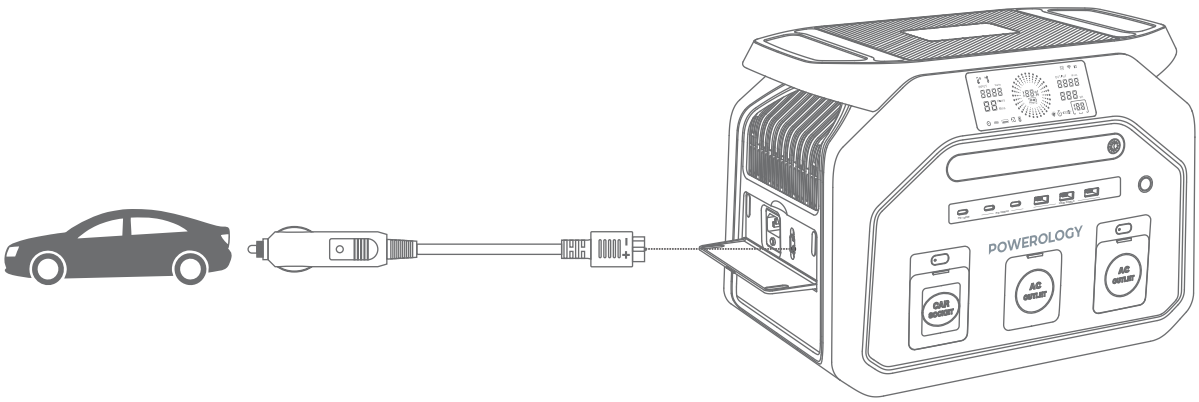


Charging via Car

1. Plug the car charging cable provided with the battery into your car's cigarette lighter socket. Then connect the other end of the cable to the DC input port of the battery.
2. The car charger cable includes a 10A protection fuse to safeguard your vehicle's electrical system.
3. The screen will display the input power and remaining charging time while the battery is charging.

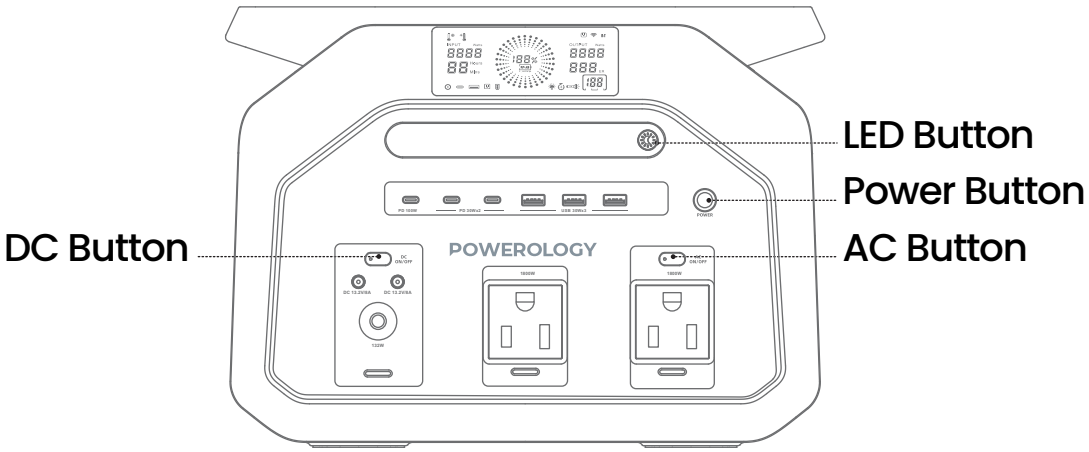
⚠ Attention

To prevent car battery power loss, charge this product through your car's cigarette lighter socket only when the engine is running. This charging method is intended for use with 12V or 24V vehicles only.



Instructions for Use

1. Button Guide



1.1 Power Button

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

b. The device will automatically shut down after 10 minutes of standby to conserve power.

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

⚠ Attention:

1. When the product is on, double-click the power button to activate the AC automatic shutdown function. The (AUTO) icon will illuminate simultaneously. When the product is off, double-click the power button to deactivate the AC automatic shutdown function, and the (AUTO) icon will turn off. If you need to use electrical appliances with an intermittent power supply for an extended period, please disable the AC automatic shutdown function.

2. About the AC auto-off function:

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

1.2 AC On/Off Button

Press the AC button briefly to enable the AC function (the (AUTO) icon will appear on the screen). Press the AC button again briefly to disable the AC function.

⚠ Attention:

Long press the AC button to enter xBoot mode. Continuously press the AC button 5 times to switch the AC output voltage. Press 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 (?) icon will be displayed on the LCD). Press the DC button again briefly to turn off the DC output.

⚠ Attention:

Press and hold the DC button to display the device's software version. Simultaneously pressing the DC and LED button lights will reset the WiFi distribution network function.

1.4 LED Light Button

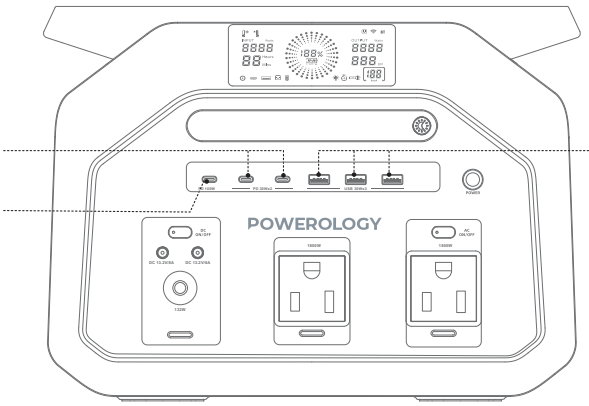
Press the LED button ( ) briefly to turn the LED on or off, adjust brightness levels (50 %,100 %), and activate SOS mode.

⚠ Attention:

Press and hold the LED button to toggle the silent charging function on or off.

2. USB Outputs

2 * Type-C Output
5V=3A, 9V=3A, 12V=2.5A, 15V =2A, 20V=1.5A
Type-C Output
5V=3A, 9V=3A, 12V=3A, 15V =3A, 20V=5A



3 * USB Output
5V=3A, 9V=3A, 12V=3A

⚠ Attention:

The type-c and USB output parameters provided are for single-channel use only. If type-c-2 and USB-2 or type-c-3 and USB-1 are used simultaneously, the respective ports can only output 5V 3A. This limitation may affect the simultaneous operation of high-power devices depending on the actual usage scenario.

Protection Mode (USB Output):

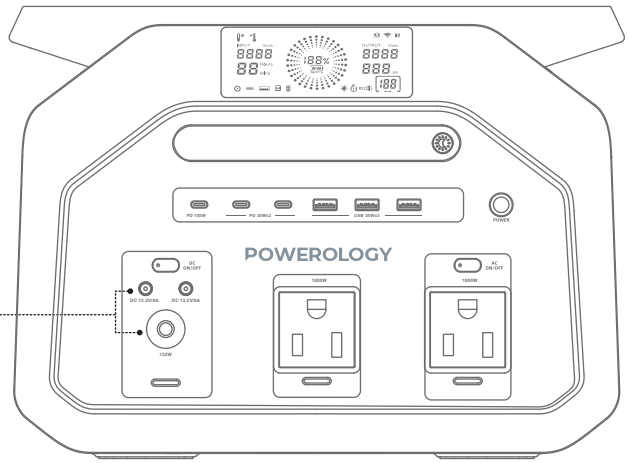
Overcurrent protection: If the USB output port becomes overloaded, unplug the device and then plug it back in. The product will return to normal operation.

Short-circuit protection: If the USB output port experiences a short circuit, unplug the device and then reconnect it. The product will resume normal function.

3. DC Outputs

DC 5525 Port 13.2V=8A

Car Port 13.2V=10A



1. The two DC5525 (5.5 mm diameter) 13.2V ports support a maximum current of 8A.
2. The DC13.2 5525V ports automatically distribute current based on the connected devices to ensure the shortest possible charging times.
3. Each DC5525 port can be connected to a cigarette lighter cable; however, the maximum output is limited to 120W.

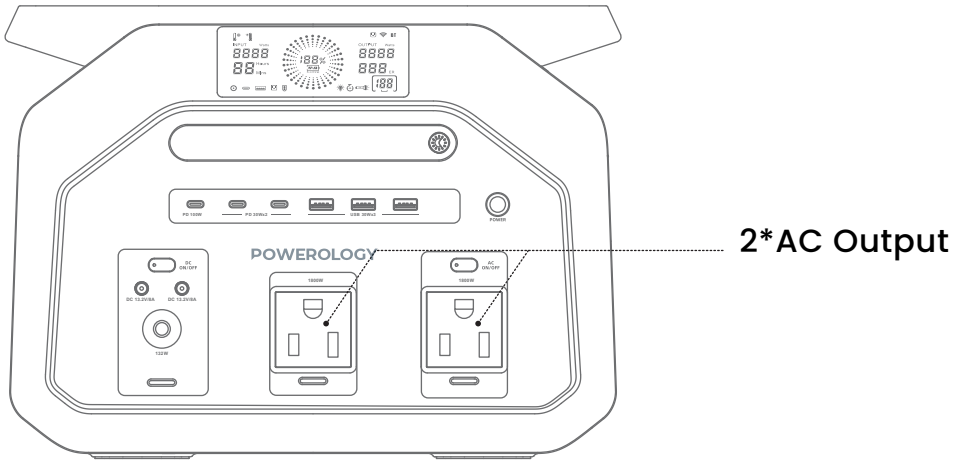
⚠ **Attention:**

Protection mode (DC outputs)

1. Overcurrent protection: If the DC output port is overloaded, the DC icon on the screen will blink. Remove the device, then press the DC button to restore normal operation.

2. Short-circuit protection: If the DC output ports experience a short circuit, remove the device and press the DC button to reset the product to normal.

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 enter AC mode.

2. Ensure the power rating of the connected AC appliance does not exceed 1800W.

⚠ **Attention:**

If the battery voltage drops below 44.8V, the AC output function will automatically shut down. It will resume normal operation after recharging.

Protection mode (AC output):

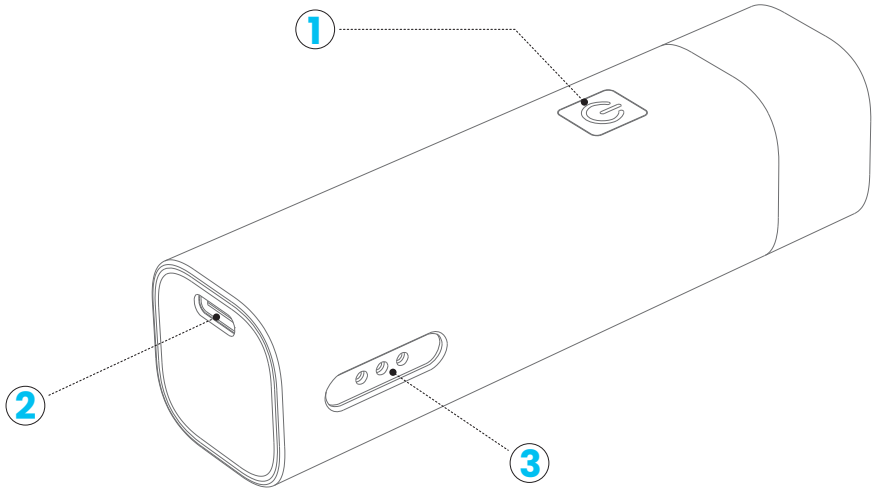
A. This product features under-voltage protection, overload protection, short-circuit protection, and over-temperature protection. It is built with a double isolation circuit for safety, reliability, and high efficiency.

B. In the event of overload, over-temperature, or short circuit, the AC icon will blink, and the AC output function will automatically shut down to ensure safety.

Specifications

Battery Type	LiFePO4 (Lithium Iron Phosphate)
Battery Capacity	1024Wh (Approx. 20000mAh @51.2V)
Battery Voltage	51.2V nominal
Voltage	230Vac (180-260V)
Frequency	60/50Hz
AC Input	1200W
MPPT Solar Input	500W max (10-52V)
XT60 DC Input	120W max (10-52V)
AC Output	1800W (Nominal Power) 3600W (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	12.7kg
Product Dimension	232.6×269.5× 361.5mm

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. Do not drop it or expose it to collisions or strong impacts.

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

3. Avoid placing the product near flammable or combustible liquids to prevent fire or smoke hazards.

4. Do not place the product into the storage box immediately after use, as residual heat may damage the white LED. Ensure the product is fully cooled before storage.

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

Error Code Description

Flashing Icon or Displayed Code	Description
	The battery is discharging due to over-temperature and charging is occurring at an over-temperature condition.
	The battery is discharging due to under-temperature and charging is occurring at an under-temperature condition.
	Battery charging is experiencing an over-temperature caused by photovoltaic (PV) charging.
	Battery charging is experiencing an over-temperature caused by grid charging.
	Battery charging is experiencing an over-temperature caused by combined grid and PV charging.
	A failure in PV charging has occurred due to the battery charging under-temperature.
	An AC charging failure has occurred due to the battery charging under-temperature.
	A combined grid and PV charging failure has occurred due to the battery charging under-temperature.
	Charging voltage or over-current has been detected during PV charging.
	Grid under-voltage, over-frequency, under-frequency, or grid charging over-current has been detected during grid charging.
	The Type-C port is overloaded or has a short-circuit condition.
	The USB port is overloaded or has a short-circuit condition.
E01	There is a soft start fault in the inverter.
E02	The inverter output is experiencing a short circuit fault.
E03	The inverter has an under-voltage fault.

E04	The inverter has experienced an over-voltage fault.
E05	The inverter is currently experiencing a short circuit fault.
E06	The inverter output is experiencing an over-current fault.
E07	The inverter DC component is experiencing a fault due to excessively high values.
E08	The inverter is experiencing an over-temperature fault.
E09	The inverter discharge circuit is experiencing an over-current fault.
E10	The inverter charging circuit is experiencing an over-current fault.
E11	The inverter current sensor has detected a fault.
E12	The inverter output is experiencing over-voltage, under-voltage, over-frequency, or under-frequency faults.
E13	There is a short circuit in the AC load.
E14	The inverter main relay is faulty.
E15	The inverter fan is faulty.
E16	The inverter DSP and main-control MCU have a communication fault.
E17	The active MCU and BMS are experiencing a communication fault.

⚠ Attention:

This product contains an internal, non-removable LiFePO4 rechargeable battery. Do not attempt to remove the battery, as this may cause damage to the device.

The battery supports over 4000 charge and discharge cycles.

Caution

1. Do not short-circuit the product. To prevent short-circuiting, keep the product away from all metal objects.
2. Do not expose the product to fire, water, or other liquids. Avoid high ambient temperatures and direct sunlight.
3. Keep the product away from humid and dusty environments.
4. Do not disassemble or reassemble this product.
5. Avoid dropping the product, placing heavy objects on it, or subjecting it to 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 during operation.
9. Avoid overcharging the product.
10. When 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.

Cold Weather Usage

Cold temperatures (−20°C to −10°C) can reduce the battery capacity due to its chemical characteristics. For off-grid use in sub-zero conditions, it is recommended to store the product in an insulated cooler connected to a power source (such as a 12V/24V car, wall outlet, or solar panel). The natural heat generated by the product inside the insulated cooler will help maintain battery capacity at its highest level.

Disposal and Recycle

This product should not be disposed of with regular household waste. Please dispose of or recycle the product and its battery according to local laws and regulations.

Disclaimer

1. Our company is not liable for damages caused by fire, earthquakes, third-party actions, accidents, intentional misuse, abuse, or other abnormal conditions.
2. Do not attempt to repair any damage to the AC plug or power supply on your own.
3. Our company assumes no liability for damages resulting from improper 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 1800W. It is not suitable for use with equipment related to personal safety or critical applications such as medical devices, nuclear facilities, aerospace manufacturing, or spacecraft. We disclaim liability for any accidents, fires, or equipment failures caused by misuse of this 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**