

P600

User
Manual

Disclaimer:

Read and understand all safety instructions, warnings, terms of use, and disclaimers carefully. Refer to the User Manual and stickers on the product before use. The user takes full responsibility for any use and operations of the product. You should familiarize yourself with related regulations in your area. You are solely responsible for observing all relevant regulations and using Ampace products in a way that is compliant.

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1 Specification

Product Info	
Net Weight	8.0kg/17.6lbs
Dimensions (L*W*H)	26.3*22.1*21.5cm/10.3*8.7*8.4in
Capacity	584Wh 15.2V
Extended Battery	Support
Certification	CE, FCC, RoHS2.0
Ambient Temperature Range by Charging	-10~45°C (14°F~113°F)
Ambient Temperature Range by Discharging	-20~45°C (-4°F~113°F)

Output Ports	
AC (*2)	Pure Sine Wave, total 600W(Surge 1200W), US 110V 60Hz, UK/EU/AU 220~240V 50HZ
Max Device(s) Power Supported by A-turbo ①	1,800W for resistive load
USB-C (*1)	5/9/12/15/20V 3A 60W max
USB1 (*2)	5V/2.4A 12W max, per port
USB2 Fast Charge (*1)	5V/3A 9V/2A 12V/1.5A 18W max
Car Charger (*1)	12-16.8V 10A 168W max
DC 5521 Output (*2) ②	12-16.8V 10A 168W max
Jump starter	12V start current 600A (Peak current 1,500A)

① Not all electrical appliances with resistive load less than 1,800W is applicable.; it's incompatible with appliances with strict voltage requirements. Appliances with voltage protection (such as precise instruments) are not supported. It is more suitable for heating devices. This function will keep the device working, but at less power than the device's rated power.

② Car charger shares power with the DC5521 output port, offering a maximum output of 168W.

Input Ports	
DC Input	Adapter:12~30V 100W max
	Solar panel: 12~30V 100W max, MPPT supported
	Car charger: Supports 12/24V, 100W max

Battery Info	
Cell Chemistry	Lithium-ion
Cycle Life	1000 cycles to 70% capacity
Protection	Over-voltage Protection; Over-load Protection; Over-temperature Protection; Short Circuit Protection; Low Temperature Protection; High Temperature Protection; Low Voltage Protection; Over-current Protection.

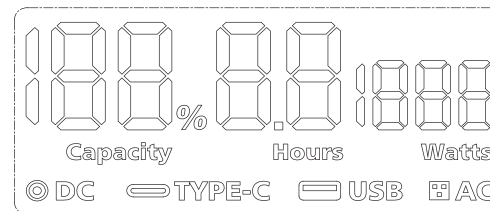
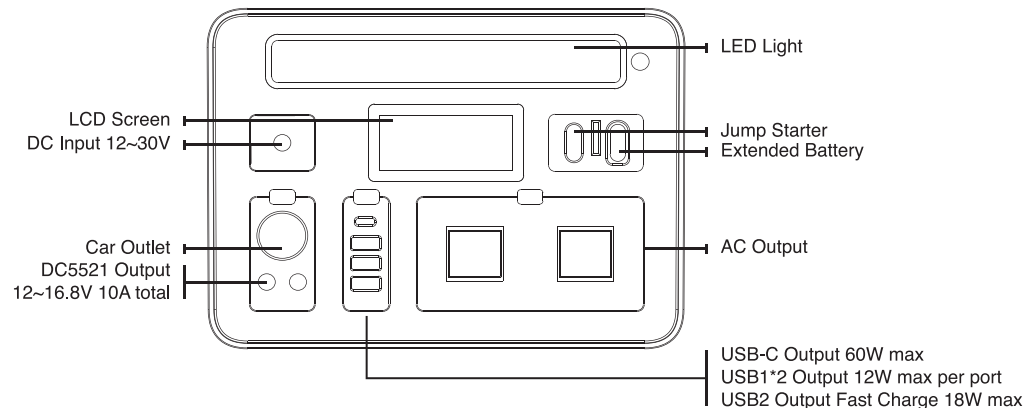
2.1 Usage

- 1 Do not use the product near heat sources, such as fire or heating furnace.
- 2 Avoid contact with any liquid. Do not immerse the product in water or get it wet. Do not use the product in rainy or humid environment.
- 3 Do not use the product in a strong static/magnetic environment.
- 4 Do not disassemble the product in any way or pierce the product with sharp objects.
- 5 Avoid using wires or other metal objects that may cause short circuit.
- 6 Do not use unofficial components or accessories. To replace any components or accessories, official Ampace channels are recommended for relevant information.
- 7 Always follow the ambient temperature specified in this user manual when using the product. If the temperature is too high, serious hazardous situations such as fire or explosion may occur. If the temperature is too low, the product performance may be severely impacted, including ceasing to work
- 8 Do not stack any heavy objects on the product.
- 9 Do not hinder the fan from running during operation, nor place the product in unventilated or dusty area.
- 10 Avoid collision, dropping or severe vibration when using the product. If subjected to a severe external collision, the power supply should be turned off immediately and the product should be forbidden to using. Make sure the product is well fastened during transportation to avoid vibration and collision.
- 11 If accidentally drop the product into water while using, keep it away in a safe open area until it is completely dry. The dried product should not be used again, and should be properly disposed of according to Section 2.2 below. If the product catches fire, it is recommended to use fire extinguishers in the following order: water or water mist, sand, fire blanket, dry powder, and carbon dioxide fire extinguisher.
- 12 Use a dry cloth to clean off the dirt on product ports.
- 13 Place the product on a flat surface to avoid damages from falling down. If the product flips over and is severely damaged, turn it off immediately, place it in an open area away from people or flammable materials, and dispose of it in accordance with local laws and regulations.
- 14 Make sure that the product is kept out of reach of children and pets.

2.2 Disposal

- 1 If conditions permit, make sure that the battery is fully discharged before disposing of it in a designated battery recycling bin. The product contains batteries with potentially hazardous chemicals, therefore it is strictly prohibited to dispose of it in ordinary trash cans. Please follow the local laws and regulations regarding battery recycling and disposal.
- 2 If the battery cannot be fully discharged due to product failures, do not dispose of the battery directly in the battery recycling bin. In such case, contact professional battery recycling authority for further processing.
- 3 Over-Discharged batteries that cannot be recharged should be disposed of.

3.1 Product Details



3 Getting Started

LCD Screen

When you press any power button, the LCD screen will light up displaying charging or discharging status, Battery Power, Available Time (Hours), and Power Consumption (Watts) will be displayed on the screen



The current battery power, it is displayed as a percentage (%).



Available time at the current power.



The current total input/output power.



Press the [DC] button to turn on the DC output function.



Press the [USB] button to turn on the USB output function.



Press the [USB] button to turn on the TYPE-C output function.



Press the [AC] button to turn on the AC output function.

3.2 General Product Usage

● **It is recommended to fully charge the product before using for the first time.**

Power on:

At the OFF state, press any button to turn on the product. The display shows DC/TYPE-C&USB/AC, indicating that the corresponding function is on.

Manual shutdown:

Manually turn off all outputs, the display will stop showing DC/TYPE-C&USB/AC, and dim after 30s, and the product will shut down after 60s.

Automatic shutdown

Regardless of whether there is an electrical appliance connected, the product will remain on for 6 hours every time after startup, in order to ensure the low-power electric appliances can be fully charged. After 6 hours, the product will continue to operate if it detects there is a load; otherwise, it will automatically shut down.

Note: Some products, such as DC 12V car refrigerators, have intermittent power consumption, and this function can ensure their normal use; Bluetooth headsets and other products have a very small charging current, and they will be fully charged within 6 hours.

Overload shutdown:

If any output port is overloaded, the product will shut down, and can only be rebooted after removing the overload.

Low battery shutdown:

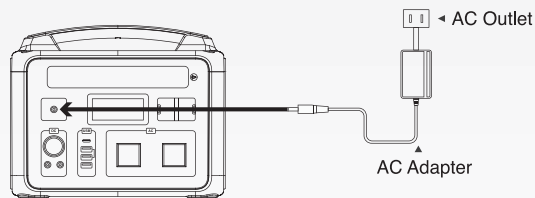
The product will shut down when remaining battery capacity is too low. Please charge the product in a timely manner.

Over temperature shutdown:

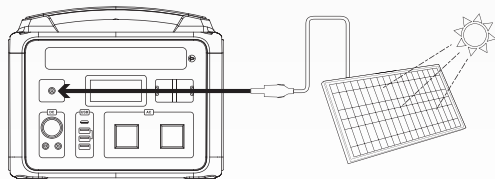
The product will shut down when it is beyond the range of allowable temperature. Do not use it in this case. The product should be placed in a ventilated environment at room temperature, and wait until the product (Cell) temperature return to the normal range before using again.

3.3 Charging Method

Wall charger: Around 6.5 hours

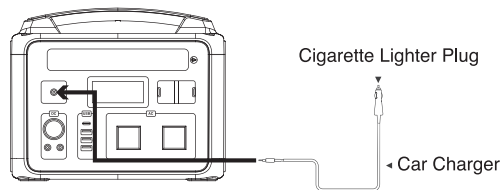


100W Solar panel (Optional): About 8 hours depending on weather. Users can connect solar panel as shown in the illustration below to recharge the product. The product supports 12-30V DC input, and 100W max charging power



Car charger: About 10 hours

Users can recharge the product through the Input Port. It supports 12V/24V car chargers.

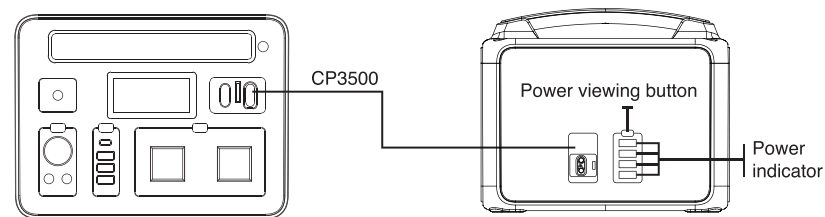


3.4 Using Extended Battery (Optional)

The product can connect to other Extended Battery to meet higher capacity needs.

To extend battery, please follow the instructions below:

- 1 Before connecting the product to an Extended Battery, please make sure that both the product and the Extended Battery are turned off.
- 2 After connecting the product to an Extended Battery, please make sure the cable (CP3500) connection is reliable.
- 3 Do not directly connect or remove the extended battery during charging and discharging. If you need to connect or remove it midway, please turn off the product first.
- 4 Do not touch the metal terminals of the Extended Battery connector with your hands or other objects. If there are foreign objects adhering to the metal terminals, please gently wipe them with a dry cloth.

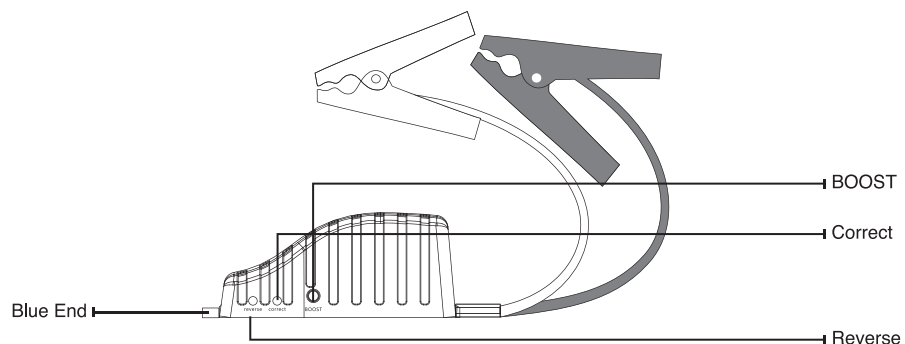


When charging, the main battery will be charged first. If the main battery is fully charged, it will automatically switch to charge the extended battery through the CP3500 cable. When discharging, the power of the extended battery will be used first, and as the extended battery is used up, the main battery pack will continue to be used automatically.

CAUTION

CP3500 cable will generate high temperature when working. Please DO NOT touch it in case of getting burnt!

3.5 Car Jump Starter (Optional)



Jump Start 12V Vehicle Instruction:

- 1 Before using the Jump Starter function, ensure that the power of the P600 is greater than 20%, and when the temperature is below 0°C, greater than 50%.
- 2 No need to disconnect car battery. First connect the Blue End of the smart clamp to the P600 "Jumper Starter" interface, then connect the red clamp to car's positive port, and finally connect the black clamp to car's negative port.
- 3 When "correct" lights up green, it indicates the car can be started normally.
- 4 Start the engine.
- 5 Remove the battery clamp.

Car Jumper Troubleshooting

Fault	Possible Cause	Solution
"Reverse" lights up red or the buzzer is buzzing.	Car battery connections are reversed	Immediately disconnect the Jump starter from the car and reconnect it properly.
"Correct" lights up red.	Abnormal communication. / P600 battery voltage is low. / Battery temperature is high. / Smart clamp temperature is high.	<ol style="list-style-type: none"> 1. Check whether the power of the P600 is too low. 2. Check whether the smart clamp and the host are connected reliably. 3. Lower battery and smart clamp temperatures.
"Correct" lights up red with blinking.	The starting current is too large or there is a short circuit in the car line.	<ol style="list-style-type: none"> 1. Mainly check the short circuit inside the car, do not continue to start without troubleshooting. 2. The starting current of this model is too large and cannot be used.
"Correct" flashes red and green alternately.	Smart clamp's self-protection for ignition too many times.	Please put it at room temperature for more than 10mins and try again
"Correct" lights up green with blinking or the lights are not on.	There is no car battery or the car battery voltage is low.	<ol style="list-style-type: none"> 1. Make sure connection is correct, and then press the "BOOST" button. When the "Correct" lights up green, start the car engine. 2. If after pressing "BOOST" button, the red light is on, it is forbidden to use.

! CAUTION

READ THIS INSTRUCTION BEFORE USE

- 1) Do not press the "BOOST" before connecting the car battery.
- 2) Do not connect 2 clamps.
- 3) Only for 12V vehicles, RED clamp for "+", BLACK clamp for "-"

1. Q: What type of battery does the product use?

A: This product uses a high-quality lithium-ion battery.

2. Q: What equipment can the AC output port of the product carry?

A: The rated power of the AC output port of this product is 600W and the peak power is 1200W, which can supply power to most household appliances, but it is recommended to confirm the power of the appliance before use, and ensure that the sum of the power of all load equipment is less than the rated power.

3. Q: How do I know how long the product can be powered?

A: The LCD screen of this product will display the remaining usage time, which can be considered as an estimation of the powering time for the product if the power consumption is stable.

4. Q: How to judge whether the product is charging?

A: When charging, the LCD screen will display the remaining charging time, the last digit of the battery percentage and the remaining time will flash, and the input power will be displayed.

5. Q: How to clean this product?

A: Wipe this product with a dry, soft, clean cloth or tissue.

6. Q: How to store the product?

A: When storing, please turn off this product first, and then store it in a dry, ventilated place with room temperature. Do not place this product near water sources. For long-term storage, it is recommended to charge the battery to 80% every three months to prolong the life of this product.

7. Q: Can this product be taken on the plane?

A: No.

8. Q: Is the actual output capacity of the product consistent with the capacity stated in the user manual?

A: The capacity indicated in the user manual is the rated capacity of the battery pack of this product. Since this product has a certain efficiency loss during charging and discharging process, the actual output capacity of the product is lower than the capacity specified in the user manual.

9. Q: Why does the product make a "buzzing" sound when using?

A: This product uses an air cooling system. When the fan is working normally, it will make a slight sound, which is a normal phenomenon.

10. Q: Why I can't use the product within the rated output power range?

a. Battery capacity is low and needs to be charged.
b. The power used by some devices is greater than the highest peak power of the product or the nominal power of the device is greater than the actual power of the product.

11. Q: Will the charger be damaged due to heat during use?

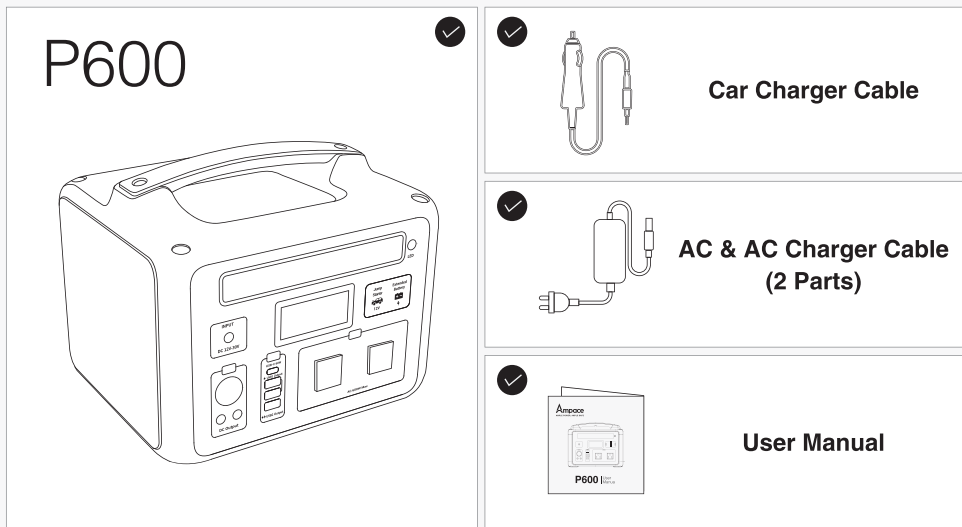
A: When the charger is in normal use, there will be some slight heat, which is a normal phenomenon.

12. Q: Is it possible to charge and discharge at the same time?

A: Yes.

Fault state	Possible Cause	Solution
Cannot be charged	The AC socket, charger, and input port are not connected properly, and the charging indicator is not on.	Reconnect AC port, charger, input port.
	Good contact, but the charging light does not light up.	The charger may be damaged, please contact after-sales service.
	The charging light is on, but it cannot be charged.	The product may be damaged, please contact after-sales service.
Product has no output	The appliance and the product are not properly connected.	Connect equipment and appliances correctly.
	The output switch is not turned on.	Turn on the corresponding output switch.
	Product battery is too low.	Charge the product.
	The electric appliance power is beyond the load range of this product.	Replace the product with a larger specification or reduce the load power.
	Could not troubleshoot.	The product may be damaged, please contact after-sales service.
Output breaks down in use	The electric appliance power is beyond the load range of this product.	Replace the product with a larger specification or reduce the load power.
	The power of the equipment is too small, which causes the product to fail to recognize and automatically turn off the output.	Restart.
	Could not troubleshoot.	The product may be damaged, please contact the after-sales service.

6 Packing List



ITEMS	QUANTITY
P600	1
AC Charge	1
AC Charger Cable	1
Car Charger Cable	1
User Manualr	1

7 Warranty

This power supply product purchased through regular channels (Amazon, official website) enjoys a 12-month warranty service;

Note: Customers need to provide proof of purchase or other valid evidence when seeking warranty service.

Warranty Period

Within 12 months from the date of purchase of this power supply product, if the product is found to have any inherent quality problem or manufacturing defect, we will repair it for you free of charge. Within six months of purchase, we will bear the return shipping cost; beyond six months, the customer will bear the return shipping cost, and we will bear the shipping cost of the repaired product.

Replacement

If the power supply product cannot be repaired due to its own quality defects during the warranty period, we will provide you with a replacement product (not lower than the performance of the original product), and the warranty period of the replacement product is the remaining warranty period of the original product.

The following conditions are not covered by the warranty:

- 1 Products purchased through informal purchase channels, or non-authentic products of our company;
- 2 Giveaway and optional accessories;
- 3 Normal appearance wear and tear during use;
- 4 Misuse, abuse, accidental damage, intentional damage;
- 5 Unauthorized disassembly and repair by unauthorized maintenance personnel;
- 6 Problems caused by the use and storage not in accordance with the requirements of Chapter 2 and Chapter 3 of this manual;
- 7 Damage caused by natural disasters, lightning, earthquake, tsunami and other irresistible factors;

If you have any questions, please feel free to contact us:

Email: Services@ampacesupport.com

There are no warranties other than those stipulated herein. Ampace shall not be liable for any consequential or indirect damages arising or in connection with the product.

