

P600 Portable Power Station

User Manual



Please read this manual carefully and fully charge the product before using or storing this product.

Please use the standard adapter for charging.

First of all, thank you very much for choosing Huafon ESS's products. Huafon ESS is committed to "making energy safer, more efficient and cleaner", based on the concept of "artificial intelligence +energy storage", to create a high-tech enterprise with intelligent energy storage products.

Before you start using the product, we recommend that you read this manual carefully so that you can quickly understand how to use the product properly.

Warning:

Improper use of this product may result in a fire, damage to goods or personal injury, so please be sure to follow the safety guidelines below for using this product.

Product Disclaimer

Please read all security tips, warning messages, terms of use and disclaimers carefully. Before use, please fully understand the terms of use and disclaimer of this product as well as the label on the product. Users assume full responsibility for all use and operation. Please familiarize yourself with the relevant laws and regulations in your area. It is your responsibility to be aware of all relevant regulations and to use this product in a legal and compliant manner.

Guidelines for the Safe Use of Products

Product Use

1. Please do not disassemble this product without permission. Otherwise, electrocution may occur, or it triggers a battery fire, explosion, etc., thus endangering personal safety. We will not be responsible for any consequences caused by dismantling the product without permission.
2. It is strictly forbidden to make the product come into contact with any liquid. Do not immerse the product in water or get it wet, and do not use the product in the rain or wet environment, as this may cause the battery to spontaneously combust and may even cause an explosion.
3. It is strictly forbidden to use unofficially provided parts. If you need a replacement, please contact Huaon ESS customer service (please see the warranty card for customer service contact information). Huaon ESS is not responsible for product failures and accidents caused by the use of components not provided by Huaon ESS.
4. Before installing or unplugging other modules of this product, please ensure that the power supply of this product is turned off. Do not unplug other modules or components while the power is on, as this may damage the power interface.
5. Do not use sharp objects to pierce the product, which may cause a fire or even an explosion.
6. It is prohibited to use this product in a strong magnetic or strong electrostatic environment; otherwise it may not work properly. This leads to the failure of certain protection functions of the product, which causes serious product failures.
7. Do not hit the product with force, and do not place heavy objects on the product.

- 8.If the ambient temperature is too high (over 60°C), the battery may catch fire or even explode. If the ambient temperature is too low (below -20°C), it will lead to a serious decline in product performance. Please wait for the device to return to normal temperature before normal use.
- 9.This product shall not continue to be used if it is strongly dropped or hit by an external force.
- 10.If the interface of the product is dirty, please wipe it clean with a dry cloth.

Product Charging

- 1.Please use the adapter and charging cable specified by our company for charging. We are not responsible for any consequences caused by your use of other unauthorized adapters and charging cables for charging.
- 2.Please make sure the product is placed in an environment free of flammable materials when you charge, to prevent accidents from happening.
- 3.The internal battery of the product that has just completed full discharge may be hot. Thus, to ensure safety, please wait until the product has cooled down to room temperature before starting to charge.

Product Storage and Transportation

- 1.If you need to transport this product by express delivery or logistics, please reduce the remaining power of the product to about 30%.
- 2.It is prohibited to store or transport this product together with other metal objects.
- 3.The product should be stored in a dry environment.
- 4.Do not place this product near a heat source, to avoid raising the temperature of the product and causing safety accidents.
- 5.If this product is left idle for a long time, please store it after it is fully charged. During the storage period, the product should be charged once a month to ensure its battery activity.
- 6.Please keep the product out of reach of children. If a child accidentally swallows a part, seek medical attention immediately.

Product Disposal

Batteries are dangerous chemicals that can cause serious harm to the environment when discarded at will. Please be sure to discharge the battery completely before placing the waste battery in a special battery recycling bin. Please do not dispose of the battery at will. Please comply with local laws and regulations regarding battery recycling and disposal.

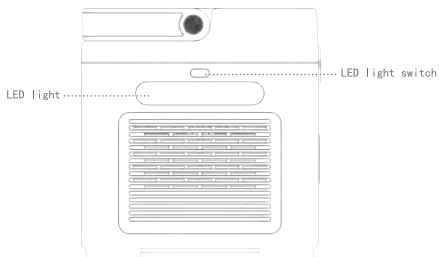
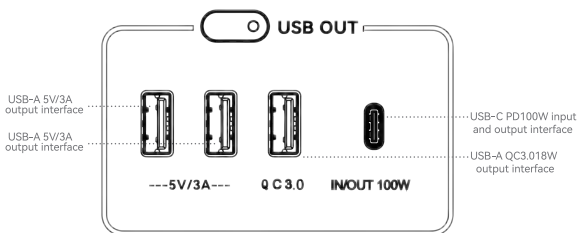
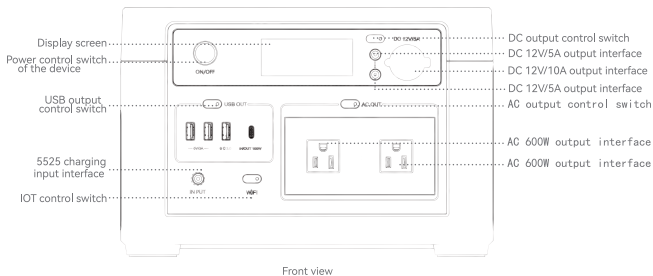
Product Maintenance

- 1.The best ambient temperature range of the product is: 0°C - 45°C during charging; -20°C - 60°C during discharging.
- 2.Please maintain and charge the product regularly (once every three months is recommended). The specific method is: discharge the product to about 30% of the remaining power, and then charge it to 90%.

Description of Product Features



Product Diagram



1.Display screen

The display screen can show the remaining power, charging and discharging power, charging and discharging time, abnormal alarm and other information.

2.LED light

If you short press the LED light on/off button in the power-on state, the LEDlight will switch among soft light, strong light and off in sequence; if you long press the LED light on/off button, the SOS flash mode will be enabled.

3.USB output control switch

Short press this button to turn on/off the USB output in the power-on state.

4.USB-A 5V/3A output interface

It has a total of two interfaces, which can provide a maximum power output of 5V/3A respectively

5.USB-A QC3.018W output interface

It supports QC3.0 fast charging and supports output according to the following specifications: 5V/3A, 9V/2A, 12V/1.5A, providing a maximum output power of 18W. It can charge devices that support the QC fast charging protocol.

6.USB-C PD100W input and output interface

The USB-C output interface supports PD3.0 fast charging and supports output according to the following specifications: 5V/3A, 9V/3A, 12V/3A, 15V/3A, 20V/5A, providing a maximum output power of 100W. It provides fast charging for devices that support the PD3.0 fast charging protocol. In addition, the interface also supports charging for the device via a PD fast charger adapter.

7.5525 charging input interface

Use the adapter that comes with it for charging. During charging, first plug the adapter into the charging input interface, and then plug the adapter into the utility AC220V socket.

8.DC 12V/5A output interface (5521 interface)

With two interfaces in total, it can provide a maximum power output of 12V/5A for the cigarette lighter interface and a total power output of 120W for the DC 5521 outlet, respectively when used alone.

9.DC 12V/10A output interface (car charger output port)

The car charger output port can provide a maximum power output of 12V/10A.

The total power of the car charger output port and DC 5521 output port is 120W.

10.DC output control switch

Short press this button to turn on/off the DC output in the power-on state.

11.Power switch of the device

Long press for 3 seconds to turn on/off; short press to turn off/light up the screen in the power-on state.

12.AC output control switch

Short press this button to turn on/off the AC output in the power-on state.

13.AC 600W output interface

It has two interfaces in total and outputs AC220V pure sine wave power. Combined, it provides a maximum of 600W of power. It supports 600W-1000W by Power Boost. Description of the Power Boost function: The Power Boost function of P600 can support the use of appliances with rated power of 600W-1000W without overload protection. When an appliance with more than the rated power is used, the device with conventional inverters is protected from overload, thus rendering such appliances unusable.

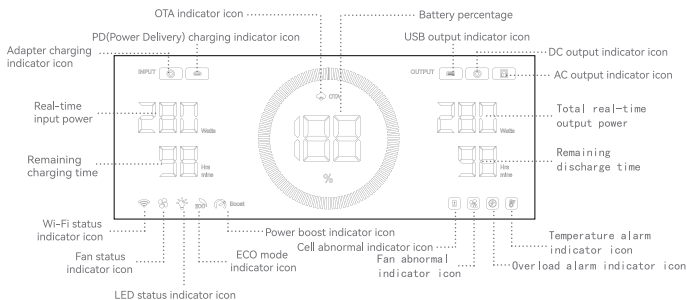
The Power Boost function of P600 is suitable for 600W-1000W appliances. Please note when using:

- a.P600 turns off the Power Boost function by default. To use this feature, you need to enable it in APP.
- b.When you use appliances with the rated power of 600W-1000W, it is best to access only one appliance to avoid affecting the effectiveness of use.
- c.Power Boost is not suitable for all appliances. It still cannot be applied to appliances with rated power of 600W-1000W that have strict requirements on voltage. For example, air conditioners and air compressors are not recommended to use this function to avoid damage. It is recommended to use pure resistive heating appliances with rated power of 600W-1000W, such as hair dryers, electric kettles, electric blankets, coffee machines and other devices.

14.IOT control switch

Press and hold for 3 seconds to enable the WIFI function of the device for IOT connection.

Description of the Display Screen Interface



1.Adapter charging indicator icon

The indicator icon lights up when the adapter (or solar panel, car charger) is connected for charging.

2.PD(Power Delivery) charging indicator icon

The indicator icon lights up when the PD(Power Delivery) adapter is connected for charging.

3.USB output indicator icon

The indicator icon lights up when the USB output is turned on by short pressing the USB OUT button.

4.DC output indicator icon

The indicator icon lights up when the DC output is turned on by short pressing the DC button.

5.AC output indicator icon

The indicator icon lights up when the AC output is turned on by short pressing the AC button.

6.Real-time input power

When the adapter is connected for charging, real-time input power will be displayed.

7.Total real-time output power

Display the current total real-time output power

8.Remaining charging time

When charging with an adapter, the remaining charging time will be displayed.

9.Remaining discharge time

Display the current remaining discharge time.

10.Wi-Fi status indicator icon

This product supports Wi-Fi connections. After completing the network settings of this product, the user can check the status of the product by mobile APP, perform settings, software upgrades and other operations.

11.Fan status indicator icon

When the internal temperature is higher than the safety temperature, the cooling fan will working automatically, and the indicator icon will light up. When the internal temperature of the product returns to safety, the fan will stop working and the indicator icon goes out.

12.LED status indicator icon

When the LED light is turned on, the indicator icon lights up; when the LED light is turned off, the indicator icon goes out.

13.ECO mode indicator icon

When the ECO mode is turned on, the indicator icon lights up; when the ECO mode is turned off, the indicator icon goes out.

14.Power boost indicator icon

When the Power Boost is turned on, the indicator icon lights up; when the Power Boost is turned off, the indicator icon goes out.

15.Cell abnormality indicator icon

The Battery Management System of this product will automatically detect the battery status, and if the battery is abnormal, the indicator icon will light up. Abnormal battery cells may degrade product performance, please contact customer service as soon as possible (please refer to the warranty card for customer service contact information) for maintenance.

16.Fan abnormal indicator icon

This product will automatically detect the status of the cooling fan, and if it detects that the status of the fan is abnormal, the indicator icon will light up. An abnormality of the fan may cause the internal temperature of the product to over the safety temperature. Please turn off the product immediately and contact our customer service for maintenance.

17. Overload alarm indicator icon

When the power of the electrical appliance over the rated power, the overload alarm icon lights up. Please disconnect the high-power electrical appliances immediately, and wait for the alarm indicator icon to go out before resume working.

18. Temperature alarm indicator icon

When the product temperature is higher than the safety temperature, it will start automatic protection, and the temperature alarm indicator icon will light up. For safety reasons, charging and discharging cannot be performed at this moment. Please wait until the product temperature returns to safety and the alarm indicator icon goes out before resume working.

19. OTA indicator icon

When the OTA is turned on, the indicator icon lights up; when the OTA is turned off, the indicator icon goes out.

20. Battery percentage

Displays the current battery percentage. If the power is too low, please charging immediately. The light surround the indicator will flashing during charging.

Product Technical Parameter

Basic Specification

Product Model	P600
Size	289x187x180mm
Weight (without accessories)	6.5kg
Color	Moonstone Gray
Power	600W
Capacity	635Wh
Certification Standard	ROHS、PSE、FCC、CE、UL、MSDS、UN38.3
FCC ID	2BAI5-P600
Contain FCC ID	2AC7Z-ESPS3WROOM1

Input

Adapter input	AC 100--240V(50Hz/60Hz), 120W
USB-C input	5V/3A, 9V/3A, 12V/3A, 15V/3A, 20V/5A, Max.100W
Solar charging input	Max. 120W, Max. input voltage 24V
Charging by car charger	Supports up to DC 12V/10A
Parallel charging	Supports utility (or car charger/solar) and USB-C charging simultaneously

Output

USB-A output*2	Each output interface provides DC 5V/3A power supply respectively, 15W power
USB-A QC3.0 output*1	With a maximum power of 18W, it can output according to the following specifications: 5V/3A, 9V/2A, 12V/1.5A.
USB-C PD100W output*1	With a maximum power of 100W, it can output according to the following specifications: 5V/3A, 9V/3A, 12V/3A, 15V/3A, 20V/5A.
DC 5521 output*2	It can provide a maximum power output of 12V/5A when used alone. The total power of the car charger output interface and DC 5521 output interface is 120W.
Car charger output*1	It can provide a maximum power output of 12V/10A. The total power of the car charger output interface and DC 5521 output interface is 120W.
AC pure sine wave output*2	It has two interfaces in total and outputs AC220V/110V pure sine wave power. Combined, it provides a maximum of 600W of power. It supports 1200W by Power Boost.

Battery

Battery type	Trithium
Discharging temperature	-4°F to 140°F±5°F (-20°C to 60°C±3°C)
Charging temperature	32°F to 113°F±5°F (0°C to 45°C±3°C)
Cycle life	Residual capacity after 1000 cycles ≥ 80%

How to Charge

Note:

Improper charging of this product may result in damage to the product, or even fire and explosion, endangering personal and property safety, so please be sure to follow the guidelines below for charging this product.

Charging with the standard adapter

Plug the output of the adapter that comes with it into the 5525 charging input interface of this product, and then plug the input of the adapter into a utility outlet

Charging with PD fast chargers

Just plug the output of the PD fast charger adapter into the USB-C PD100W input and output interface of this product, and then plug the input of the fast charger adapter into the utility outlet.

Charging with solar panels

You may purchase solar panels from our company and connect them to the 5525 charging input interface of this product so that you can charge this product even in the field.

Charging with car chargers

You can use the car charger cable that comes standard with this product. Plug the input of the car charger cable into the car cigarette lighter power supply (DC12V or DC24V) and plug the output into the 5525 charging input interface of this product for charging.

Is parallel charging possible?

Yes. To shorten the charging time, you can use both the adapter (or solar panel, car charger) and the PD fast charger adapter for charging.

Can it be charged and discharged?

This product supports charging and discharging at the same time. You can charge while connecting an external appliance for discharge.

Packing List



P600 Mobile
Power



Car charger
cable



AC cable



Adapter



User manual
and warranty card

App Use

You may download and install the Huafo

n ESS App by scanning the QR code on the right, which allows you to control and view the information and data of this product conveniently.


FCC Caution

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

- (1) this device may not cause harmful interference.
- (2) this device must accept any interference received, including interference that may cause undesired operation. Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

To maintain compliance with FCC's RF Exposure guidelines, This equipment should be installed and operated with minimum distance between 20cm the radiator your body: Use only the supplied antenna.

Warranty Card

This product is guaranteed for one year + extended warranty for one year. The warranty period is effective from the date of purchase by the user. To protect your warranty rights, please retain your proof of purchase or other reasonable documentary evidence.

The following cases are not covered under warranty:

1. Damage caused by personal reasons after the product has started to be used.
2. Product performance failure due to human causes.
3. Damage caused by natural disasters, lightning, accidents and other irresistible factors
4. Damage or malfunction caused by failure to use in accordance with the requirements of the Operation Manual

Please contact our company for after-sales service matters

Email: service-ess@huafeng.com

Tel: 400-8815 - 686

Website in Chinese: www.huafeng-ess.com

Website in other languages: www.huafon-ess.com

Note: Please read the Operation Manual carefully before use and follow it strictly.

Name:	Tel:
Address:	
Date of Purchase:	MM-DD-YY
Purchase Channel:	
Product Model:	

Date	Maintenance Records

Certificate of Conformity	
Quality Inspector::	
Date of Inspection:	
Company Name: Zhejiang Huafon Energy Storage Technology Co., Ltd.	