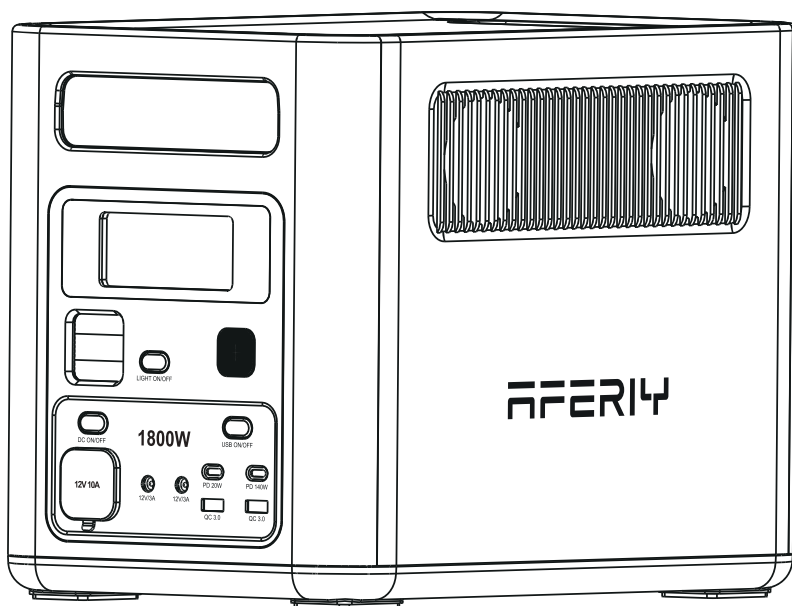# ∩FERI4

Portable Power Station

AF-P180 | User Manual

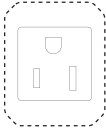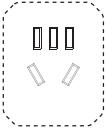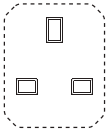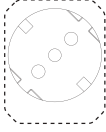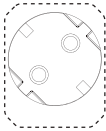**1800W**

Hi dear, thank you very much for purchasing and experiencing the AF-P180 portable power station. Before operating this product, please carefully read the user manual for proper operation.

According to the transportation requirements of the international customs for battery products, the battery level of this product is only less than 35% when it leaves the factory. Please fully charge the product after unpacking it to start the experience tour of AF-P180.

⚠ Precautions For Use

1. Please avoid long-term storage and use of this product in environments with high temperature and humidity or direct sunlight to avoid shortened battery life and other failures. The product should not be close to the fire source, otherwise it may cause a major fire or accident.

2. This product must not be disassembled or modified. Improper operation may cause product malfunction or even fire.

3. Be careful not to drop or drop the product from a high place, so as not to damage the product.

4. Please store or use this product out of the reach of children, otherwise the product may be dropped or collided and may cause bodily injury to children.

5. Please use our original accessories, and AFERIY will not guarantee the defective products caused by the use of non-original accessories.

6. Please directly plug in the wall socket to charge the product, do not use extension cords or cable taps, otherwise there is a risk of damage to the extension cords and cable taps or even a fire; If the extension socket is plugged in to charge this product, please do not connect other electrical appliances to this socket, otherwise the household meter may trip.

7. When the product is not in use or idle, please turn it off and unplug the power cable. If it needs to be idle for a long time, please consume the product from a fully charged state to an uncharged state, then recharge it to about 50% of the battery level and store it. In order to prolong the life of the product, please take three months as a cycle, operate and keep it in this way.

8. If the product reaches scrap conditions, please discard or recycle the product in accordance with local laws.
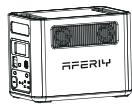
AC Output Parameter

Type of AC port	AC output
US/JP	100V~120V 50Hz/60Hz
CH	220V 50Hz
UK	220V~240V 50Hz/60Hz
EU	220V~240V 50Hz/60Hz
KR	220V 60Hz

Contents

Packing List

Portable Power
Station

AC Charging Cable
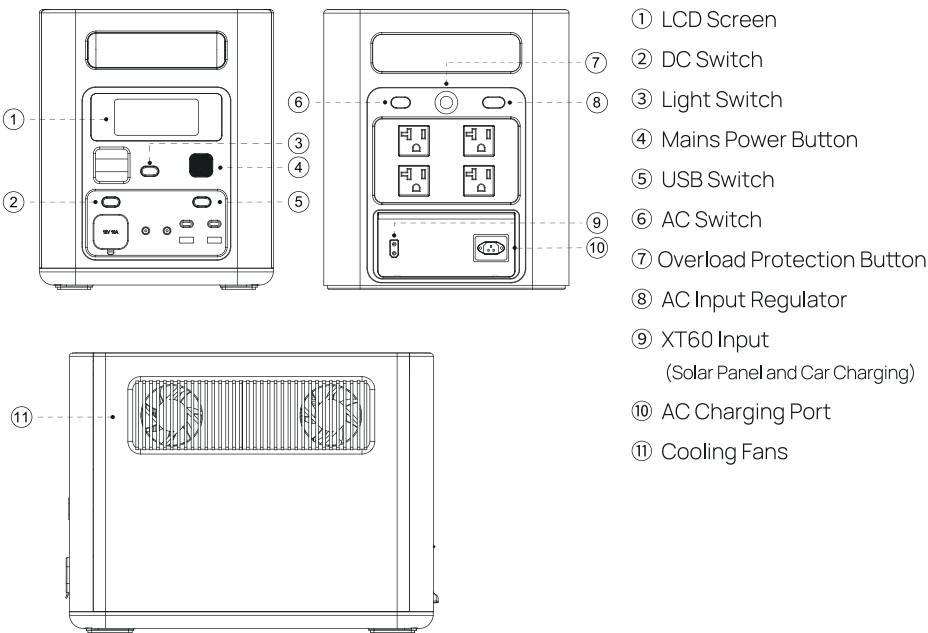

User Manual

MC4-XT60

Product Introduction

This product is a portable power device with a built-in battery pack with charge/discharge function. It includes both AC output interface and DC output interface such as USB output, cigarette lighter output, DC output, etc. It also has functions such as display, interface control, protection, and alarm. Moreover, this product can be charged by mains AC, solar panels and vehicle charging.

The following are the main features of this product:

- Equiped with LiFePO4 battery, the battery energy is up to 1024Wh, and after the safety level is extremely high.

- Pure sine wave AC output can meet almost all daily electronic equipment and small household appliances.

- Two-way fast charging technology is adopted to fully charge the product within 1.2 hours.

- A great variety of output interfaces such as USB-A, Type-C, DC5521, cigarette lighter output, etc., meet many different application scenarios.

- In UPS mode, the switchover time is less than 10ms which is truly seamless switching.

- Multiple protection mechanisms such as battery, circuit, structure, etc., guarantee the product safety.

Button Function Introduction

① LCD Screen
② DC Switch
③ Light Switch
④ Mains Power Button
⑤ USB Switch
⑥ AC Switch
⑦ Overload Protection Button
⑧ AC Input Regulator
⑨ XT60 Input
  (Solar Panel and Car Charging)
⑩ AC Charging Port
⑪ Cooling Fans

❶ LCD Screen

Display the product's battery level and usage status tips.

❷ DC Switch

Instructions: Short press the DC button to turn on the DC output port,and short press it again to turn it off.

Cigare port X 1	DC5521 X 2
12V/10A	12V/3A

❸ Light Switch

Instructions: Short press the LIGHT button, the LED light is on; short press it again, the LED light enters the SOS mode, short press in turn,enters the strobe mode, and finally the LED light is turned off (LED light in any mode, long press the LIGHT button for ≥ 1 second , directly turn it off).

❹ Mains Power Button

Instructions: Press and hold the power button for 3S to turn on/off the whole system.

❺ USB Switch

Instructions: Short press the USB button to turn on the USB output Port and short press it again to turn it off.

USB-A X 2	TYPE-C X 1	TYPE-C X 1
QC 3.0	PD-20W	PD-140W

❻ AC Switch

Tap the AC button to enable the AC output function. Since there may be differences in the AC output frequency and voltage in different regions, if you need to switch the frequency and voltage, the operations are as follows:
1) Press and hold the AC button for 3 seconds to enter the frequency switching mode, the 50Hz or 60Hz icon will flash on the display, short press the AC button again to select 50Hz or 60Hz; when the icon stops flashing and displays 50Hz or 60Hz, it indicates the switch is successful.
2) Quickly press the AC button for 10 times to select voltage.

❼ Overload Protection Button

When the power supply voltage is unstable due to lightning or other reasons, and there is a large voltage input at the AC Input, in order to protect the product, the overload protection function (safety circuit breaker) will activate and cut off the AC input port.
Please follow the steps below to restore the AC input function:
1) Turn off the power button and unplug all ports.
2) After confirming that there is no abnormality in each part, turn on the power button.
3) Press the overload protection button, connect the AC Cable to restore the AC input.

❽ AC Input Regulator

When you slide the switch to the left, it implies that the maximum AC input power is limited to 500W. On the other hand, when you slide the switch to the right, the maximum AC input power at this time will be 1000W.

❾ XT60 Input(Solar Panel and Car Charging)

This interface supports solar panel input or car charger input. For details, please refer to"Solar Panel Connection" and "Car/Vehicle Charging" of this manual.

❿ AC Charging Port

To charge the product by a household socket can achieve 1000W fast charging.It only takes 1.2 hours to fully charge from 0 to 100%. When charging in this wayplease pay attention to the following points:

※ Please directly plug in the wall socket to charge the product, do not use extension cords or cable taps, otherwise there is a risk of damage to the extension cords and cable taps or even a fire.

※ If the extension socket is plugged in to charge this product, please do not connect other electrical appliances to this socket, otherwise the household meter may trip.

⓫ Cooling Fans

When the product reaches the temperature threshold set by the system, the cooling fan will automatically run, accompanied by a certain fan noise (fan noise below 60dB is normal). Do not block the cooling suction/ exhaust port during use of this product, and do not place any object within the range of 30CM.

Download Method

Method 1:

Scan the QR code on the right.

Method 2:

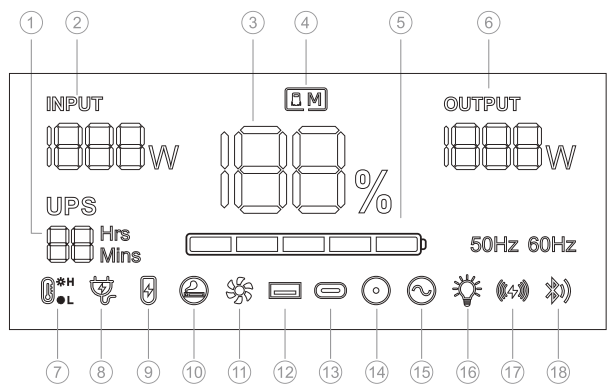Search for "BrightEMS" in the App Store (iOS) or in other mobile app stores.

Method 3:

Open a browser and search for the website:
"https://www.abisda.com/support/download"

Introduction of Display Interface

① Remain Using
② Total Input Power
③ Power Percentage
④ Main Engine Icon(M)
⑤ Power Level Indicator
⑥ Total Output Power
⑦ High/Low Temperature
⑧ Connected to the AC Mains
⑨ XT60 Input

⑩ Cigar Lighter (12V) Output
⑪ Fan Status
⑫ USB-A
⑬ USB-C
⑭ DC (12V) Output
⑮ AC Output
⑯ LED Light
⑰ WiFi
⑱ Bluetooth

Screen Display Description

Power display: When the product is in the charging state, the battery progress bar rotates continuously in the form of a clockwise marquee, and the battery level percentage gradually increases; when the product battery level is 0, the battery level percentage icon flashes.

Input and output status: When the product is working, the total input power, total output power and the cursor corresponding to the working area will be displayed on the screen.

Alarm prompt: See the following troubleshooting table for details.

Troubleshooting Sheet

Phenomenon	Cause	Processing method
◎ ⚠ ▭ ⬭ The above output icon flashes and beeps.	The output exceeds the standard and it's short-circuited.	1.Disconnect the device and restart the product. 2.Replace different electrical equipment to test the machine.
🔋ᴴ The temperature warning icon flashes and beeps.	The temperature of the productis too high or too low.	Remove the device and turn the power OFF Wait for the device to reach the appropriate temperature.
🔌 The icon of connecting to the AC mains flashes and the product cannot be charged.	The charging cable is poorly connected.	Check the connection status of the cable and the power supply of the power supply.

If you have any questions, please feel free to contact us.
Email address: support@aferiy.com.
Sincerely.

UPS Mode

• UPS Feature

This product has the function of backup uninterruptible power supply.The usage and operation precautions are as follows:
As shown in Pic1 below, when the product is connected between the wall socket and the electrical appliance, and the power supply and AC switch of the product are in the ON state, the product enters the UPS working mode. The AC mains in the socket supplies power to the electrical appliance through the bypass circuit, and also charges the product. In this working state:

1.The rated power of the electrical appliance must be lower than 1200W(only100V~120V) otherwise overload protection may be triggered.
2.The rated power of the electrical appliance must be lower than 1800W(only220V~240V) otherwise overload protection may be triggered.

Bypass circuit

Battery charging

load/Equipment
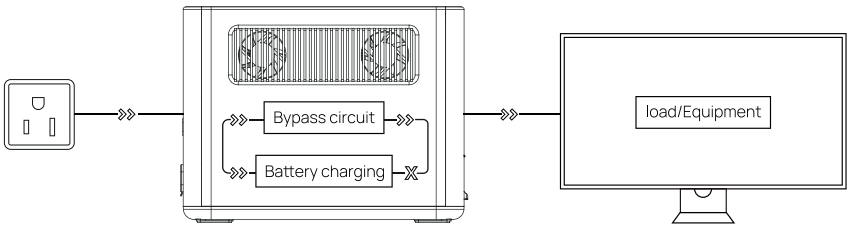
(Pic 1)

As shown in Pic2 below, when the AC mains at the socket end is disconnected, the bypass output inside the product stops working, the product switches to a bidirectional inverter circuit within 10ms, and the circuit outputs supply power to the electrical appliance to ensure that the electrical appliance is uninterrupted and works normally during the process.

Bypass circuit

Bidirectional inverter circuit

load/Equipment
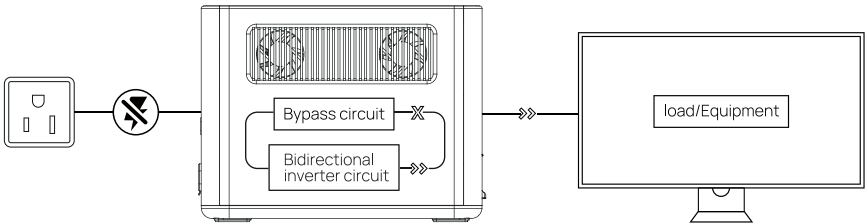
(Pic 2)

Connection of Solar Panels

Under the condition of light, this product can be connected to the solar panel and getting charged. The charging power is determined according to the conditions of light and weather.

In this charging mode, we support solar panel input within 500W, and the input voltage cannot exceed 55V, otherwise the product abnor-mality caused by it will not be covered by the warranty.

● **We recommend the following two charging schemes:**

Scheme One

Portable Power Station Charging Area

XT60

Portable Power
Station

MC4 to XT60

Solar Panel (Not in accessories)
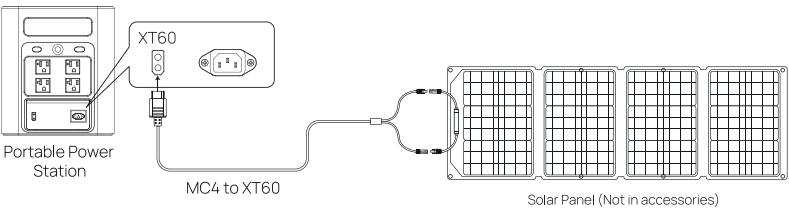
Scheme Two

Portable Power Station Charging Area

XT60

Portable Power
Station

MC4 to XT60

Solar Panel ①
(Not included in accessories)

Solar Panel ②
(Not in accessories)

8
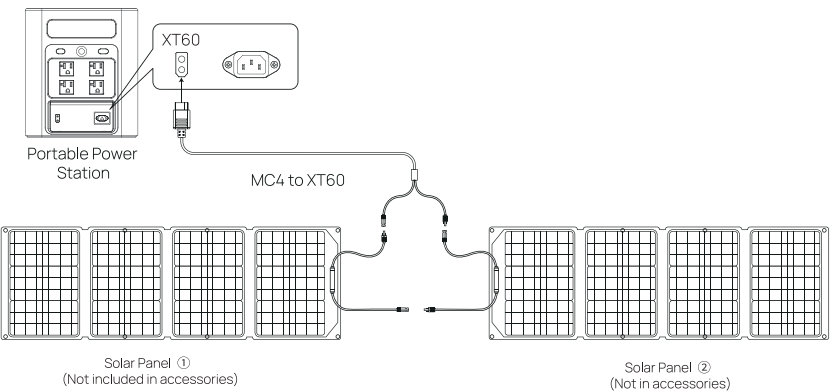
Car Charging

When the car is in the process of starting, connect the car charging port on the car and the product through the car charging cable to charge the product. The connection method is shown in the picture below:

This product supports 12V/24V car charger charging, please pay attention to the following two points when using this method to charge:

❋ Please use it when the car started, otherwise the car battery may be exhausted.

❋ Vehicle charging power is usually in the range of 90W-120W, and the charging time is long.If fast charging is required, the AC mains charging is recommended.

XT60

Portable Power Station

Car Charging Cable
(Not included in accessories)
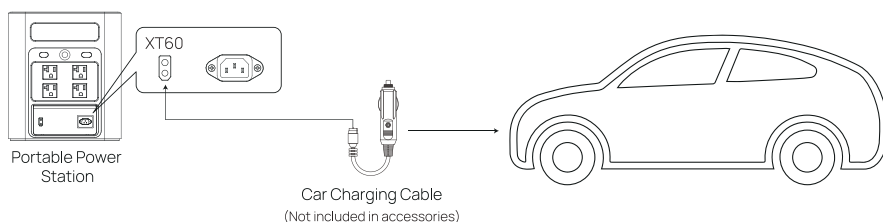
Product Parameter

Product Name	1800W Portable Power Station
Dimension	L*W*H=350X220X263mm
Weight	11.64kg
Capacity	1024Wh
AC Charging	1000W
XT60 Input	11.5-55V 500W max
AC Output	1800W
USB-A Outout	(QC3.0 18W) X2
Type-C ① Output	(PD20W) X1
Type-C ② Output	(PD140W) X1
DC 5521 Output	(12V/3A) X2
Car Charging Output	12V/10A
Shutdown Current	<500μA
Working Temperature	-10~40℃
Environment Humidity	≤90%RH
Cycle Times	> 4000 times

Battery Specifications

Cell type	40135 LiFePO4
Rated voltage of single battery	3.2V
Rated capacity of single battery	20Ah
Rated voltage of battery pack	51.2V
Output voltage range of the battery pack	43.2-58.4V
Rated capacity of battery pack	1024Wh

FCC Statement

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.

Caution: Any changes or modifications to this device not explicitly approved by manufacturer could void your authority to operate this equipment.

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, and (2) this device must accept any interference received, including interference that may cause undesired operation.

RF Exposure Information

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator and your body.

Disclaimer

Before use, please read the user manual of this product to ensure full understanding and correct use. After reading, keep the user manual properly for future reference. If you do not operate this product correct-ly, you could cause serious injury to yourself or others, or result in damage to the product and property. Once you use this product, you are deemed to have understood, recognized and accepted all terms and content of this document. Users undertake to be responsible for their own actions and all consequences arising therefrom. AFERIY is not responsible for all losses caused by the user's failure to use the product in accordance with the User Manual.

In compliance with the law, the company has the final right to interpret this document and all related documents of the product. If it is updated, revised or terminated without prior notice, please visit the AFERIY official website for thelatest product information.

Warranty Card

<table>
<tr><td colspan="2" align="center">**Warranty Card**</td></tr>
<tr><td>Name</td><td></td></tr>
<tr><td>Address</td><td></td></tr>
<tr><td>Tel</td><td></td></tr>
<tr><td>Mail</td><td></td></tr>
<tr><td>Brand、Order number</td><td></td></tr>
<tr><td>Buying date</td><td></td></tr>
<tr><td>Fill in the date</td><td></td></tr>
<tr><td>What is the product failure</td><td></td></tr>
<tr><td colspan="2">Please fill in all the above items.</td></tr>
</table>

This product provides a 24-month warranty service from the date of purchase

- If there is a quality problem within the range of normal use, we provide warranty service.
- After purchasing our company's products, please keep this product together with invoices and other items. When maintenance services are needed, please provide information according to our company's request.
- In the case where the warranty is damaged or altered，and no stamp of the sales store on the warranty, the warranty service may not be provided.
- Damage caused by use beyond the normal range of use is not covered by the warranty service.
- The content of the warranty scope shall be subject to the content recognized by the company.
- Even within the scope of the warranty, sometimes it will be exchanged for products with the same function. The shipping and repair fees for products outside the warranty range shall be paid by the customer.
- Sometimes the specifications and functions of the product will be updated without prior notice.