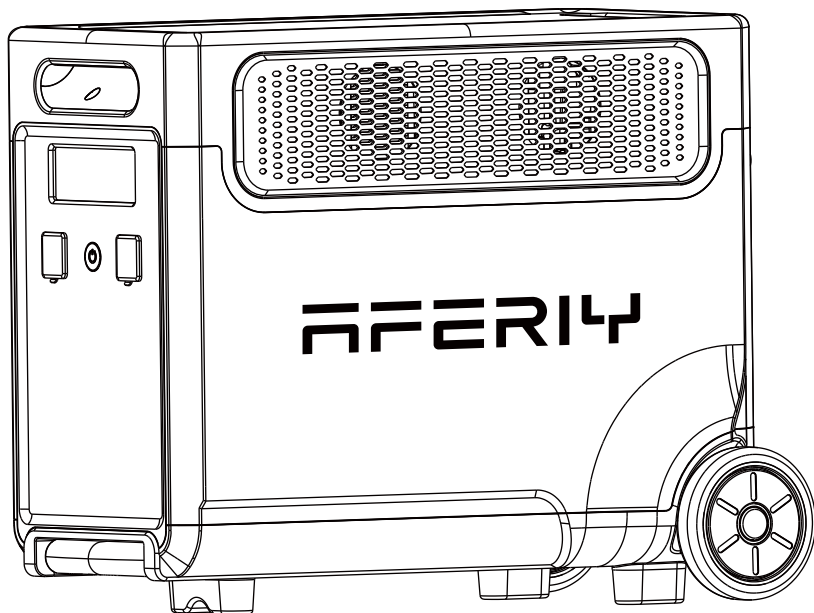


# AFERIU

## Smart power pack

AF-P310-EC-S | User Manual

3600W



Hi dear, thank you very much for purchasing and experiencing our AF-P310-EC-S Smart power pack. This product needs to be used with AF-P310-EC-H. Before using this product, please read the instructions carefully 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 30% when it leaves the factory. Please fully charge the product after unpacking it to start the experience tour of our AF-P310-EC-S.

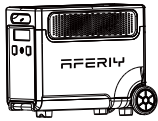
## **Precautions For Use**

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.

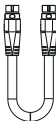
# Contents

- Packing List ..... 01
- Product Introduction..... 01
- Button Function Introduction ..... 02
- Introduction of Display Interface ..... 03
- Troubleshooting table ..... 04
- Description of battery pack connection ..... 05
- Connection of Solar Panels ..... 06
- Car/Vehicle Charging ..... 07
- Product Parameter..... 08
- Battery Specifications ..... 08
- Disclaimer ..... 09
- Warranty Card ..... 10

# Packing List



Smart power pack



Parallel Cable  
(Power Connection Cable)



MC4 to XT60  
Plug Charging Cable



User Manual

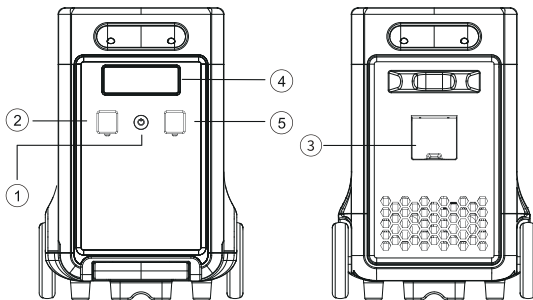
# Product Introduction

This product is a portable power pack with charge/discharge function. It is mainly used for parallel expansion of 3600W energy storage power supply. It includes USB DC output , XT60 solar charging input , and parallel input-output.

- Equipped with LiFePO4 battery, the battery capacity is as high as 3840Wh, and the safety level is extremely high.
- It can be parallel with 3600W energy storage power supply to increase the capacity of 3600W.
- USB-A and Type-C PD3.0 output interfaces can also be used separately in non-parallel state.
- With PV charging function, it can also be charged in non-parallel state. Multiple protection mechanisms such as battery, circuit, structure, etc., guarantee the product safety.



# Button Function Introduction



- ① Power ON/OFF Button Long Press  
USB ON/OFF Button Short Press
- ② XT60 Input Port
- ③ Parallel input and output
- ④ LCD Screen
- ⑤ USB output

## ① Power ON/OFF Button

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

## ② XT60 Input Port

This interface supports solar panel input or car charger input. For details, please refer to "Solar Panel Connection" on page 6 of this manual and "Car/Vehicle Charging" on page 7.

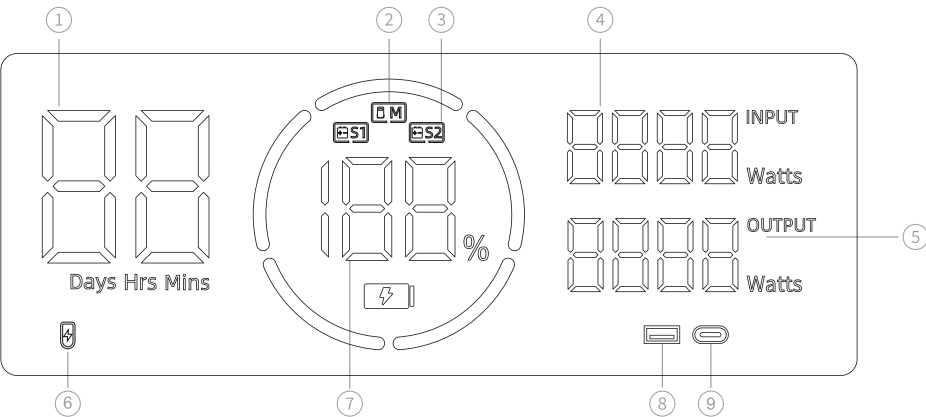
## ③ Parallel input and output

The expansion is achieved by connecting the parallel cable to the host. This interface can achieve a maximum of 4000W input and output. The picture for paralleling is attached.

## ④ LCD Screen

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

# Introduction of Display Interface



- ① Remain Using/Recharging Time
- ② Host Logo
- ③ Parallel Operation Logo
- ④ Input Power in Total
- ⑤ Output Power in Total
- ⑥ XT60
- ⑦ Battery Level Percentage
- ⑧ USB Output
- ⑨ PD3.0 Output




## 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 table

Phenomenon	Cause	Processing method
 The above output icon flashes and beeps.	The output exceeds the standard and it's short-circuited.	Remove the load, and then short press the switch in the area corresponding to the icon to remove the alarm
 The temperature warning icon flashes and beeps.	The temperature of the product is too high or too low.	Take the product out of the charging state, remove all loads, turn the power off, wait for the device to reach a suitable working temperature, then the alarm is removed.
 The parallel light blinks.	Parallel failure.	Charge products with low battery capacity or discharge products with high battery capacity (until battery capacity less than 80%) before reconnecting.

## Notes:

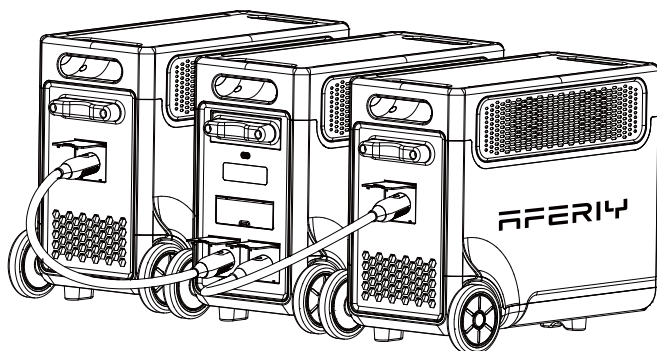
1. The inadequate light at sunrise or sunset will cause sudden high or low output voltage, which may cause repeated switch of relay between "ON" and "OFF" status. As a result, the "ON" sound of the relay will continue all the time. It is recommended to actively disconnect the input of solar energy after sunset and manually connect the input of solar energy after sunrise. This operation can both avoid the trouble of continued "ON" sound of the relay and reduce power consumption of the product.
2. When the relay is turned on, a blue LED indicator will be "ON" in the product, of which the blue light will penetrate through the ventilation opening at night. This is a normal phenomenon.
3. The long transportation may lead to deviation of displayed battery capacity with actual battery capacity at the first application. Before normal use of the product, you need to charge the product to 100% battery capacity, then discharge the product to automatically turn off and recharge to 100% battery capacity.
4. The product has low-temperature charge and discharge protection functions. At the environments below 0°C, the product will stop charging and continue the normal charging until its temperature recovers.
5. The power consumption of the product itself may cause error in power collection if the output power is small, as a result, the displayed output power is 0, and automatic shutdown may occur after a period of application.
6. The product has smart charging protection function. If the battery capacity reaches 85% in the process of charge, the charging power will automatically decline, which can raise service life of its battery.

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

Email address: support@aferyi.com.

Sincerely,

# Description of battery pack connection



The host can be connected to a maximum of two battery packs with a maximum capacity of 11520Wh through parallel cables. Please connect the product when the host and battery pack are off. After the connection is completed, S1 and S2 will be displayed on the display screen. After the parallel operation is successful, the system can start charging or discharging. The charging power is small when the charge is high, and the output power is large when the discharge is high. If there is no external charging, the high-power product will charge the low-power product, and the display will show the power.

## Announcements

- Do not plug and unplug the parallel cable when the AF-P310-EC-H is working. Please connect or disconnect the product when the product is turned off.
- Do not short-circuit the parallel port of the host.



# 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.

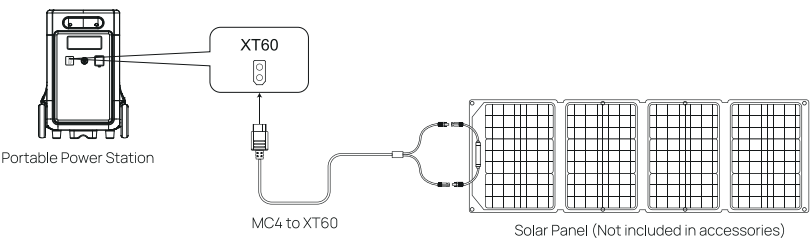
In this charging mode, we support solar panel input within 200W, and the input voltage cannot exceed 50V, otherwise the product abnormality caused by it will not be covered by the warranty.

We recommend the following two charging schemes:

## Solar panel charging

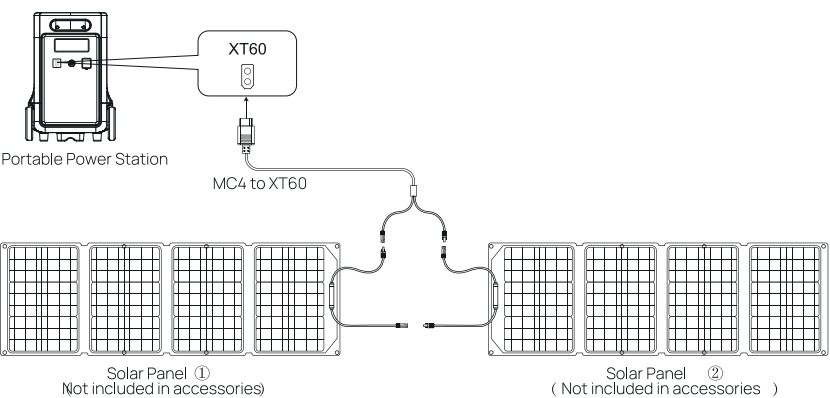
### Scheme one

Portable Power Station Charging Area



### Scheme two

Portable Power Station Charging Area



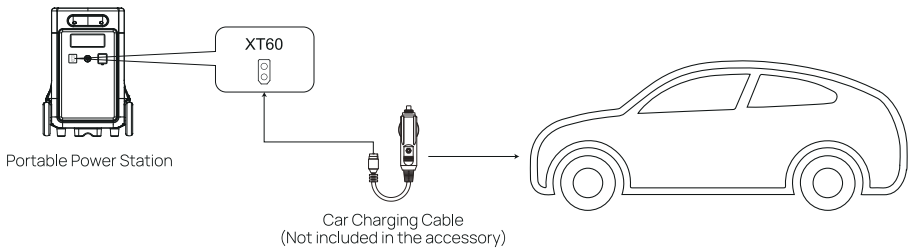
# Car/Vehicle Charging

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 do 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 recommend-ed.



# Product Parameter

Product Name	Battery Pack
Dimension	L*W*H=584X321X464mm
Weight	36.5kg
Capacity	3840Wh
XT60 Input	11.5-50 V 200W max
USB-A Output	QC3.0 18W Max
Type-C Output	PD3.0 100W Unidirectional
Car Charging Output	12V/10A
Shutdown Current	< 500uA
Parallel Capacity	Max 11520Wh
Working Temperature	-10 ~ 40℃
Environment Humidity	≤90%RH
Cycle Times	> 3500 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	48V
Output voltage range of the battery pack	40V~45V
Rated capacity of battery pack	3840Wh

# 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 correctly, 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. We are 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 our official web-site for the latest product information.

# Warranty Card

Warranty Card	
Model	
Name	
Address	
Tel	
Mail	
Name of the store	
Buying date	
Please fill in all the above items.	

- 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.