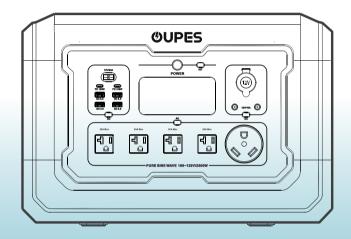


## 2500W PORTABLE POWER STATION



MEGA 2

**User Manual** 

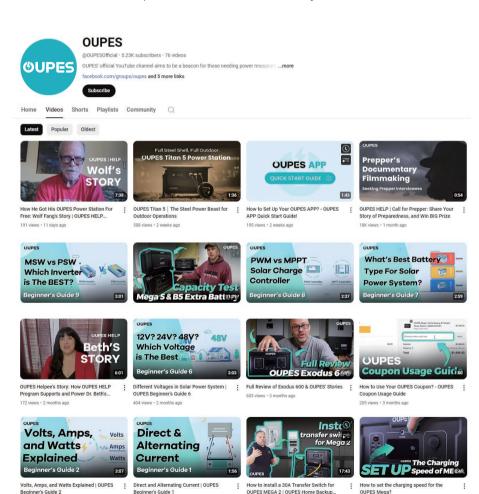
# Welcome

Hi friend, thank you for choosing to support our products.

Please follow our YOUTUBE channel to learn more about product operation guides,

precautions, new product release information, as well as see product usage

experiences and stories shared by others.



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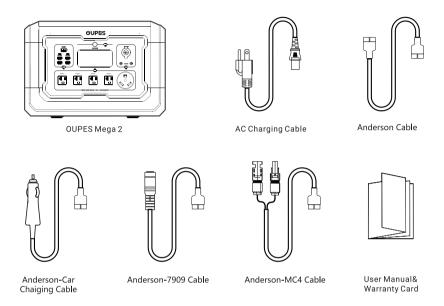
#### **Disclaimer**

Read this user manual carefully before using the product to ensure that you completely understand the product and can correctly use it. After reading this user manual, keep it properly for future reference. Improper use of this product may cause serious injury to yourself or others, or cause product damage and property loss. Once you use this product, it is deemed that you understand, approve and accept all the terms and content in this document. The Company is not liable for any loss caused by the user's failure to use this product in compliance with this User Manual.

In compliance with laws and regulations, the Company reserves the right to final interpretation of this document and all documents related to this product. This document is subject to changes updates, revisions, or termination) without prior notice. Please visit the official website to obtain the latest product information.

- The Company is not responsible for any damage caused by force majeure (e.g. fire, typhoon, flood, earthquake or negligence, abuse or use under other abnormal circumstances by the customer).
- No compensation for losses caused by the use of non-standard connectors.
- ■The Company is not responsible for any damage caused by not following the instructions in the operating instructions.

## **Product List**

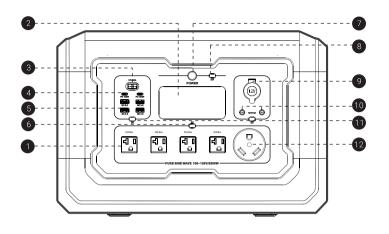


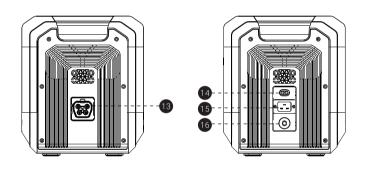
# **Product Description**

Output Technical Parameters				
AC Output	Rated Voltage 100~120Vac			
	Rated Power 2500W			
	Peak Power 5400W			
	Frequency 60Hz			
DC 12V & Car lighter Output	Rated Voltage	12V		
	Rated Power	10A		
USB-A Output	5V/3A; 9V/2A; 12V/1.5A 【18W Max 】			
USB-C Output	5V/3A; 9V/3A; 12V/3A; 15V/3A; 20V/5A [ 100W Max ]			
Anderson Output	12V/30A			
Input				
AC Charge Input	100~120Va.c	c 16A Max 1600W Max		
PV(Anderson)Input	12~150Vd.c MPPT	:18V-140V 15A Max 2100W Max		
Battery				
Rated Capacity		2048Wh		
Rated Voltage		51.2V		
Battery Type	LiFePO <sub>4</sub>			

Common Information			
IP Grade	lp21		
Working Temperature	0~40°C		
Dimensions	18.1*10.6*12.0in (460*270*305mm)		
Net Weight	48.5lb (22kg)		

#### **Function Description**



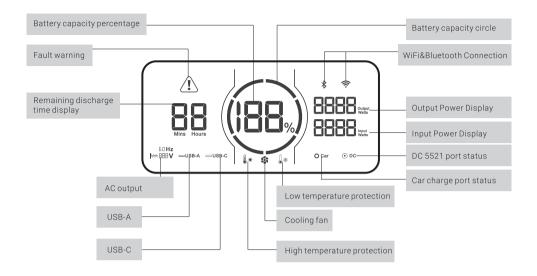


- 2. LCD Screen
- 3. Andreson Output Port
- 4. USB-C Output Port
- 5. USB-A Output Port
- 6. AC Output Power On/Off Switch 12. AC Output Port (30A Max)

- 1. AC Output Port (20A Max) 7. Main Power On/Off Switch
  - 8. IOT On/Off Switch
  - 9. 12V Car Charger Output Port
  - 10. DC 5521 Output Port
  - 11. DC Output Power On/Off Switch

- 13. Power pack connection port
- 14. Andreson Input Port
- 15. AC Recharging Input Port
- 16. Circuit Breaker Protection

#### **LCD Screen Description**

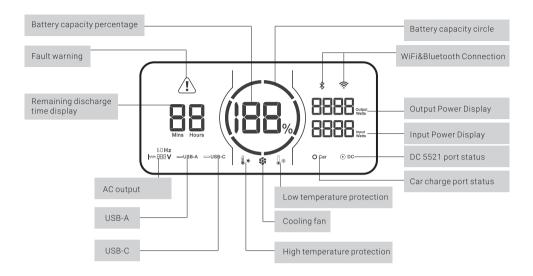


### Instructions for use

The LCD Battery Capacity Circle indicates the remaining capacity. The capacity circle is divided into six segments, accounting for about  $17\% \sim 35\% \sim 51\% \sim 68\% \sim 85\% \sim 100\%$  of the capacity. The LCD display will wake up automatically when used.

When discharging, the blue capacity segment goes off from the display, indicating the remaining capacity. When charging, the blue battery capacity circle flashes clockwise along the trajectory, which indicates that the current device is in the state of charging, the number on the right side of the energy circle shows the real-time input power at this time. When fully charged, all blue capacity segments will shine and remain stable. After charging, please unplug the charger.

#### **LCD Screen Description**



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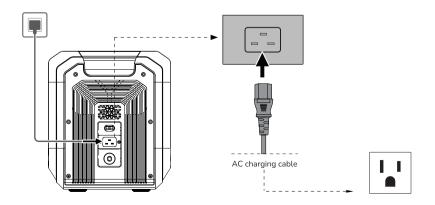
will turn on automatically.

3. The product defaults to 12 hours of standby time. With the output power buttons turned off and no other load for 12 hours, the product will shut off automatically. You can set the standby duration in the app.

## **Recharge Methods**

#### **AC Charging**

Use the standard AC charging cable to charge the device, connect as shown in the figure, when the input power on the screen shows a reading, the device starts to charge. The maximum fast charge can be 1600W and the device can be fully charged in about 1.5 hours.



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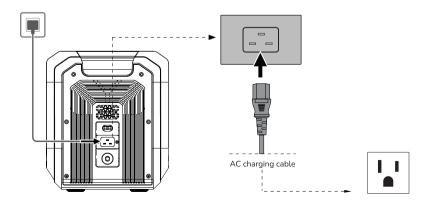
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## **Recharge Methods**

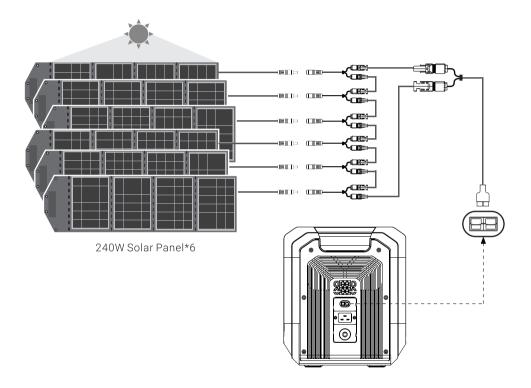
#### **AC Charging**

Use the standard AC charging cable to charge the device, connect as shown in the figure, when the input power on the screen shows a reading, the device starts to charge. The maximum fast charge can be 1600W and the device can be fully charged in about 1.5 hours.



#### **Solar Charging**

Connect the standard solar panels to the device by using the fittings "Anderson to MC4 cable" ×1 and "MC4 to 7909 cable" ×6. Up to 6 standard solar panels can be connected to the device, which takes about 1.5 hours to be fully charged.



#### Notice:

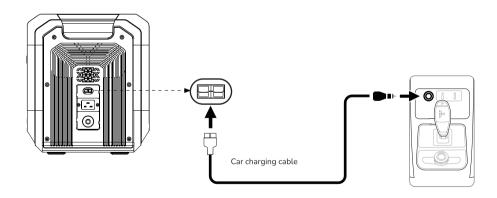
- 1. The solar charging cable (MC4-7909 cable) and solar panel need to be purchased separately.
- 2. When using the matching solar panel to charge this product, please connect it according to the user manual.

#### Notice:

3. Before connecting the solar panel, please confirm that the output open circuit voltage of the solar panel is within 150V to avoid damage to the product.

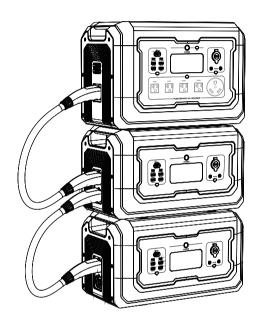
#### **Car Charging**

Use the car charger port of the car to charge this product, supporting 12V/8A car charging. For protecting the car battery from losing power and unable to start, it is necessary to use the car charger to charge after the car is started. At the same time, ensure that the car charger port and the cigarette lighter of the car charger input cable are in good connection. The company shall not be held responsible for any loss caused by non-compliance with the standard operation.



#### **Expandable Battery Charging**

Expandable Battery can be connected to this product. Use the productspecific power pack cable to connect the product with the battery pack. When the input power is read on the screen, the device starts charging.



#### Notice:

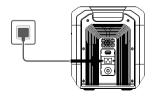
- 1.Please make sure that both the product and the power pack are turned off before connecting.
- 2.After this product is connected to the power pack, press any of their power buttons, if both of them can be switched on at the same time, then they are connected successfully and can be normally used; if you are using the APP, it will also show the data of the power pack.
- 3. Do not connect or remove the power pack directly during the charging and

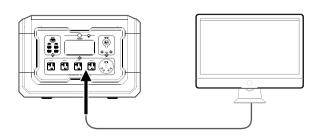
- discharging process. If you need to connect or remove the power pack, please turn off the power before operating.
- 4. Do not use your hands or other objects to touch the metal terminals at the connection port of the power pack. If there are foreign objects attached to the metal terminals, please lightly wipe with a dry cloth.
- 5.Please connect this product with the specified power pack and cable in strict accordance with the operation specifications. The company is not responsible for equipment damage caused by improper operation.

## **Other Functions**

### **EPS(Emergency Power Supply)**

The product supports EPS. When you connect the grid power to the AC Input Port of the product through an AC cable, you can power electrical devices through the AC Output Port (AC power will come from the grid and not the power station in this situation). In case of a sudden blackout, the product can automatically switch to the battery powered supply mode within 20ms.



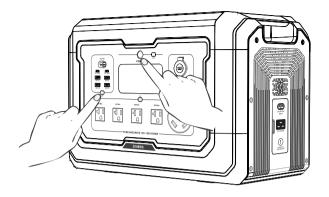


#### Notice:

This function is a non-professional UPS function and does not support 0ms switching. Please do not connect it to devices that require high uninterrupted power supply (such as data servers and workstations), or use it after multiple tests to confirm whether it is compatible. And it is recommended to use only one device during use, and the operating power of the device should not exceed 2500W (input + output). When the load and charging reach 2500W, the output will be turned off in one minute for overloading, and the output will be turned off in 1 second for more than 2500W. Do not use multiple devices at the same time to avoid overload protection of this product. If the device does not operate normally or data is lost due to failure to follow the instructions, the company will not bear the corresponding responsibility.

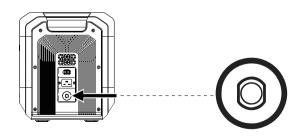
#### **Frequency Switching**

- 1.In the power-on state, turn off the AC output, and press the main power button & the DC button (USB output) at the same time to enter the switching frequency menu.
- 2. Press the AC output button to switch the frequency, the frequency to beset will continue to flash.
- 3.Long press the main power button to set the frequency, the word "SUC" will be displayed if the setting is successful, and then long press the main power button to exit the setting menu.



#### **AC Input overload protection**

When the AC input current is continuously more than 25A, the device charge input port will protect itself. The AC input overload protector button will pop up automatically. After confirming that the product is not faulty, press the AC input overload protector to resume charging.



### **FAQ**

- 1. What battery does the product use?
- It uses high-quality lithium iron phosphate batteries(LiFePO<sub>4</sub>).
- 2. What devices can the product's AC output port power?

With 2500W rated power and 5400W peak power, the product's AC output port can power most household appliances. Before you use it, we recommend that you confirm the power of the appliances first and ensure the power sum of all loaded appliances is lower than the rated power.

3. How long can the product charge my devices?

The charging time is shown on the product's LCD Screen, which can be used to estimate the charging time of most appliances with stable power usage.

4. How can I know if the product is charging?

When it's charging, the remaining charging time will be shown on the LCD Screen. Meanwhile, the charging indicator icon begins to rotate with the remaining battery percentage and the input power shown on the right of the circle.

5. How to clean the product?

Please gently wipe it with a dry, soft, clean cloth or paper towel.

6. How to store the product?

Before storing, please turn off the product first, and then store it in a dry, ventilated place at room temperature. Do not place it near water sources. For long-term storage, please discharge and charge it every three months to extend its battery life.

7. Can this product be taken on the plane?

No.

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

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 the charging and discharging process, the actual output capacity of the product is lower than the capacity specified in the user manual.

# Fault Code and Trouble Shooting

Code	Description	Performance	Trouble Shooting
E000	AC output short circuit protection	flashing, no output	Press the AC output power on/off button for recovery
E001	Output overload protection	flashing, no output	Flashing icons indicates which circuit overload. Overload protection needs to be restored manually, UPS function overload 2500W1sec
E002	AC battery low power protection	The corresponding port has no output	After protection, restart corresponding function keys to restore functions, and recharge it timely
E003	AC output over-voltage and low voltage protection	ms≋v flashing, no output	You need to manually press the AC power button to recover
E004	Abnormal AC input frequency	flashing, no output	Automatically recover when voltage is normal
E005	High and low bus voltage, over-current	flashing, No output from each part	You need to manually press the AC power button to recover
E006	<ul> <li>Inverter over-temperature charging</li> <li>over-temperature protection</li> </ul>	flashing, no output	Temperature lower down to normal level, it will recover automatically
E007	PV input over-voltage and low voltage protection	No PV charging	It will recover automatically when input voltage adjust to the input voltage range
E008	12V/30A overload short circuit protection	flashing, no output	You need to manually press the DC power button to recover
E009	24V auxiliary power overload short circuit alarm	The DC board reports a fault, but does not turn off the output.	Reduce the load on the DC port
E010	Cigarette lighter port overload and short circuit	O Car  O DC  flashing, no output	You need to manually press the DC power button to recover
E011	USB-A port overload and short circuit	euse. A flashing, no output	You need to manually press the DC power button to recover
E012	USB-C port overload and short circuit	Euss.c A flashing, no output	You need to manually press the DC power button to recover
E013	Battery low voltage protection when DC discharge	E013 code flashing, no output	After protection, restart corresponding function keys to restore functions,and recharge it timely

Code	Description	Performance	Trouble Shooting
E014	PV charging over-temperature	A PV charging off	After the temperature recovers, the fault disappears automatically, and charging resumes
E015	PV output over-temperature	flashing, no output	Press the DC button on the left to troubleshoot
E020	BMS communication failure	flashing, no output	Check BMS communication cable
E021	Set the device aside and wait for the battery voltage to recover automatically	E021 code flashing	Set the device aside and wait for the battery voltage to recover automatically
E022	Single cell of the battery low-voltage	E022 code flashing, turn off the output	Connect the AC charging cable and keep charging until the voltage is normal
E023	The total voltage of the battery is too high	E023 code flashing, but does not turn off the output	Set the device aside and wait for the battery voltage to recover automatically
E024	The total voltage of the battery is too low	flashing, no output	Connect the AC charging cable and keep charging until the voltage is normal
E025	Battery cell over-temperature	1 flashing, no output	Automatically recover when temperature cooling down
E026	Battery cell low-temperature	flashing, no output	Automatically recover when temperature cooling down
E027	System overload	The AC icon flashes, AC output close, DC output is normal, the AC load is higher than 2600VA or AC+DC load is higher than 2600W	You need to manually press the AC power ON/OFF button to recover
E028	Charging over-temperature	1* A flashing, device stops input	Automatically recover when temperature cooling down
E029	MOS over-temperature	flashing, no output	Automatically recover when temperature cooling down
E030	Power pack exceptions	Connect the wrong power pack	

## **Storage & Maintenance**

- 1. Please store the product away from water, heat, and metal objects.
- 2. In order to prolong the service life of the battery, it is recommended to use or store this product in an environment temperature between 20° $^\circ$  to 30° $^\circ$ .
- 3. For long-term storage, please charge and discharge the product once every 3 months (discharge to 0% first, then fully charge, and then discharge to 60% for long-term storage). Products that have not been charged and discharged for more than 6 months will not be covered under warranty.
- 4. For safety, do not store this product in an environment temperature above 45°C or below -10°C for a long time.
- 5. If the product has been idle for too long and the battery is severely low, it will enter a deep sleep protection mode. In such case, please charge the product before using it again.
- 6. For long-term storage, please place it horizontally.

