

Mega 2

2500W Portable Power Station

User Manual

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Disclaimer

Before using this product, please read this user manual carefully to ensure that you fully understand the product and can use it correctly. After reading this user manual, please keep it in a safe place for future reference. Improper use of this product may cause serious injury to yourself or others, or result in product damage and property loss. By using this product, you are deemed to have understood, recognized and accepted all the terms and contents of this document. The Company shall not be responsible for any damages caused by the user's failure to use this product in accordance with this user manual.

In accordance with laws and regulations, the company reserves the right of final interpretation of this document and all documents related to this product. This document is subject to change, update, revision or termination without notice.

Please visit our website for the latest product information.

- The company shall not be held responsible for any damage caused by force majeure (e.g. fire, typhoon, flood, earthquake) or use under other abnormal circumstances by the customer.
- The company bears no responsibility for loss caused by the use of non-standard connectors.
- •The company shall not be liable for any damage caused by non-compliance with the standard operation.
- Please do not disassemble the product. Otherwise, the warranty will be voided.

Safety Instruction

Preparation Before Use

1.1 Read the User Manual

Carefully review the user manual provided with the device to understand the power station's interface functions, rated power, supported device types, and usage methods. Pay special attention to the rated power and output voltage of each interface to ensure compatibility with connected devices.

1.2 Device Inspection

Before use, inspect the power station and accessories to ensure they are intact, with no exposed wires or damaged interfaces.

Confirm that all interfaces are dry and clean.

Device Compatibility and Precautions

2.1 Matching Power Specifications

Verify that your device's rated power matches the power station's output. Examples include:

- •USB-C Interface: Suitable for small portable devices like smartphones and tablets (e.a., iPad).
- Car Charger Interface: Avoid connecting sensitive devices like radios.
- AC Socket: Designed for high-power devices like TVs or sound systems, but the power must be within the station's rated output.

2.2 Avoid Simultaneous Connection of High-Power and Sensitive Devices

Do not connect high-power devices (e.g., refrigerators, induction cookers) and sensitive equipment (e.g., TVs) at the same time to prevent voltage fluctuations that could damage the devices.

Do not use the power station to power medical equipment and precision instrument.

Device Compatibility and Precautions

2.3 Special Note: List of Sensitive Devices

Devices sensitive to voltage fluctuations include:

- High-end TVs (OLED, 4K)
- Tablets like iPads
- High-end sound systems
- Cameras and drones

For these devices, use them individually and ensure proper interface matching.

Common Mistakes and How to Avoid Them

3.1 Using the Wrong Interface, Causing Device Damage

- Error Example: Using the car charger port for powering voltage-sensitive devices (e.g., radios).
- Precautionary Measures:
 - Ocheck the device's power requirements (wattage, voltage).
 - OConnect to the correct interface.

3.2 Damage Due to Instant Voltage Fluctuations

- Error Example: Keeping sensitive devices connected while turning the power station on or off.
- Precautionary Measures: Disconnect devices before powering the station on or off.

3.3 Overloading the Power Station

- Error Example: Powering multiple high-power devices simultaneously, exceeding the station's power limit.
- Solution: Check the station's rated power and plan device usage accordingly.

Usage Scenarios and Precautions

4.1 Charging via the car charger

- Do not charge devices via the car charger interface when the vehicle is starting or stopping to avoid voltage spikes.
- •Ensure the device's power aligns with the station's output specifications when using the car charger interface.

4.2 Indoor Use

• For TVs, sound systems, and other devices in EPS mode, ensure the input source is grid power or a pure sine wave generator.

4.3 Outdoor Use

- •Keep the power station away from water, dust, and extreme temperatures.
- Regularly clean interfaces and power cables after outdoor use.

APP

You can connect this product via APP to view information, control the device and personalize settings.

Scan the QR code to download our Smart Control APP.

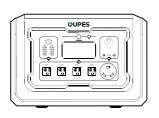




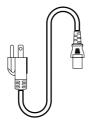




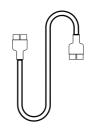
What's in the Box



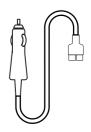
Power Station*1



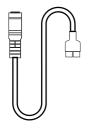
AC Charging Cable *1



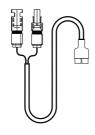
Anderson to
Anderson Cable*1



Cigarette Lighter to Anderson Cable*1



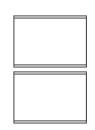
7909 to Anderson Cable *1



MC4 to Anderson
Cable *1



User Manual*1



Warranty Card*1
Brand card*1

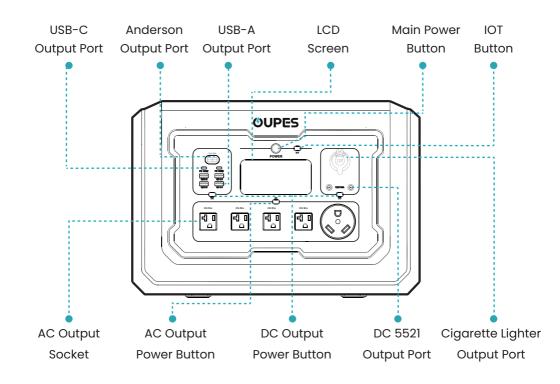
Product Description

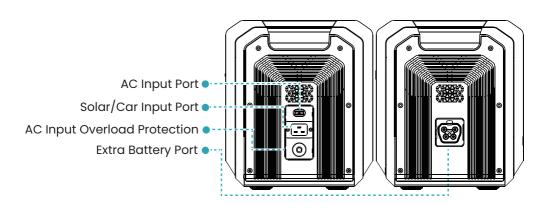
Specifications

Output				
AC Output	100V~120V 50Hz/60Hz Max 2500W (Surge: 5400W) Bypass Mode: 2500W			
DC 12V & Cigarette Lighter Output	12V10A 120W Total			
USB-A Output	5V3A; 9V2A; 12V1.5A 【18W Max】			
USB-C Output	5V3A; 9V3A; 12V3A; 15V3A; 20V5A 【100W Max】			
Anderson Output	12V30A			
Input				
AC Input	100V~120V 60Hz 13A Max 1600W Max			
Solar Input	12V~148V MPPT: 18V~140V 15A Max 2100W Max			
Cigarette Lighter Input	12V~15V 8A Max			
General Info				
Battery Capacity	2048Wh (51.2V/40Ah)			
Battery Type	LiFePO4			
Working Temperature	32°F~104°F (0°C~40°C)			
Storage Temperature	-4°F~140°F (-20°C~60°C)			
Dimension	18.1*10.6*12.0in (460*270*305mm)			
Net Weight	48.5lb (22kg)			

Product Description

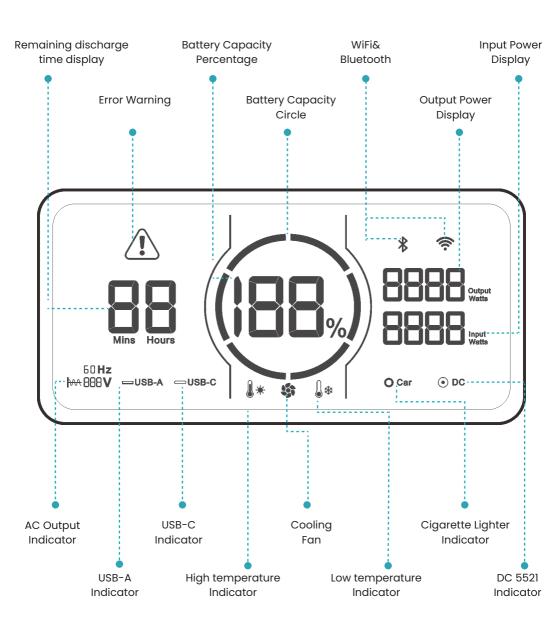
Overview





Product Description

LCD Screen

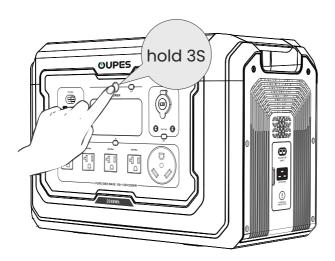


Instructions for use

Power ON/OFF

Main Power:

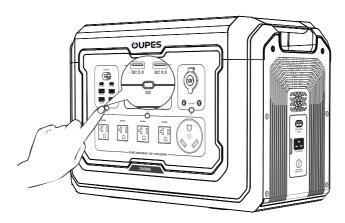
- a) Press and hold the main power button for 3 seconds to turn the main power on or off.
- b) When the main power is on, short press the main power button to turn the screen on or off.
- c) The product will shut down after 5 minutes without operation.



Power ON/OFF

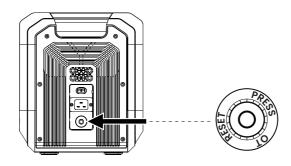
AC/DC Output Power:

- a) When the main power is on, press AC/DC output power button to turn on, press them again to turn off.
- b) The product will shut down after 12 hours without any load connected, which can be adjusted on the APP.



AC Input Overload Protection

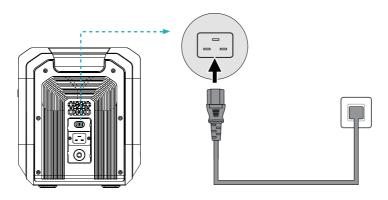
- $\alpha) \;\;$ When AC input current exceeds 25A, the protector will blow automatically.
- b) Please disconnect all the connections for safety reason, and ensure that the current is lower than 25A. Then press the button to resume using.



Recharge Methods

AC Charging

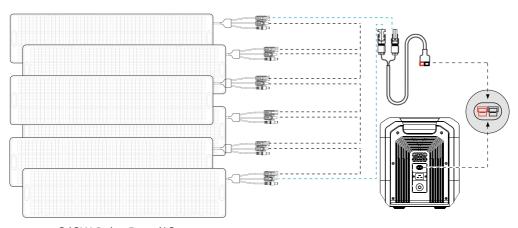
Use AC charging cable to connect AC wall outlet and the power station.



Solar Charging

- a) Use MC4 to Anderson charging cable to connect solar panels and the power station.
- b) Connect 6*240W solar panels at most in series to get maximum power.
- c) Make sure the solar panels meet the following requirements:

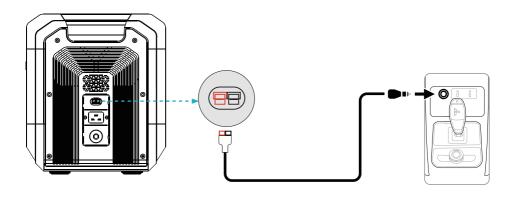
OCV: 148V; Current: 15A; Max Power: 2100W



240W Solar Panel*6

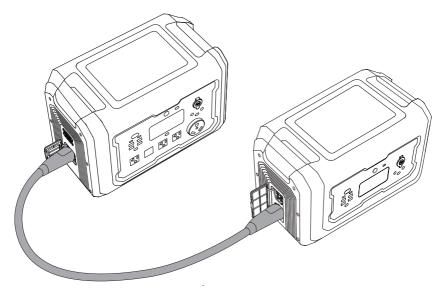
Cigarette Lighter Charging

- a) The cigarette lighter port supports 12V~15V, 8A car charging input.
- b) Please ensure that the car is started before connecting the power station in case that the car battery drains.



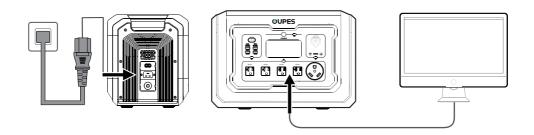
Extra Battery Charging

- a) Turn off the power station and the extra battery before connecting or disconnecting them.
- b) Use battery expansion cable to connect the extra battery and the power station.



EPS(Emergency Power Supply) Function

- a) EPS function is enabled by default with a 20ms switching when grid power is cut off.
- b) Charge the power station from power grid and connect the device to AC output port as shown in the picture, then press AC output power button on.
- c) Please do not connect the power station to equipment requiring 0ms uninterrupted power supply.
- d) The total input and output power should lower than 2500W. Otherwise, the power station will shut down in 1 minute.



Error Code & Trouble Shooting

Error Code	Status	Cause	Solution
E000	+ ==== + meet	Short circuit of AC output.	Press the AC output power button to restore.
E001	flashing, no output	Overload of AC output.	Press the AC output power button to restore.
E002	+ BBB + MARRIED + MARRIED TO MARR	Battery voltage of inverter input is low.	Charge the device in time and restart the corresponding function button to restore.
E003	flashing, no output	Over voltage and under voltage of AC output.	Press the AC output power button to restore.
E004	+ HEEE	Abnormal AC input frequency.	Automactically restores after frequency returning to normal.
E005	+ HEBBE	High and low bus voltage.	Press the AC output power button to restore.
E006	flashing, no output	Over temperature of Inverter.	Turn off output power and rest the device to restore.
E008	flashing, no output	Overload and short circuit of 12V30A output port.	Press the DC output power button to restore.
E009	BBB == flashing	Overload or short circuit of 24V auxiliary power.	Reduce the loads on DC output port.
E010	flashing, no output	Overload or short circuit of the cigarette lighter output port.	Press the DC output power button to restore.
E011	flashing, no output	Overload or short circuit of the USB-A port.	Press the DC output power button to restore.
E012	flashing, no output	Overload of the USB-C port.	Press the DC output button to restore.
E014	flashing, no input	Over temperature of internal PV charging board.	Stop charging and wait for the temperature returning to normal.

Error Code & Trouble Shooting

Error Code	Status	Cause	Solution
E015	flashing, no output	Over temperature of 12V30A output port.	Restart after the temperature returning to normal.
E020	+ Read flashing	BMS communication failure.	Contact after sales service team for further support.
E021	+ Harring flashing	Over voltage of single battery cell	Stop charging and discharge until the battery voltage returns to normal.
E022	flashing, no ouput	Low Voltage of single battery cell.	Charge the device until the voltage returns to normal.
E023	+ RR flashing	Battery total voltage too high	Stop charging and start discharging until the battery voltage returns to normal.
E024	+ Harring flashing	Battery total voltage too low	Charge the device until the voltage returns to normal.
E025	flashing, no output	High temperature of battery.	The device will automatically return to normal when the temperature returns to normal.
E026	flashing, no output	Low temperature of battery.	The device will automatically return to normal when the temperature returns to normal.
E027	flashing, no AC output. DC output is normal.	System overload, AC output is over 2600VA or the total AC and DC output is over 2600W.	Reduce AC loads and press the AC power button to restore.
E028	flashing, no input	Charge over temperature.	Charge the device after the temperature returning to normal.
E029	flashing, no intput	Over temperature of MOSFET.	The device will automatically return to normal when the temperature returns to normal.
E030	flashing	Connect the wrong expansion battery.	Connect correct extra battery to restore.



Scan QC code for FAQ.

Certification and Compliance

FCC Warning

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. Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

FCC Warning

Notice:

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 instal- lation. 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:

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

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 & your body.



Customer Service Hours (EST):

© Call Us: +1 (209) 400-9909(9:00 AM - 5:00 PM, Mon. - Fri.)

Email Us: 9:00 PM - 5:00 AM, Mon. - Fri.

Customer Support: support@oupes.com

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