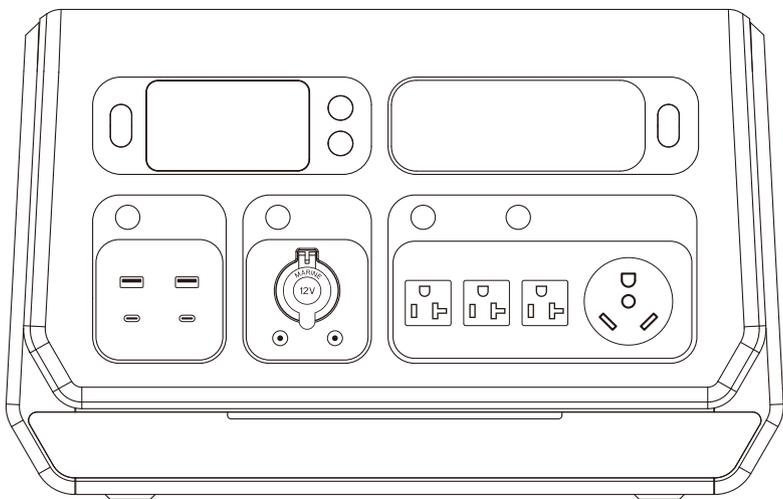


# ALLWEI®

2400W Portable Power Station  
Emergency Power Source

## User Manual



Model: SGR-PPS2400-3

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## Important Safety Caution

The product has been designed and tested strictly according to the international safety requirements. As with all electrical or electronic devices, there are residual risks despite careful construction. To prevent personal injury and property damage and to ensure long-term operation of the product, read this section carefully and observe all safety information at all times.

1. This power station has a built in lithium battery which is highly sensitive to high temperature - Keep it away from heat sources like direct fire or any heat sources.
2. Please follow the instructions in this manual to correctly connect all charging cables. Do not use third-party cables. Any incorrect connections may damage the machine and even pose an electric shock hazard.
3. Do not touch the live components in standby mode, there may be a risk of electric shock.
4. Do not move the machine while it is operating, there may be a risk of electric leakage.
5. Keep away from moisture or water.
6. Do not disassemble microwave, puncture, incinerate or insert foreign objects into the power station.
7. Do not crush, bend, shred, drop or place heavy objects on top of the device.
8. Do not use the product if damaged or punctured.
9. Always be prepared - Charge the unit every three months also if it is not used.
10. When connecting to the grid and photovoltaic components, please understand the components and functions of the photovoltaic system, ensure that all electrical connections, voltage, and current meet standards, and ensure that the power station is turned off during the entire connection process.

## 2.Preface

Thank you for purchasing this 2400W Portable Power Station.

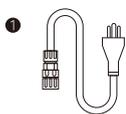
The portable power station can connect to AC wall outlets, solar panels, and DC power sources and is designed to keep your electronic devices powered both during an emergency and while on the go.

It comes equipped with AC outlets, 12V DC output ports, a car port, Type-C port and fast charging USB ports 3.0 for your convenience. Perfect for outdoor adventures and home backup, it is compatible with most electronic devices such as drones, projector, coffee maker, blender, refrigerator, cooling fan, microwave.

You can charge your electrical or digital devices with this unit in case of a power failure or when you are out or on a road trip.

It also works as an emergency power kit. Especially, it's suitable for locations that are prone to severe weather patterns and natural disaster related power failures including typhoons, floods, hurricanes, earthquakes, forest fires, snowstorms and low-temperature disaster-prone areas.

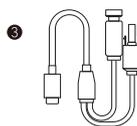
## 3.Package Contents



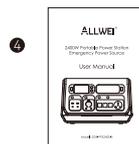
1\*M25  
AC Power Cord



1\*XT60  
DC Cable



1\*MC4 Cable  
with XT60



1\*User Manual

## 4.Warm Tips

Before using our power station, please read the following instructions carefully:

- 1.This power station has a built in lithium battery which is highly sensitive to high temperature - Keep it away from heat sources like direct fire or any heat sources.
- 2.Keep away from moisture or water.
- 3.Do not disassemble microwave, puncture, incinerate or insert foreign objects into the power station.
- 4.Do not crush, bend, shred, drop or place heavy objects on top of the device.
- 5.Do not use the product if damaged or punctured.
- 6.Always be prepared - Charge the unit every three months also if it is not used.
- 7.When connecting for the first time, if the power level is not consistent between the power packs (including the host power level), the reference time after a complete full charge or discharge is required to be relatively accurate.

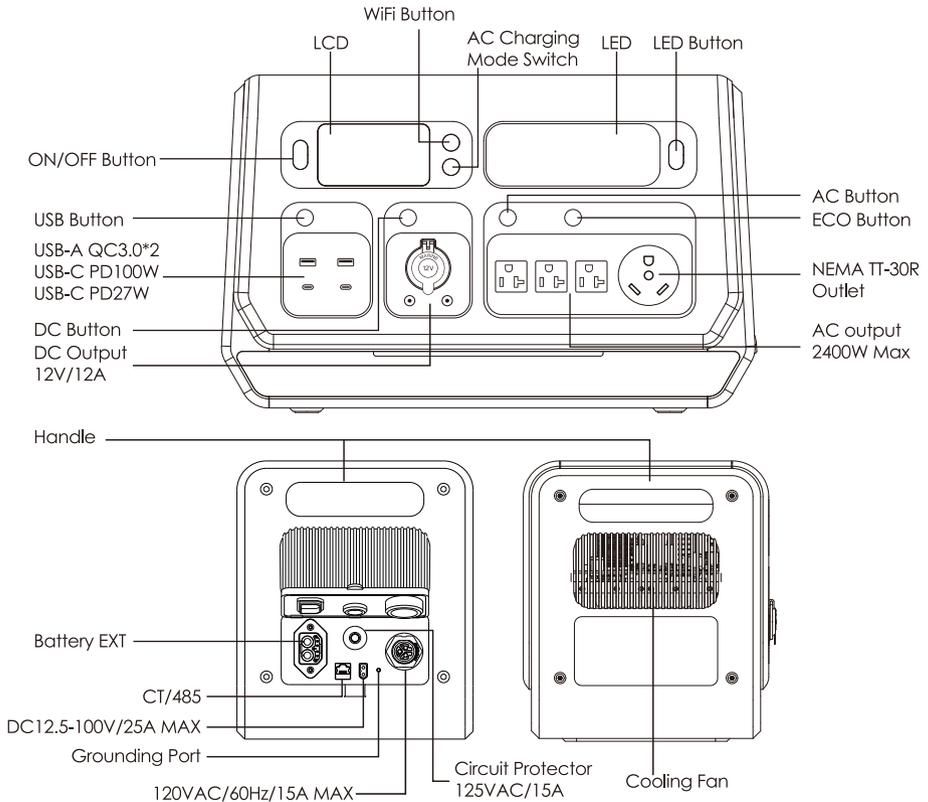
## 5. Technical Specification

Battery Capacity	LiFePO4 2048Wh±5%(40Ah/51.2V)
AC Input Charging	AC 100-120V/1500W Max
Car Input Charging	12.5V-15V/8A 120W Max
Solar Input Charging	DC16V-100V/25A 1200W Max
Output Port	<p>Pure Sine Wave Output            AC Output*3: 120V, 60Hz, 2400W, Peak 4800W            TT-30R AC Output*1: AC120V/30A Max            Note:            When the battery capacity≤5%, AC output will be off.            When the battery capacity≤3%, DC&amp;USB outputs will be off.            (In order to protect the battery cycle life.)</p>
	<p>USB Output 1: QC18W Max            (5V3A&amp;9V2A&amp;12V1.5A)            USB Output 2: QC18W Max            (5V3A&amp;9V2A&amp;12V1.5A)            USB Type-C 1: PD100W            (5V3A&amp;9V3A&amp;12V3A&amp;20V5A)            USB Type-C 2: PD27W            (5V3A&amp;9V3A&amp;12V2.25A&amp;15V1.8A&amp;20V1.35A)</p>
	<p>1*Cigarette Lighter 13.8V/12A Max +2*DC5521            Rated Output 13.8V/5A Max, (Total 12A Max)</p>
AC Output Waveform	Pure Sine Wave
LED Light	3W MAX, 3 Levels(L/M/H adjustable)with SOS function
Safety Protection	<p>Short-Circuit            Over-Current            Over-Voltage            Low-Voltage            Over-Load            Over-Temperature</p>
Battery Cycle Life	After 3500 cycles, Capacity retention≥70% Initial Capacity (@25 C, +0.5C/-0.5C, 90%DOD)
Pass-Through Charging	Support
Weight&Size	23.2KG/51 IBS 18.31in x 10.24in x 11.61in
Environmental Operating Temperature	<p>Charge Temperature: 0~40°C(32~104°F)            Discharge Temperature: -10~40°C(14~104°F)</p>

## 6. Using Your 2400W Power Station

1. Long press the on/off button 3 seconds or press any of the port buttons to turn on the power station. To turn off the power station long press the turn on/off button 3 seconds.
2. The individual port buttons turn on or off the power to their respective ports. To conserve power, turn off ports when not in use. Read the LED screen to know which port is turned on.
3. Plug in your devices.
4. The power station supports full pass-through charging, so you can charge the power station and run your devices at the same time.

## 7. Product Diagram

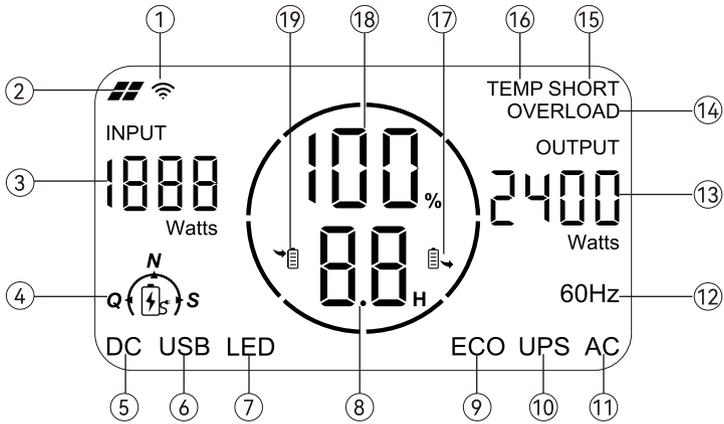


\*The circuit protector is an electrical safety switch designed to protect your unit from damage caused by over-current or short circuit. When the AC output exceeds 15A or 1800W, it will trip automatically. Press it once to reset the unit after these symptoms cleared.

\*Grounding port is for some electrical appliances that require grounding.

\*CT/485 port is for after-sales service or adding other functions in the future.

## 8.LCD Display



①	WiFi Indicator	⑪ AC	AC Output Indicator
②	Solar Panel Input Indicator	⑫ 60Hz	Output Frequency
③ <sup>INPUT</sup> 1888 Watts	Input Power	⑬ <sup>OUTPUT</sup> 2400 Watts	Output Power
④	Charging Mode Indicator(Q,N,S)	⑭ OVERLOAD	Overload Warning
⑤ DC	DC Output Indicator	⑮ SHORT	Short-circuit Warning
⑥ USB	USB Output Indicator	⑯ TEMP	Temperature Warning
⑦ LED	LED Indicator	⑰	Output State Indicator
⑧ 88 H	Remaining Usage Time or Remaining Charging Time(Hour)	⑱ 100%	Remaining Battery Percentage
⑨ ECO	ECO Function Indicator	⑲	Input State Indicator
⑩ UPS	UPS Function Indicator		

\*The remaining usage time depends on the real-time output wattages of the loaded devices.

The remaining hours tells the remaining charge/discharge time. It will prioritize displaying the remaining discharge time when charging and discharging simultaneously.

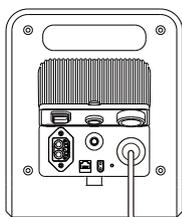
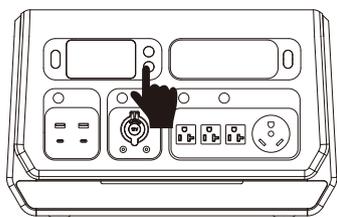
\*(The remaining time may has errors and the data is for reference only.)

## 9. Ways to Recharge

### 9.1 AC Wall Charging

Please plug the unit into the standard wall outlet and start charging.

This power station supports Quick/Normal/Silent charging modes. The default charging mode of the unit is "N" charging mode, Press the AC Charging button to switch these 3 charging modes.



Q: Quick Charging Mode

**1.1-1.2 Hours**

N: Normal Charging Mode

**3-3.5 Hours**

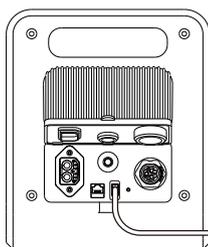
S: Silent Charging Mode

**6-7 Hours**



### 9.2 DC Vehicle Charging

Please connect the unit directly to the vehicle plug-in cigarette lighter port via the car charging cable.



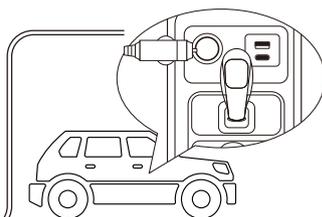
12V Car Charging

**19-21 Hours**

24V Car Charging

(Fuse should be  $\geq 25A$ )

**3-4 Hours**



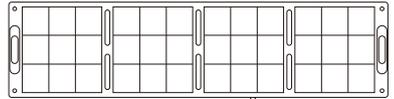
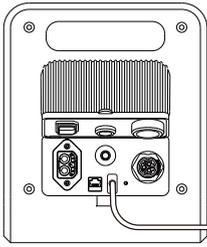
Cigarette lighter **MUST** be fully inserted into the lighter port of the machine.

### 9.3 Solar Charging

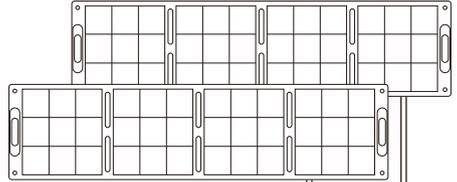
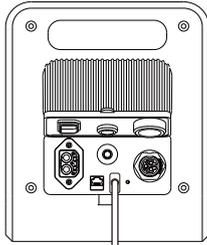
#### Safety Precautions When Charging

- 1) Never use higher than DC 100V to recharge this power station.  
ONLY use solar panels with compatible voltage.
- 2) Please ensure that the voltage of all solar panels connected in series is the same, and try to use the same type of solar panel.
- 3) Please don't put the power station in direct sunlight while charging in the high temperature environment.
- 4) Please ensure that your solar panels only charge the power station, they are prohibited from charging other photovoltaic equipment simultaneously.

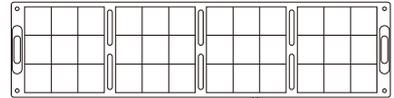
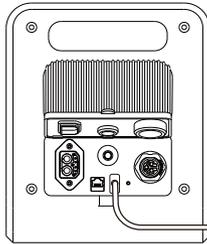
Note: Please make sure your solar panels comply with Open Circuit Voltage of DC16-100V. The Max Solar Input Power of the power station is 1200W.



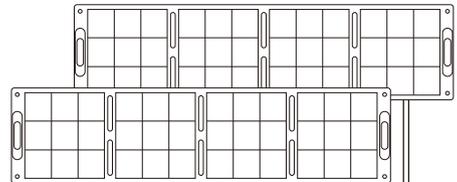
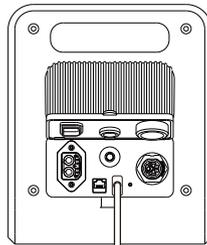
1\*200W Solar Panel  
**12-13 Hrs** (in full sun)



2\*200W Solar Panel  
**6-7 Hrs** (in full sun)



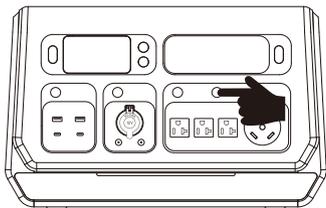
1\*400W Solar Panel  
**6-7 Hrs** (in full sun)



2\*400W Solar Panel  
**3-4 Hrs** (in full sun)

## 10. ECO Mode

The prerequisite for activating ECO Mode is to turn on the AC button. Turn on ECO Mode, the AC power will automatically turn off when AC load is  $\leq 50W$  or no load over 4 hours to save power drain.



## 11. Auto-Sleep Mode

If the ECO Mode is off, to avoid forgetting to turn off the output during use that results in battery consumption, the unit will turn to Auto-Sleep Mode when no device is connected or the connected device is less than or equal to a certain value.

When without charging, and the AC&DC&USB outputs  $\leq 2W$ , the device will automatically shut down after 1 hour.

## 12. Super Power Mode

The Super Power Mode is disabled by default. To enable it, turn it on directly in the LANDBOOK app. when enabled, In this mode, the power station can run high drain pure resistive loads\* ( $\leq 3600W$ ) while its rated output power remains 2400W.

**Note:** The Super Power Mode is not available when charging power station via an AC source like a wall outlet or generator. The AC source will bypass the inverter and supply power directly to connected AC loads.

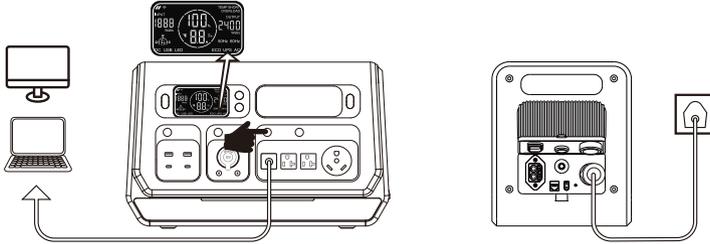
## 13. UPS Bypass Mode

UPS Bypass Mode: Connect the power station with the AC power, then turn on the AC output, and the 'UPS' 'AC' will be on display. When on this mode, the AC power will directly support the loads on AC output ports and charge the unit.

Note: Max. output power: 1800W.

The UPS Bypass Mode prioritizes providing AC output power, then the excess power will supply for charging the power station.

The AC inverter is disabled under UPS Bypass Mode. The unit won't enter this mode unless connecting with AC power AND turning on the AC output.



## 14. ATS Mode

To use the ATS feature, connect your power station to a wall outlet with the AC charging cable, connect your devices via the AC output ports, turn on the ATS button in the LANDBOOK app, the UPS function will automatically activate every time after a power outage without pressing the AC outlet button.

### How the control ATS function?

Method 1: Turn on the ATS on/off button in the LANDBOOK app.

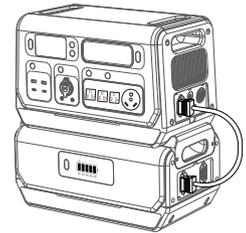
Method 2: Long press the AC button for 3 seconds to turn on or turn off the ATS function. The flashing AC icon indicates successful setup.

We suggest that you use the first method to control ATS function.

## 15. Connecting with an Expansion Battery

Your power station can be connected with an expansion battery to double the capacity to 4096Wh. Please refer to the user manual of ALLWEI Expansion Battery (2048Wh) for detailed instructions.

(Support 4 battery packs, For capacity expansion, additional battery packs need to be purchased seperately).



## 16. Download App

Please search for the App "**Landbook**" in the App store (iOS: App Store; Android: Google Play) on your mobile phone and download it.

Please refer to the ALLWEI App User Manual for detailed instructions.



# 17.Usage

## Emergency:

The power station can be used as an emergency power supply during power failures. It is especially suitable for locations that are prone to severe weather patterns and natural disasters including floods, hurricanes, earthquakes, forest fires, and snowstorms.

## Outdoor Activities:

Camping, outdoor celebrations, fishing, climbing, outdoor photography, RC helicopter and drone charging, farming and bird watching.

## Home Backup:

Home and office electrical device charging, energy-saving lamps, television, mini refrigerators, holiday decoration lights, printers, laptops, fans and smart mobile phones.

# 18.Usage time of devices

 <b>Projector</b> (100W) <b>19 Hrs</b>	 <b>*Mini Cooler</b> (90W) <b>21 Hrs+</b>	 <b>Blender</b> (300W) <b>6 Hrs</b>	 <b>Coffee Maker</b> (550W) <b>3.5 Hrs</b>	 <b>Electric Grill</b> (1600W) <b>1.1 Hrs</b>	 <b>Washer</b> (500W) <b>3.8 Hrs</b>
 <b>Hand Drill</b> (60W) <b>32 Hrs</b>	 <b>*Refrigerator</b> (520W) <b>5-24 Hrs+</b>	 <b>*Air Conditioner</b> (1150W) <b>2 Hrs+</b>	 <b>Microwave</b> (1160W) <b>90 Min</b>	 <b>CPAP</b> (40W) <b>48 Hrs</b>	 <b>TV</b> (110W) <b>17 Hrs</b>

## NOTES:

- 1.Run time=2048Wh\*90%(conversion rate)/Your device's power(Watts).
- 2.Support all electronic devices less than 2400 Watts.
- 3.It is recommended to use a DC port instead of an AC outlet to power your CPAP machine.
- 4.\*The usage time for refrigeration machines with compressors mainly depends on temperature setting and start frequency of compressors,it's usually lasting longer time than certain reference time.
- 5.The above charging times are calculated as a reference guide only. The actual usage time will depend on the power of the connected devices.

# 19.FAQs and Solutions

## 1. Can 2400W Power Station be connected to battery packs?

Yes. The 2400-3 generator supports capacity expansion with B200 PRO expansion batteries, Max support 4 expansion batteries up to 10240Wh.

\*2400-3 & B200 PRO: Via 1\* 2+7PIN Connecting Cable

## 2. How long will the 2400W battery power my device?

Working time=2048Wh\*90%/Operating Watts of Your Device. Note: the actual working time may vary under different circumstances.

## 3. Is lithium-ion battery the same as LiFePO4? Which battery is better for a power station?

No, there are a few varies in performance, chemical composition and longevity in lithium-ion and LiFePO4. Both are safe reliable choice for power station. But LiFePO4 batteries have a longer lifespan, enhanced safety and increased thermal stability.

## 4. Can I charge it with solar panels from other manufacturers?

Yes. Open circuit voltage: DC16V-100V/25A 1200W Max, Total solar input:

1200wMax, our 2400W power generator is built in XT60 input port. We recommend ALLWEI 200W Solar Panel and ALLWEI 400W Solar Panel.

## 5.How to reset the power station when over-load protection?

If your device watts is beyond the 2400W, it will trigger over-load protection.

Please press the "Circuit Protector" Button on the side of the battery to reset the power station.

## 6. How to keep this product when it is not used for a long time?

If the battery is to be unused for a long time (more than 3 months), please recharge it every 3 months to keep the battery power above 50% if you don't use it. (it's recommended to check and charge every 3 months).

Store it in a dry and cool place with temperature range between -4°F~140°F, and humidity 20%~85%RH.

Avoid contact with corrosive substances, and far from fire and heat Sources.

## 7. Why is the output to the low-power device automatically turned off after several hours?

If the ECO mode is on, the AC power will automatically turn off when AC load is≤ 50W or no load over 4 hours to save power drain.

If the ECO Mode is off, to avoid forgetting to turn off the output during use that results in battery consumption, the unit will turn to Auto-Sleep Mode when no device is connected or the connected device is less than or equal to a certain value. When without charging, and the AC&DC&USB outputs≤2W, the device will automatically shut down after 1 hour.

### 8. Is the 2400W power station waterproof?

No, please do NOT store it in a humid environment for a long time.  
Please store it in a dry and cool place.

### 9. Can I use or charge the 2400W power station in sub-zero temperatures?

**Temperature ranges for 2400W power stations are:**

AC Charging: 0°C-40°C(32°F- 104°F); Discharge: -10°C- 40°C(14°F- 104°F);

Storage:-20°C- 60°C(-4°F- 140°F).

Technically, it can power electrical devices under such situations, but please avoid charging it.

### 10. Are the built-in batteries replacement or upgradeable?

No. If the battery pack is faulty or even dead, please contact our Customer Service.

## 20.Common Trouble Shooting

Failure Description	Types	Solutions
Unit can not charging from AC wall outlets	AC charging fault	1.Please ensure to use original AC power cord. 2.Please check if the AC wall plug is correct connection. If not solved,Please contact our after-sales service.
Unit can not charging from solar panel	DC solar charging fault	1.Please ensure solar charging connection is correct under user manual. 2.Please ensure connected solar panel specification is meet specified standard. 3.Please ensure solar panel charging under sunlight environment. 4.If not solved,Please contact our after-sales service.
LCD Screen icon flash "AC" "DC" "USB"	Over-current protection Short circuit protection Over-voltage protection Low-voltage protection Over-Load protection	Resolve the problem by pulling out plug or remove electrical devices,the product can recover itself after re-start. If not solved,Please contact our after-sales service.
High-temperature icon continuous appears	High-temperature warning	Power station can recover itself after battery cooled.

## 21.Maintenance and Storage

- 1.When not using the unit for extended periods of time, power off the unit and disconnect the AC adapter from the outlet.
- 2.Charge the unit to 80% capacity every 3-6 months for long-term storage.
- 3.When the battery capacity drops to 20%, recharge the power station in time to extend the battery life.
- 4.Clean the unit with a dry cloth gently and carefully.
- 5.DO NOT stack anything on top of the unit either in storage or in use.
- 6.Store it in a dry and cool place with temperature range between -20°C~60°C, and humidity 20%~85%RH.
- 7.Avoid contact with corrosive substances fire and heat sources.

## 22.Warranty & Customer Service Support

Thanks for purchasing our 2400W portable emergency power station. The portable power station is covered a warranty of 5 years from the date of its original purchasing. The warranty covers material and manufacturing defects prior to being shipped to third parties. This warranty does not apply: Any defects or damages caused by misuse of products, unauthorized modification, dis-assembly or operation not in accordance with the official instructions or manuals.

If you have any after-sales questions or need further technical assistance, please feel free to contact the email: ✉ [support@allweipower.com](mailto:support@allweipower.com)

### CAUTION

- a) Do not overcharge the internal battery. See instruction manual.
- b) Do not smoke, strike a match or cause a spark in the vicinity of the POWER STATION.
- c) Only charge the internal battery in a well ventilated area.
- d) Risk of Electric Shock. Connect only to properly grounded outlets.
- e) Risk of Injury to Persons. Do not use this product if the power cord or the battery cables are damaged in any way.
- f) Keep away from moisture or water. Do not use outdoors on rainy days.



Made in China