

# CN505

614Wh Power Station User Manual

In the Safest Mode, Out to the Furthest Border

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Thank you for your purchase of 614Wh portable power station. Building up a power system for your mobile house or when go camping hunting. With portable power station, you can easily set up a power system for ceiling fans, RV lighting, laptops, and phones. Keep basic electric stuff charged up easily.

To ensure safety and avoid any property damage, please read this manual before use and follow its guidance. Non-compliance may cause serious injuries, life-threatening, severe property damage. Please keep this manual for future reference.

## Important Safety Instructions




Please be sure to observe the following for safe use

<b>DANGER</b>	This indicates situation in which people could be seriously injured, life could be threatened.
<b>WARNING</b>	This indicates situation in which people could be injured in certain degree.
<b>ATTENTION</b>	This indicates situation in which properties damage may occur due to incorrect operation.

**Serious Injury:** refers to burns, blindness, injuries, electric shock, fracture, poisoning and other sequelae, and in which case people need to go to the hospital for treatment, or life could be threatened.













**Injuries:** refers to injuries, burns, electric shocks... which does not threaten life but people still need hospital treatment for cure.

**Properties Damage:** refers to damage to houses, household property and livestock, pets.












	It indicates that attention should be paid to fire, rupture and high temperature when operating the product. Specific attention is described in the figure.
	This means that this behavior is prohibited when operating a product. Specific prohibited content is described in the icons or text in or near the icons.
	This represents the mandatory operation of the product in accordance with the instructions. Specific mandatory content is described in graphics or text in or near the figure number.

- In order to use the product safely, a clear note label was pasted. Please use it with the contents and labels of this manual.
- Please do not make the labels sticking on this product dirty or fall off.










## DANGER

	Please do not disassemble, repair or transform, which may cause electric shock, heat, fire and other dangers.
	Do Not put the product near the fire source or put it into the fire or heat, which will cause fire or burns and other dangers.
	This product can not be charged and used in dew, bathhouse, rain and other places; do not use water to clean the product, it will cause electric shock, heat, fire and other dangers.
	Do Not touch this product or connector plug when your hands are wet. It may cause electric shock hazard.
	Do Not use metal to contact AC output interface. It may cause electric shock, fever, fire and other dangers.
	Do Not wipe the liquid of the product inside the eye. After washing eyes with clean water, please see a doctor immediately. It may cause the risk of blindness.
	Do Not throw it as general waste disposal. Electric shock, heat and fire may occur in the garbage or collection truck.
	Do Not use AC connections other than those specified
	Please confirm the specifications of the connection interface, and do not exceed the specifications during usage.
	Do Not have a strong impact on the product such as a drop or a hammer strike. It may cause electric shock, heat, fire or damage to the unit.
	Do not place, store, and use in places where product could fall or drop easily (such as high shelves).
	Do not move the product while it is being charged or in use. Due to vibration and shock during movement may cause heat or fire or electric shock or damage to the unit.

## WARNING

	Please keep the place clean for use and storage. Powder or small metal contact terminal may cause short circuit, accidents such as smoke or fire.
	Be sure to check before use. In case of any abnormality such as breakage, crack, leakage, fever and AC line breakage, please stop using the product immediately.
	When AC wire is damaged, please pay attention to operation. Do not move the AC wire. Do not unplug the AC wire from the input port. Keep the AC wire away from the heat source. Do not trample or pull the AC wire, etc that would lead to AC wire damage. These are the causes of AC wire damage, heat, fire, electric shock.
	Do not let children use this product. Or it may cause accidents or injuries.
	Do not use if the interface cannot be fully plugged in due to loose or deformed interface, otherwise which may cause electric shock, heat and fire.
	Please do not use it on the beach or in dusty places. Or it may cause smoke, fire.
	Please do not use and keep in the car, trunk, loading table or high temperature place under direct sunlight. Otherwise, it may cause product failure obstacles or deterioration.
	When the liquid inside the product sticks to the skin or clothes, please wash it with water immediately. Otherwise it may cause the skin injury and so on.
	Remove the AC cable from the socket when lightning strikes during charging. When it thunders, a large current from the socket may cause fire and other accidents.
	Please charge in the specified voltage range (AC 100-240V).Otherwise, it may cause fire or other accidents.
	Please do not put the product in reverse or sideways when using and storing. Otherwise may cause leakage, heat, fire, or other accidents.

## Attention

	Please stop using the product immediately when there is any abnormality such as rusting, peculiar smell, heating, etc.
	The transportation of the product shall conform to the provisions of laws and regulations of dangerous goods. The built-in lithium ion battery capacity is more than the United Nations regulations value (100Wh), therefore, the product must be packed, labeled and declared in accordance with IATA(international air transport association) regulations when transported by air or ship. Please consult with the shipping company for details.
	When transporting the product with a car, etc., please fix the product in place so that it cannot be moved. Otherwise it May cause damage to the product, resulting in electric shock, heat, fire, etc.
	Do not allow this product and the AC cable to get wet with water or other liquids. It may cause short circuit, heat, fire, etc.
	Please charge, use this product under 113°F,storage this product under 149°F otherwise it may cause poor performance or heat.
	In case of accidental fall and impact, the body may be damaged due to electric shock, heat, fire, etc., please stop using it immediately. To prevent accidents, please contact the local designated system installation and maintenance persons immediately.
	Please carefully read the operating instructions of the electrical products to be connected. Failure to operate the electrical products may result in accidents or injuries.
	Before connecting electrical products, please make sure that the electrical products are powered off, and sudden start of electrical products may cause accidents or injuries.
	Be sure to turn off the main power button during storage to prevent unnecessary discharge of the battery and prevent electric shock.

# About the 614Wh Portable Power Station

## 1.What' s in the box

- 1 614Wh Portable Power Station×1
- 2 AC Adaptor (Including AC Charging Cable)×1
- 3 Cigarette Lighter Cable×1
- 4 DC to MC4 Cable x 1
- 5 User Manual×1



①



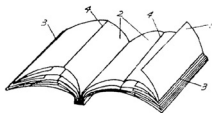
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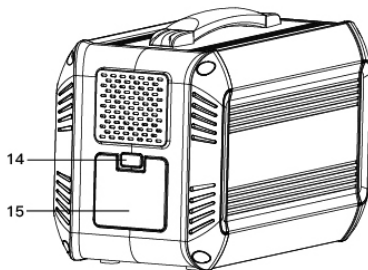
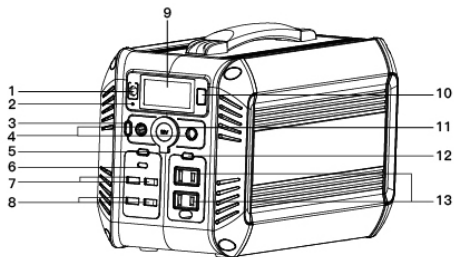
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 **Note:** Picture is only for reference.

## 2.Product Introduction



1. Charging Port( DC Input )

2. Reset Hole

3. DC Power Button

4. DC 12v 5521 Output Port

5. USB Power Button

6. Type-C PD Output Port

7. USB 5V/2.4A

8. USB QC3.0 18W Output Port

9. LCD Screen

10.Main Power Button

11.DC 12v Car Cigarette Lighter  
Output Port

12.AC Power Button

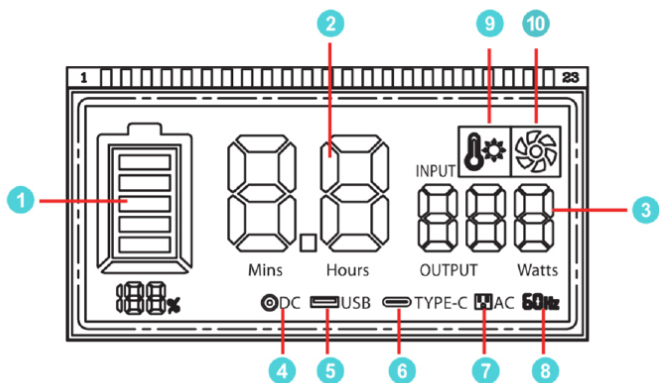
13.110V AC Output Port

14.LED Light Button

15.LED Light



## LCD Screen



1. Battery Capacity Indicator
2. Battery Remaining Time
3. Input/Output Power
4. DC ON /OFF
5. USB ON /OFF

6. TYPE-C ON /OFF
7. AC ON /OFF
8. 50/60HZ
9. Over-temperature Indicator
10. Fan Indicator

### **LCD Battery Display:**

The LCD Battery Display indicates the charge level. There are 5 segments of the battery, approximating 20% ~ 40% ~ 60% ~ 80%

~ 100% of capacity. During using, segments will disappear from the display from top, indicating the remaining capacity. When charging it, you will notice a battery segment blinking with 1 second interval. This indicates the current charge status and the number under INPUT shows the real-time charging power. Once it is fully charged, all battery segments will be lit and remain solid.

### **Over-temperature indicator Display:**


When the discharge temperature is greater than 149 °F degrees, the over-temperature protection indicator will be displayed on the screen for 5 seconds.

### **Radiator indicator Display:**

The fan will turn on when the power supply temperature reaches 45 degrees.

## **Using Portable Power Station**

### **Important Tips Before Use**

 **Note:** Please charge the product to 100% before using.

When charging the product, the battery capacity display icon on LCD screen will be on dynamic status, after the battery is charged fully, the display icon will on static status.

## **1 Charging**

### **(1). AC Adapter Charger Charge the Product**

 **Note:** Always use the standard AC Adapter charger that comes with the product



- ① . Connect the product and socket with the AC charger in the package.
- ② . Please unplug the charger when charging completed.(it takes about 7-8hrs to fully recharge the product if using 19V/4.75A 90W AC adapter charger).
- ③ . Please use original adaptor, non-standard adapters may cause defects in the product.

**⚠ Note:** It is normal for this product to get hot during charging.

**⚠ Note:** Make sure that the wiring is in good contact, otherwise the contact terminals may melt or ignite at high temperatures.

## (2).Car Charger Charge the Product

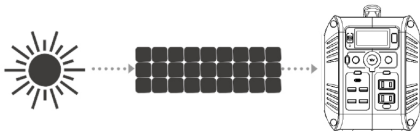


- ① .Connect the product and the cigarette lighter socket with the cigarette lighter cable in package.
- ② .Charge the product after starting the car.

**⚠ Note:** Make sure that the wiring is in good contact, otherwise the contact terminals may melt or ignite at high temperatures.

**⚠ Note:** If the car battery is 12V, the product cannot be fully charged. If the car battery is 24V, the product can be fully charged.

## (3).Solar Panel Charge the Product



**Please note:** solar panel cable should be purchased separately. The package does not include solar panel cable.

- ① . Choose suitable solar panel(DC5521 charging cable 12~24V / Max. (100W) )
- ② . Put the solar panel under strong sunshine, face to the sun perpendicularly.
- ③ . Take the cable, connect the solar panel and the product.
- ④ . When the product is charged fully by the Sun, it will stop charging automatically. Please take out the charging cable, and turn off our product.

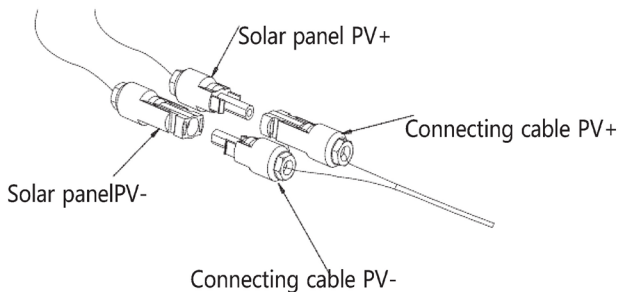
**!** **Note:** Please make sure the cable connecting is correct and stable, or will cause the connector in high temperature status or sparking.

**!** **Note:** Please charge the product under 32-113 ℉ temperature environment.

**!** **Note:** During the charging, it is normal if the product is getting a little bit hot.

**!** **Note:** The charging time is different when light intensity is different.

**!** **Note:** If you choose the solar panel which is with MC4 connector, please make sure the positive and negative poles of solar panels are connected correctly. Refer to the following connection chart.



## 2 Battery Life

The portable power station is designed to retain up to 80% of its original capacity at 2000 complete charge cycles when operating under normal conditions.

## 3 Estimation of Working Time for different power

10W  
smartphone  
61 Times

20W LED lamp  
30 hours

75W LCD TV  
7 hours

80W electric  
tool 6.4 hours


90W refrigerator  
5.8 hours

200W electric  
stewing pot  
2.6 hours

### Q: How to calculate the working time for your devices?

A: 1. AC output working time =  $614\text{wh} \times 0.85 / \text{the power of your device}$ . For example, assume your power of device is 50W, working time will be  $614\text{wh} \times 0.85 / 50\text{w} = 10.44 \text{ hrs}$  (rough calculated)

2. DC and USB output working time =  $614\text{wh} \times 0.95 / \text{the power of your device}$

 **Note:** The above data are for reference only. The working time varies from the power of loads difference.

## 4. Operation Instruction


### 4.1 Buttons Operation

#### ① . Main Power Button

**Power on:** Long press the main power button, and the LCD screen lights up.

**Power off:** Press and hold the main power button over 3 seconds, the LCD screen will be off.


#### ② . DC Power Button

**DC power on :** Short press the DC button, the LCD will display "  DC " .



**DC power off:** Short press the DC button, and the LCD will disappear "  DC " .



#### ③ . AC Power Button

**AC power on:** Short press the AC button, the LCD will display "  AC " .

**AC power off :** Short press the AC button, the LCD will disappear "  AC " .

#### ④ . USB Button

**USB power on:** Short press the USB button, the LCD will display "  USB  " .

**USB power off:** Short press the USB button, the LCD will disappear "  USB  " .

#### ⑤ . LED Button

**LED power on:** Press the LED button, there are three scale of led brightness: Micro bright--half bright--full bright--turn off, corresponding to the times pressing LED button.

**LED power off:** Long press the LED button, the LED lights will be turned off.

**SOS LED power on:** Double-Press the LED button and the SOS light will be turned on.


**SOS LED power off:** Press the LED button and the SOS light will be turned off.


## ⑥ . **Adjust the display background brightness**


Turn on the power button, the screen is bright.


Double press the power button, the backlight becomes dark.

Then double press the power button, the backlight is always bright.

 **Note:** Turn off these buttons to save power when not being used in order to prevent power consumption.

 **Note:**When you turn on the power and there is no other operation, AC Port/ USB Port will be closed after 4 hours automatically. But the power station is on.

 **Note:**When you turn on the power button and turn on DC5521 button, if the power is less than 1W, the power station will be close automatically after 4 hours.

 **Note:**When you turn on the power button and use cigarette lighter output port, if the power is less than 1W. The power supply will be close automatically after 4 hours.

## 4.2 Output Ports(Connectible Devices)

### ① . **USB Output Port:**

The device can eliminate the need for using multiple chargers, it can intelligently charge your smartphone, MP3 player, digital camera, electronic reader, tablet computer, etc.

Single USB port maximum output is 12V/1.5A(18W)(Support the Quick Charge technology)

### ② . **Type-C PD Output Port:**

Be used for smart phones, tablets, etc. Maximum output is 20V/3.0A(60W)

### ③ . **DC 12V 5521 Output Port:**

Mainly used for LED light bulb lighting.

Single DC output ports maximum output is 12V/4A(48W)

#### ④ . **DC12V Cigarette Lighter Output Port:**


Be used for vehicle refrigerator and other 12V equipment. Maximum power output is 12V/10A (120W)

#### ⑤ . **AC Output Port:**


Be used for notebook computer, camera, display devices and other AC power supply working equipment. Single AC port maximum power output is 110V(500W)


 **Note:** AC output uses electrical products with power below 500W.

#### **Other Considerations:**

 **Note:** Please make sure that the connected electrical products can work properly before using this product.

Note: The output will stop automatically after overload protection.


 **Note:** If the output stops repeatedly, please stop using it immediately. Only after eliminating the problem, it can be used again. Please contact the local designated system installation and maintenance person if device can't work well after your own adjustment.

 **Note:** Noise may occur in the broadcast or video player or TV and etc which are connected to this product.



## Product Storage and Maintenance

1. Full charge the machine before storage.
2. Switch off all power buttons before storage.
3. If there is dirt, soak and wring the cloth dry to wipe it clean.
4. Please do not use gasoline, volatile oil, thinner, kerosene, etc. which could dissolve the resin of the surface.
5. Keep it in dry and less dusty place. Temperature should be within 14 °F - 149 °F , and avoid direct sunlight.
6. Please full charge the product at least once every six months.

 **Note:** Please do not keep it in the car, trunk, loading platform or other hot place under direct sunlight. It may cause the product failure, degradation or thermal problem.

When not in use, please turn off the output, otherwise the internal circuit is still in power consumption.

When applying inverters, consumers are requested to use electrical and electronic equipment that is officially certified and approved.

## Troubleshooting

If the product cannot charge or power other devices, please check according to following steps:

1. Make sure the power button is turned on.
2. Make sure the AC and DC power buttons are on.
3. Check the battery capacity, if it' s lower than 10%, please recharge the product as soon as possible.
4. Make sure the load power connected didn' t exceed the limit power of this product, each port has a limit for the power connected.

If you can' t solve the trouble after above steps, please contact the seller from which you bought.

## Frequently Asked Questions and Answers

- **How to check the state of charge?**

The battery icon display on the LCD display shows the battery level and charge status.
- **How long will it work at 80% load?**

AC output working time =  $614\text{wh} \times 0.85 / \text{the power of your device}$   
For example, assume your power of device is 50W, working time will be  $614\text{wh} \times 0.85 / 50\text{w} = 10.4$  hrs (rough calculated)

DC and USB output working time =  $614\text{wh} \times 0.95 / \text{the power of your device}$
- **What kind of a "mini cooler" or "mini-fridge" could this unit power?**

There are two output ports to power these devices. The generator AC continuous output is Max 500W and the battery capacity is 614Wh. It could power the device which power less than 500W. The generator DC output is Max 120W, it could power the device which power less than 120W. It is better to choose DC port power supply refrigerator, and the output without power consumption maintains more power.
- **Can you use this battery to jump-start your car's battery?**

No, it could not be used to jump-start car battery.
- **How to extend the using time of CPAP?**

Recommend to turn off its humidifier, heater, and set a lower pressure. If there is a DC cable, well use the 12v plug. Because DC output without power consumption maintains more power.
- **How long does it last on a single charge?**

It will last about 3-6 months if you do not use it after a full charge.
- **Can you charge the battery using solar while charging your phone at the same time?**

Yes, you can.
- **Will this be able to power up the router for accessing internet?**

It can, but the duration it will run will depend upon the power of the router.

- **Is the battery replaceable by customers by himself?**  
No, it doesn't.
- **Can the AC output carry a Household refrigerator or air conditioner?**  
No, it can't, AC power less than 500W. DC power less than 120W.
- **50Hz/60Hz frequency switching(factory setting: 60 Hz)**  
How to set up: Long press the power button to turn the product on, then Press and hold the power button or AC button at the same time to select 50Hz and 60Hz. The frequency displayed on the LCD will change accordingly.
- **How do you reset factory Settings(reboot system)?**  
Please insert into the reset hole with a toothpick to restore the factory setting (reboot system).

## Specification

Output		
AC Output	Rated Voltage	AC110V±10%
	Rated Power	500W
	Peak Power	1000W
	Overload Capability	550W±50W≤load<420W 420W≤load
	Frequency	50/60Hz(Adjustable)
DC12V Output (Cigarette Lighter)	Rated Voltage	12.8V±10% ( With voltage regulation function )
	Rated Current	10.2A±0.5A
DC12V Output (5521)	Rated Voltage	12.8V±10%
	Rated Current	4.2A±0.5A
USB Output	Quick Charge Technology	Suitable for most mobile phones
	Rated Voltage	5V/9V/12V/20V±5%
	Rated Current	3A/2.4A/2.25A/2A/1.5A
Type-C Output	Charging Agreement	PD (60W)
	Rated Output	5V, 9V ,12V, 15V, 20V
LED Lighting	While the power button is on, press the LED light button in turn, the order of LED light will be: Micro bright--half bright--fullbright--turn off SOS Light : Double-Press the LED button and the SOS light will be turned on.	
Input		
Input	12-24 VDC	
Input Power	100W MAX	
Battery		
Rated Capacity	614Wh	
Rated Voltage	12.8 V	
Battery Cell Type	Lithium iron phosphate (LiFePO4 )	
Voltage Range	11.2V-14.6V	
BMS Safety System	Overcharging Protection Over-voltage Protection Over-power Protection Overheat Protection	
General		
Storage Enviroment	14°F-149°F	
Working Temperature	32°F-113°F	

Product Size	W*H*L: 151*181*317mm
Product Net weight	7.5KG

**Note:**

Solar panel charge type: MPPT

## Warranty (1-Year-Limited)

The manufacturer's warranty is void under the following circumstances but not only limited to:

- Improper modification or inadequate maintenance.
- Accident, misuse, abuse, contamination, or other external damage causes.
- The use of unspecified adapter and accessories.
- Damages that occurs as a result of one's failure to follow the instructions.

## Customer Service

We have an certain time of warranty, please contact the sellers for more info.

Follow the following QR code to download the digital instruction to prevent missing the paper one.