

**POWERWIN PPS320W01 Portable Power Station**

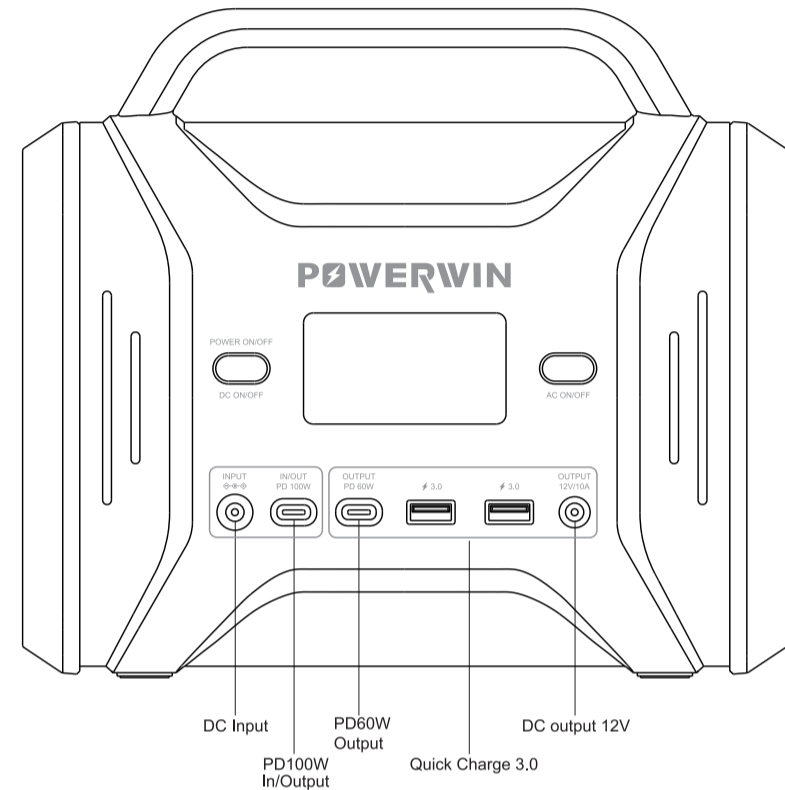
No more worries about being outdoors or having a power outage. With 320Wh capacity and up to 300W AC output, PPS320W01 always keep you charged at any on-the-go moment. Featuring 100W In/Output USB-C PD, and QC3.0 charging ports. With premium battery, POWERWIN Portable Power Station PPS320 is your most reliable and safe power solution anytime, anywhere.

**Notes:**

- A.The specifications and the pictures in this manual are for refence only.
- B.The product is perfect for off-grid power needs or backup power for emergency situations.
- C.Actual AC outlet and AC adapter will be different depending on the locations of the customer.
- D.To maximize the battery life, please fully charge the product before using it for the first time.

**Get To Know Your Product**

**1. Front**



**Charging Your Product**

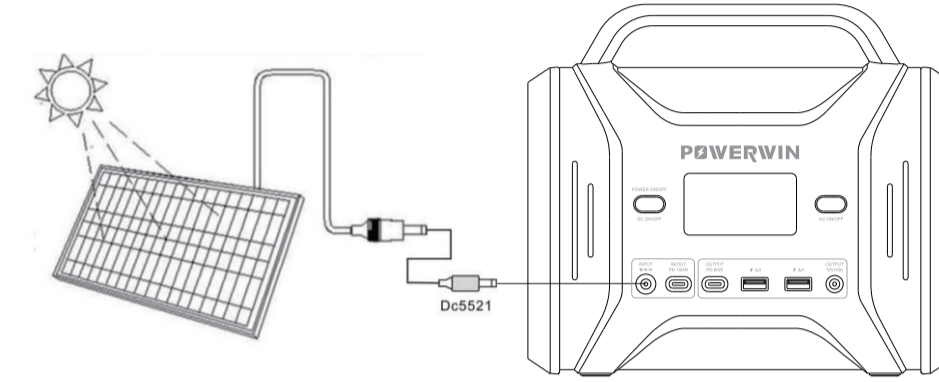
**ATTENTION**

If the ambient temperature is too high or the battery temperature is higher than 60°C due to continuous high-power discharge, the product cannot be charged. When the battery temperature is less than 55°C, the charging function will automatically resume. If the battery is not used for a long time, the battery should be stored in a dry and ventilated room with an ambient temperature of 0~35°C for more than 3 months, and the battery should be charged to 50%~80%.

**1.LCD Battery Display**

As you use your product, segments will disappear from the display, indicating the remaining charge. When charging your product you will notice a battery segment blinking at a 1 second interval status. Once your product is fully charged, all battery segments will be lit and remain solid.

**2.Charge Through Solar Panel**



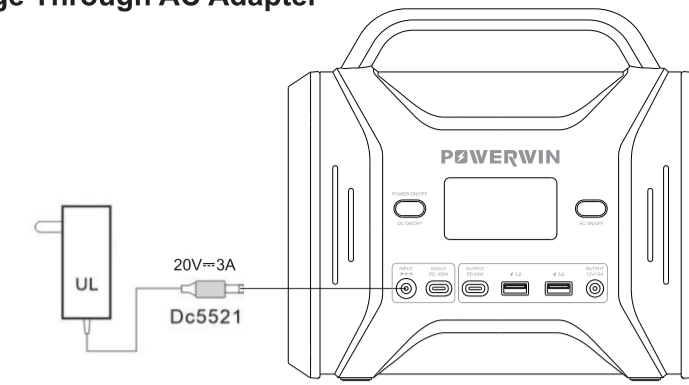
- A.Place your solar panel where it will get as much strong direct sunlight as possible.
- B.Connect the output port of the solar panel with the input port of the product to start charging. You will know the product is being charged when the LCD displays the charging percentages on the screen. The product is fully charged when displays 100%.

**Notes:**

The actual charging efficiency can vary widely depending on weather, ambient temperature, sunlight, and the angle that the solar panel faces to the direct sunlight and other factors. The maximum output voltage of the solar panel should not exceed 23.5V.

In order to ensure solar charging efficiency, it is recommended to use solar panels with an open circuit voltage of 10.8 -23.5V. The maximum current can reach 3A.

**3.Charge Through AC Adapter**

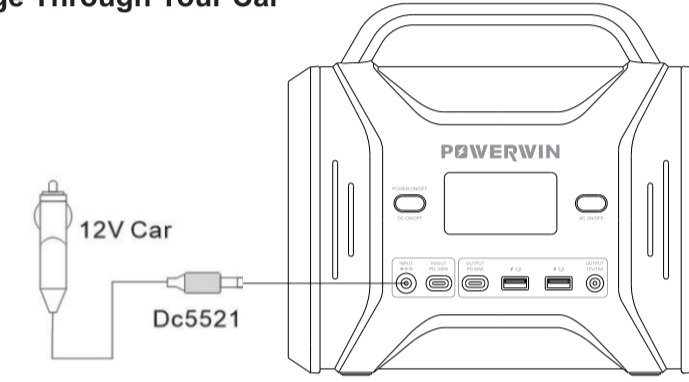


Plug the adapter into it's DC input port and you will see the state of charge displayed in the screen.

**Notes:**

- A.The product is fully charged when battery displays 100% capacity on the screen. After that, please unplug the AC wall charger as soon as possible.
- B.Usually, it takes about 5 hours to fully charge the machine using the original power adapter.
- C.When you charge your power station by Input port, the PD 100W port cannot be powered.

**4.Charge Through Your Car**



- A.Plug the car charger into the 12 V DC Charging Port of your car, and then plug into the DC input port of the machine.
- B.The original car charger features a 10A protector tube to protect your car.
- C.The product is fully charged when the battery displays 100% capacity on the screen.

**Notes:**

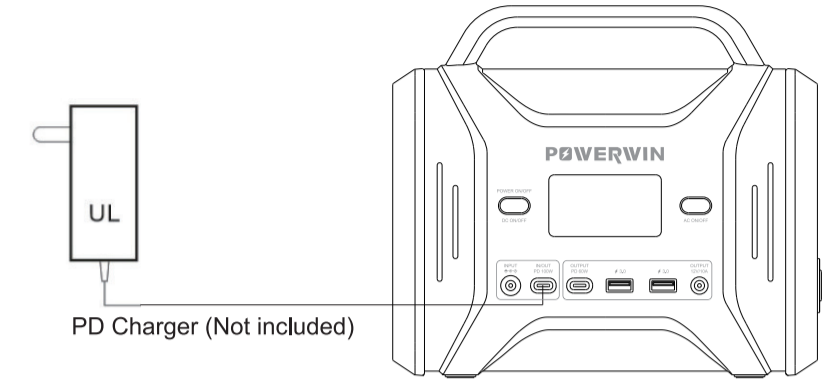
To avoid car battery power loss, you should charge this product through your 12V DC Charging Port only when your car engine is started.This function is for 12V cars ONLY.

**Protection Mode (DC Input)**

- A.Due to the different models of cars, it may not be fully charged.
- B.Under-voltage protection: The power generator can't be charged if the voltage of your car is too low.

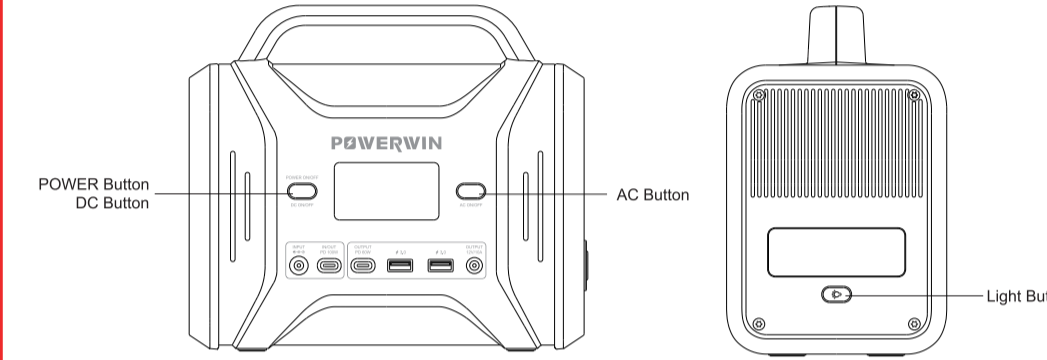
**5.Charge by PD Mode**

Plug your PD charger in PD 100W In/Output Socket.



**Using Your Product**

**1.Button**



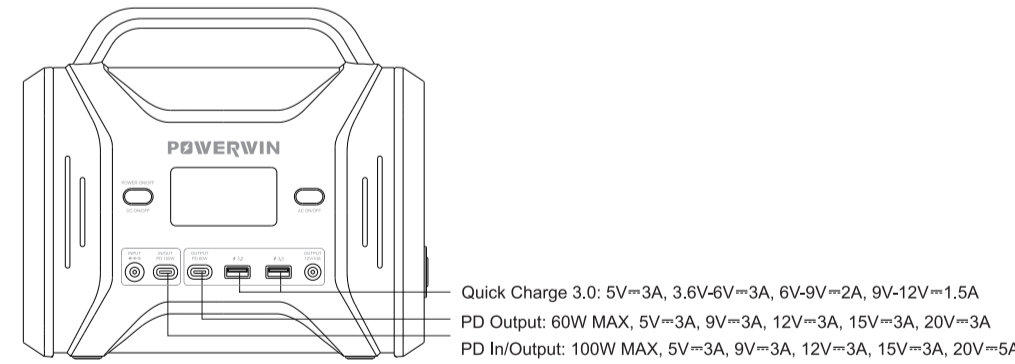
- A.Long press the power button for 3 seconds to turn the machine on. Short press the power button to turn on the DC function. When not use, press the power button to turn off the DC function.
- B.Long press the AC button to turn off the sound. Long press the AC button again to turn on the sound.
- C.Press the Power Button and Light Button simultaneously to reboot.
- D.Press the Power Button and AC Button simultaneously to switch the AC frequency.

**2.Light Modes**

- A.Press the button to turn on the light, high-light.
- B.Press the button twice to switch into low-light.
- C.Press the button third time to switch into emergency SOS signal flash.
- D.Press the button fourth time to switch into flash light.
- E.Press the button fifth time to turn off.

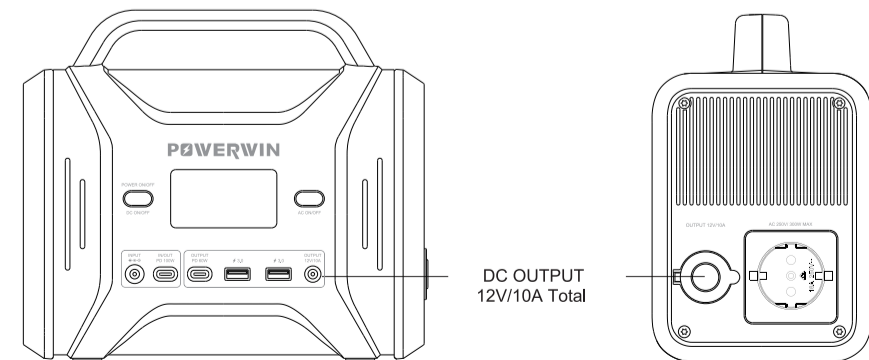
**Warning! DO Not Stare Into the Light!**

**3.USB Output Function**



When two USB-A ports use them simultaneously, the two ports can only power 5V/ 3,8A in total, which cannot power fast-charging mode.

**4.DC Outputs**



- A.The 12V DC Charging Port and The DC5521(5.5mm in diameter) 1.2-14.6V ports offer max 10A output current and automatically distributes max current according to the external connected devices to ensure shortest charging time.
- B.The DC5521 port can be connected with a 12V DC Charging Port (power requires less than 100W).

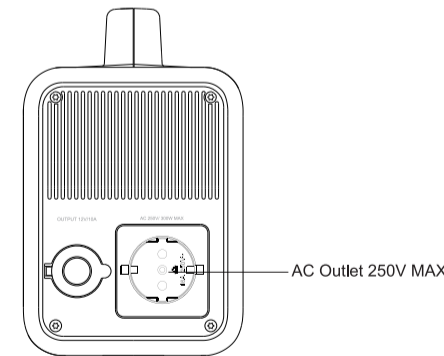
**Notes:**

If the output DC and USB of the product are greater than 32A at the same time, the buzzer alarms after the product runs for 3 minutes by E11 LCD error code. If the alarm lasts for 30 seconds and is not cleared, the product will forcibly shut down the DC output to reduce the total DC output current and ensure the safety of the product. In vehicle charging mode, when the voltage of the charging port is lower than 11.2V, the charging function will stop charging to avoid over-discharge of vehicle power.

**Protection Mode (DC Outputs)**

Short circuit protection: when short-circuit occurs to the external devices, the machine starts beeping and stops charging.

**5.AC Output**



- A.Plug the power cable of AC appliance into the AC outlet of the machine. Press the power button to enter AC mode.
- B.Make sure the power of the connected AC appliance is less than 220V/300W

**Notes:**

When there is no load for more than 2 minutes, the LCD screen backlight goes blank automatically and shut down. When the battery voltage is less than 11.2V, the AC output function will be forcibly shut off. Please charge. The AC output function automatically shut off after 8 hours of non-activity. When not in use, please turn off the AC power to keep it safe.

**Protection Mode (AC Output)**

- A.This product has undervoltage protection, overload protection and short circuit protection. The overtemperature protection is a double insulated circuit which is safe, reliable and efficient.
- B.When overload, overtemperature or short circuit occurs, this machine will start beeping and the AC icon on the screen will flash, and then the machine automatically shut down to ensure safety.

**Product Specifications**

**Battery**

Battery Type	12.8V LiFePO4 Battery
Capacity	320Wh/ 100,000mAh
Lifecycles	2000+Cycles to 80% Capacity
Battery Maintenance	Charge Every 3-6Months

**Port**

USB-A Port (Output)	5V=3A, 9V=2A, 12V=1.5A
USB-A Port (Output)	5V=3A, 9V=2A, 12V=1.5A
USB-C Port (60W Output)	5V=3A, 9V=2A, 12V=3A, 15V=3A, 20V=3A
USB-C Port (100W In/Output)	5V=3A, 9V=2A, 12V=3A, 15V=3A, 20V=5A
DC Port (2x5521+12V Car)	11.2-14.6V=10A
AC Port (Output)	230V/ 50Hz, 300W Pure Sine Wave
Charging Port (5521 Input)	Adapter: DC10.8-23.5V Solar: DC10.8-23.5V

**General**

Product Weight	9.0 lbs/ 4.1 kg
Dimension	11.3x7.5x11.9 in/ 130x202x230 mm
Operating Temperature	32-104°F/ 0-40°C
Illumination	LED

**Cold Temperature Condition**

Cold temperatures can affect the product's battery capacity due to chemical characteristics of the battery. If you'll be living off grid in sub-zero conditions, it is recommended to keep your product in an insulated cooler, and connected to a power source(12V car/AC adapter/solar panel). The natural heat generated by the product contained in an insulated cooler will keep battery capacity at its highest level.

**Disposal & Recycle**

This product should not be disposed along with household waste. Please dispose or recycle this product and the battery inside according to the local rules and regulations.

**Battery Information**

This product has an internal, non-removable, LiFePO4 Rechargeable battery. Do not attempt to remove the battery, as you may damage the device.

**Error Code**

Error Code	Discription	Solutions
E01	DC Output Overload	Unplug and reboot DC function.
E02	DC Output Short Circuit	Unplug and reboot DC function.
E03	AC Output Overload, over-temperature/ Over-voltage/ Short circuit	Unplug, keep in a cool condition, then reboot AC function.
E04	PD (Bi-directional Charging) Short Circuit/ Overload	Unplug, then reboot PD/ Type-C function.
E05	PCBA High Temperature	Keep in a cool condition, then wait until the product drops to room temperature
E06	PCBA Low Temperature	Keep in a warm condition, then wait until the product drops to room temperature
E07	Low Voltage Protection	Stop using and fully charge
E08	PD (Unidirectional Charging) USB-A Short Circuit/ Overload	Unplug, then reboot USB function.
E09	DC Charging Over-voltage	Please check that your device if it is within the voltage range of the product
E10	Battery Charge & Discharge High Temperature	Keep in a cool condition, then wait until the product drops to room temperature
E11	Battery Discharge Overload	When overload, the DC output function will be automatically shut off after 3min 30 sec approximately.
E12	Low Power	When overload, the AC & DC output function will be automatically shut off when prompt to charge.

**Caution**

- 1.Do not short-circuit the product. To avoid short-circuiting, keep the product away from all metal objects.
- 2.Do not heat the product, or dispose of it in fire, water or other liquids. Keep it away from high ambient temperature. Do not expose the product to direct sunlight.
- 3.Keep the product away from humid,dusty places.
- 4.Do not disassemble or reassemble this product.
- 5.Do not drop, place heavy objects, or trample on this product.
- 6.This product is not intended to be used by a person with reduced physical, sensory or mental capabilities.
- 7.Please keep this product away from children.
- 8.Do not cover the product with towels,clothing and other items.
- 9.Do not overcharge.
- 10.When fully charged, disconnect the product from the power source immediately.
- 11.If you are not going to use this product for a long time, please disconnect the cable before storing it.
- 12.To charge some portable electronic devices,you may need to set those devices in charge mode first. Refer the corresponding user manual of those devices for confirmation.
- 13.Do not pull the socket cover of the 12V DC Charging Port too hard, the tether could break.

**Pure Sine Wave Output**

This product generates pure sine wave, which is compatible with AC electric appliance that works with Sinusoidal wave form (power<300W). The product is perfect for off-grid power needs or backup power for emergency situations. However, it cannot replace the standard DC or AC power supply for household appliances.

**Package Content**

- 1x 320Wh Portable Power Station
- 1x AC Adapter
- 1x Car Charging Cable
- 1x PD 100W Dual Type-C Charging Cable
- 1x PV to DC 5521 Adapter Cable
- 1x User Manual

**Warranty**

Our company provides customers with warranty of 12 months from the date of purchase.

Customer Service: Service@iittechnology.com

