

## NEO 300

### Portable Power Station



Contact Us

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**Note: Please read the manual carefully before using!**

\*Based on providing better products and experience, DaranEner is constantly optimizing and updating products, the specifications and descriptions of the user manual may be changed and are subject to without notice.



# Disclaimers

- We are not responsible for any damage caused by use under abnormal conditions, including force majeure (typhoon, ground settlement, fire, earthquake, flood, lightning, abnormal voltage, other natural disasters, and other natural disasters), acts of third parties, other accidents, intentional or negligent misuse/failure caused by the customer.
- If accessories and this product are damaged, please do not repair them yourself. We are not responsible for any damage caused by disassembly or repair by yourself.
- The warranty coverage applies to the terms of use, and anything not specified is not covered by our warranty.
- If the instructions in this manual are not followed or used improperly, the product may be damaged or damage the surrounding device or cause personal injury. We are not responsible for any loss or damage caused by the above. In addition, we are not responsible for any modifications made to the product by the customer that are beyond our warranty terms.
- We are not responsible for any collateral damages (including loss of business profits) caused by misuse or modifications to the product, or damages caused by malfunctions of the connected devices which not related to us.
- We cannot confirm or guarantee that this product can be used with medical equipment that involves personal safety. We are not responsible for any damage caused by the use of medical equipment.
- Products purchased from non-authorized sellers are not covered under warranty. In addition, we are not responsible for any damages and collateral damages caused by the use of products sold by non-authorized sellers.
- Deterioration of the battery is not covered by the warranty.

## I. Important Safety Instructions

**Please keep this "User Manual" in a safe place.**

**This manual contains installation, operation, and use instructions for the DaranEner Portable Power Station NEO300.**

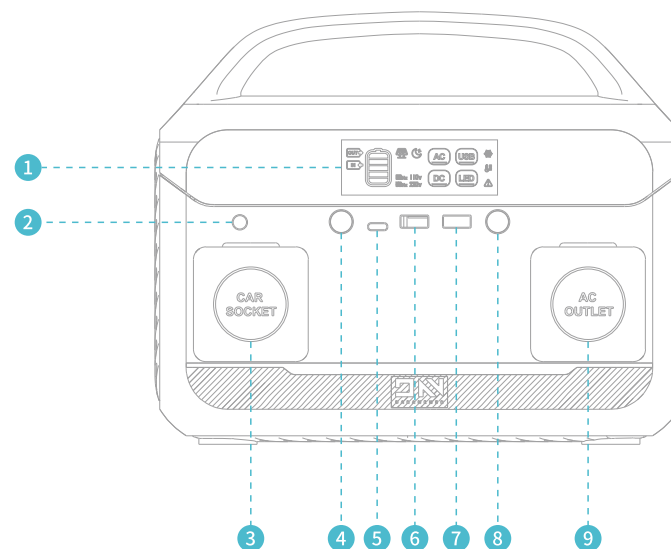
- Please ONLY use DC  $\leq 19V$  or AC 100V~120V 60Hz AC power source. Please do not use other voltages to charge, otherwise, it may cause the product and battery to overheat, fire, and explode.
- Please fully charge the power station before using it for the first time.
- When the equipment is connected to the power station, please confirm whether the equipment specifications are consistent with the power station nameplate.
- Please ensure that no short circuit is caused when connecting the external device to the power station.
- Children can not aware of the dangers of electrical equipment, please keep the power station out of the reach of children.
- Do not attempt to disassemble or modify any part of this product that is not described in this manual. Disassembly or modification of this product may cause serious accidents. Internal inspection or repairs should be handled by the dealer of the product or the manufacturer.
- Do not use this product with equipment related to life safety such as medical or essential social or public equipment such as emergency equipment.
- Do not use equipment that requires stable and accurate waveform, frequency, and voltage output. We are not responsible for any damage caused by the use of these products.

- Do not put any objects (especially metal objects) into the power station through the heat vent or interface.
- Do not replace or modify the battery pack.
- Do not touch the metal part of the DC and AC interface without protection.
- Do not immerse the product in water or splash water on it. Also, do not use this product when its surface is wet, as this may cause fire, electric shock, or malfunction.
- Please place the power station in a dry place, do not place the power station in a corrosive, acid-base, flammable & explosive gas, dusty, rainy, or humid environment.
- Please ensure adequate ventilation during use, always maintain at least 5cm (2 inches) of ventilation space around the power station. Ensure that flammable and explosive objects are kept away from the charger adapter.
- In extreme situations, liquid may be leaked from the battery, please avoid contact with battery liquid, if accidentally contacted, please wash with clean water. If the liquid splashes into the eyes, please go to the hospital for treatment asap.
- Do not drop or place heavy objects on the product. Please avoid impact on the product
- This product cannot be carried on an aircraft or shipped by air.
- When the device is not used for a long time. Please make sure to charge the power station at least every 30 days, to ensure the cycle life of the battery pack.
- Keep the workplace where the machine is placed clean, a messy workplace may lead to accidents. If foreign objects enter the machine by accident, it may cause short out, smoke or fire.
- Do not store the product where the temperature may rise above 50°C (50°F) (e.g. in a metal case or in a car in summer). This may cause deterioration of the product or the battery and may cause smoke or fire.

## II. Use Instructions

### 1 Parts Name & Function

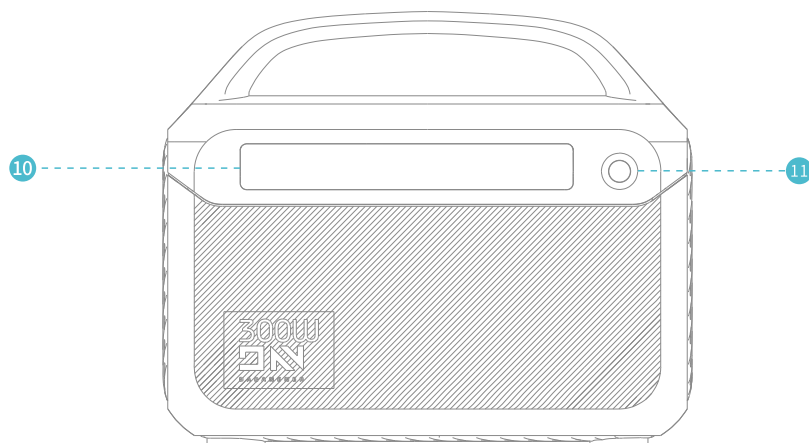
#### 1.1 - Panel Function



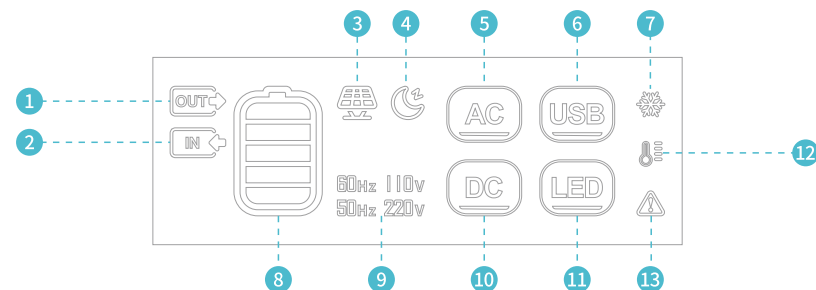
- ① **LED Display:** Displaying the working status of the power station.
- ② **DC Input Port:** Adapter and solar charging interface.
- ③ **Cigarette Lighter Port:** Cigarette lighter output for cigarette lighter devices.
- ④ **DC Switch Button:** Long press the DC button for 1 second, to open the cigarette lighter port, USB A and C port output for USB devices, and short press the switch button to close the DC output.



- ⑤ **USB C Port:** Support various PD protocol devices. Max output 60W.
- ⑥ **USB A Port 1:** Support various QC3.0 protocol devices. Max output 18W.
- ⑦ **USB A port 2:** Support ordinary USB-powered devices. Max output 15W.
- ⑧ **AC Switch Button:** Long press the AC button for 1 second to open the AC output, and short press the switch button to close the AC output.
- ⑨ **AC Output Socket:** For matching AC devices.
- ⑩ **LED Light:** 3W white LED Light.
- ⑪ **LED Switch Button:** Long press 1 second to open the LED light with 100% default brightness, and short press the button to switch between 50% brightness, strobe mode, and SOS mode.



## 1.2 - LED Screen Display



- ① **Output indicator:** This icon lights up when the power station has output.
- ② **Input indicator:** This icon lights up when the external power is charging the power station.
- ③ **Solar Charging Indicator:** This icon lights up when the solar panel is connected
- ④ **Hibernation Indicator:** This icon lights up when the device enters the hibernation mode when there is no working state.
- ⑤ **AC Indicator:** This icon lights up when the AC is turned on and there is AC output.
- ⑥ **USB Indicator:** This icon lights up When the DC is turned on with USB output.
- ⑦ **Snowflake Indicator:** This icon lights up when working at low temperature.
- ⑧ **Power Indicator:** Each block represents 20% of the battery power.
- ⑨ **Output AC Voltage and Frequency:** This icon shows the current AC output voltage and frequency.
- ⑩ **DC Indicator:** This icon lights up when the DC output is turned on.
- ⑪ **LED Indicator:** When the LED is turned on, the LED lighting is light up and this icon is light up at the same time.
- ⑫ **Thermometer Indicator:** When the temperature inside the machine reaches the temperature protection threshold, the power station will turn off the output automatically and this icon will light up.
- ⑬ **Alarm Indicator:** This icon lights up when the device is malfunctioning.  
(This icon does not light up when the battery pack has no malfunctioning).

## 1.3 - Operating Instructions

### 1.3.1 Power On Operation:

#### ① DC Button

Press and hold the DC output button for 1 second to activate the USB-A, USB-C ports, and the cigarette socket. Short press to turn off all DC output.

#### ② AC Button

Press and hold the AC button for 1 second to activate AC output, to turn on AC output. Short press to turn off AC output.

#### ③ LED Light Button

- Press and hold for 1 second to turn on the light (default brightness is 100%).
- Short press to switch between 100% brightness, 100% brightness, strobe mode and SOS mode.

### 1.3.2 Shutdown Operation:

The no-load power consumption of the power station is about 7W, in order to avoid the loss of battery power, please short press the switch button to turn off the AC/DC/LED power one by one when not in use.

### 1.3.3 Connect External Devices:

Before connecting external devices, please make sure that the working voltage of your equipment is consistent with the output voltage of the power station.


### 1.3.4 AC Frequency Switching:

**Not recommended unless necessary!** The default frequency is 110V 60Hz.

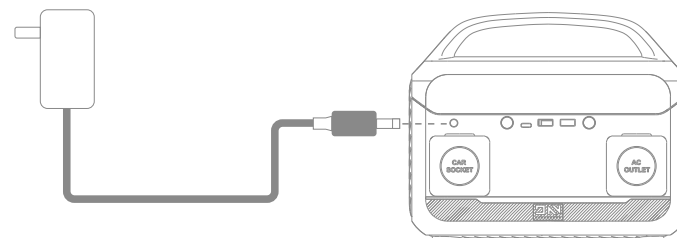
To switch the frequency, please press and hold the AC button and the DC button for 3 seconds.

## 2 Charging Your Power Station

Please strictly follow the instructions below to charge the power station. Charge the product only when the environment temperature is 0°C~40°C. Please use the original charging adapter and cable.

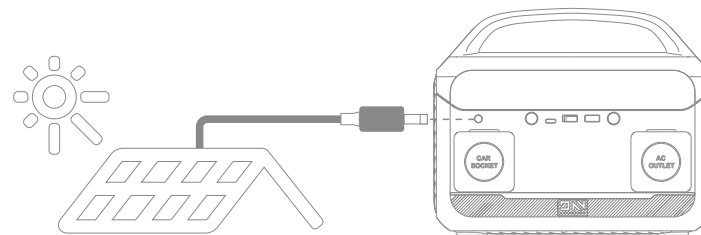
 **Warning:** For battery life and safety, do not charge immediately after full discharge is completed. Please wait 2-3 hours to cool down before recharging.

### 2.1 - Use Adapter to Charge Power Station



Connect the DC 5521 plug of the power source to the DC input port of the power station. The power block on the screen flashes to indicate charging progress, when all the power blocks stop flashing and stays on, it means the power station is fully charged, please unplug the power input in time.

### 2.2 - Use Solar Panel to Charge Power Station

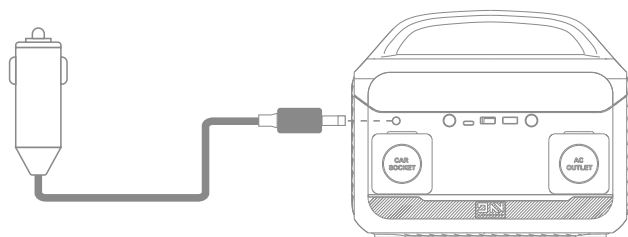


A. Place the solar panel in a place where it can get enough direct sunlight and adjust the appropriate angle.

B. Connect the solar panel to the power station DC5521 input port.

**! Warm tip:** The actual charging efficiency of the solar panels depends on various factors such as weather, temperature, sunlight, the angle of the solar panel, etc. The actual solar charging efficiency may different.

### 2.3 - Use 12V Cigarette Lighter to Charge Power Station



A. Plug the car charger cable into the 12V car cigarette lighter socket and connect the DC end to the power station.

B. The maximum output current of the car charger needs to be within 10A to protect the safety of the car battery and power station.

### 3 Use in Cold Weather

- Due to the chemical characteristics of LiFePO<sub>4</sub> batteries, low temperature (-10~-40°C) will affect the battery capacity of the product. If you are in an environment below 0°C (32°F), it is recommended to place the power station in an insulated container and connect it to a charging power source (12V car cigarette lighter/ AC adapter/solar panel, etc.). The natural heat generated by the power station in the insulated container will keep the battery pack efficiency at the highest level.
- In an environment below 0°C (32°F), the power station cannot be charged, but can output power to other equipment.

### 4 Hibernation mode

For better power saving, the power station will switch to hibernation mode automatically when there is no load. You can activate it by pressing any function button, or by connecting to any external device.

### 5 Discharge of the Power Station

In order to better extend the battery life, the normal discharge of the power station is best controlled within the 1C discharge range (i.e. total output power of 240W). When the battery level is below 10%, the BMS will turn off the AC inverter output, and the rest of the 10% power to power USB devices, and please charge the power station in time.

## 6 Troubleshooting

Failure Type	Screen Display	Possible Reason	Solution
AC output overload	Alarm icon flashes 3 times	Output load exceeds rated load	Reduce the power of external devices
AC output short circuit	Alarm icon flashing rapidly	Short circuit at the output devices	Release short circuit device
AC no output	AC output icon does not light up	Insufficient Battery power	Charge the power station
		Temperature protection	Shut down and wait for cool down
		Internal failure	Contact after-sales service
DC no output	DC or USB icon does not light up	Short circuit at the output devices	Release short circuit device
		Internal failure	Contact after-sales service
Temperature protection	Thermometer icon lights up & Alarm icon lights up	Air vent blocked	Remove the debris and keep the air vent clear
		Temperature protection	Shut down and wait for cool down
		Internal failure	Contact after-sales service

## III. Product Specifications

### 1 Battery

Cell type	LiFePO4
Battery Capacity	268.8Wh(12.8V/24Ah)
Cycle Life	3500 Cycles to 80% Capacity
Storage Advice	It is recommended to charge the product once a month

### 2 Input and Output

USB Interface(Output)	USB-A1x1: 5V~3A /9V~2A /12V~1.5A(Max. 18W)
	USB-A2 x1: 5V~3A (Max. 15W)
USB-C Interface(Output)	5V~3A/9V~3A/12V~3A/15V~3A/20V~3A(Max. 60W)
Cigarette Lighter (Output)	12V~8A (Max. 120W)
AC Interface (Output)	110V 60Hz 300W (Max. 600W)
DC Input Connector (DC5521)	Adapter 10-19V~3.42A (Max. 65W)
	Solar Input 18V~5A /20V~5A (Max. 100W)

### 3 Basic Specifications

Weight	7.7lb (3.5kg)
Size	10.0x8.2x6.6 in(25.5×20.8×16.8 cm)
Discharging Temperature	14~113°F (-10~45°C)
Charging Temperature	32~113°F (0~45°C)

## IV. Product Warranty

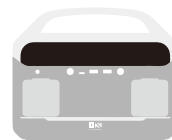
### 1 Warranty Policy

1. Claiming warranty may need your receipt and order number. We may also need to verify your identity.
2. We provide 2 years warranty for all DaranEner products, you can extend the warranty to 5 years by registering as a user on DaranEner official website.
3. During the warranty period, we will provide free repair or replacement service.
4. Even if the product warranty has expired, we can still provide paid support. However, we may not be able to handle peripherals (such as cables), discontinued products or parts.
5. We have a DOA (Defective on Arrival) period of 7 days. This means that if the product becomes defective within seven days of receipt, we will replace the item free of charge.
6. Even within the warranty period, if the product is damaged due to negligence such as customer disassembly, water immersion, drop, etc., or damage caused by natural disasters, this is not within the scope of free maintenance, the maintenance fees and freight will be charged.
7. Products purchased from non-genuine channels, such as resale second-hand products or products purchased from unknown sources, are not covered by the warranty and will not be repaired. In this case, please contact your seller for warranty support.

### 2 Disposal and Recycling

1. This product has a built-in LiFePO4 battery and cannot be disposed of with general household waste.
2. These are hazardous materials and are subject to certain transportation and disposal regulations.
3. Do not open or disassemble this product and recycle its battery alone.
4. When disposing of this product, please follow the instructions of your local government and dispose of it in accordance with the prescribed method.

## V. Packaging List



NEO300  
(1)



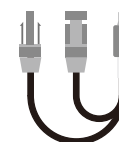
Adapter  
(1)



USB-C - USB-C  
Cable  
(1)



DC5521  
Car Charging Cable  
(1)



MC4-DC5521  
Cable  
(1)



User Manual  
& Warranty Card  
(1)

## FAQ

**Q: What type of battery does DaranEner NEO 300 use?**

A: NEO 300 adopts a new generation of LiFePO4 battery, which is high safety, long life, and good heat resistance.

**Q: What should I do if there is a malfunction?**

A: Please contact customer service for troubleshooting. Do not disassemble the machine by yourself.

**Q: When the AC output is on, the AC outlet is not connected to the external devices, will it drain battery power in this situation?**

A: When the AC output is turned on, the inverter will be started, and there is a no-load power consumption less than 10W. When the power station is not in use, please close each output interface to prevent battery power drained out.

**Q: After fully charge the power station and storing it for a long time without use, how long will the battery drop to 0%?**

A: When NEO300 is not in use, there is almost no natural discharge (turning off all switches). If it is stored for a long time after being fully charged, it can still remain more than 80% of the power after 3 months. For emergency use, please check the remaining power at least every 3 months.

**Q: When using the AC output, there is obvious noise, is it a malfunction?**

A: It is not a malfunction. This is the sound of the cooling fan running. The fan dissipates the internal heat and keeps the battery working in a good temperature environment.

**Q: Can this power station be brought on the plane?**

A: NEO300 cannot be carried on aircraft or shipped by air.

**Q: After using it for the first time or using a period of time, the remaining battery power displayed on the LED screen is different from the actual remaining battery power. Or the battery is draining too fast.**

A: The remaining power displayed on the LED screen may differ from the actual remaining power after the first use or after a period of long-term use. If this happens, don't worry. This is because the BMS goes into learning mode. After the first use or use for a long period of time, the battery pack needs to be fully charged and discharged twice, so that the BMS can re-learn and correct the battery power level. DaranEner is working hard to improve the accuracy of the displayed data.

Specific operation steps

Use (fully discharge) the power station to 0%.

Then charging the battery to 100% and leaving it for 3 hours or more, and fully discharging again.

( Repeat the above discharge and charge operations twice)

If the problem persists, please contact customer service.