DOART ROCKCORE 东安岩芯

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User Operation Manual

PowerPod Portable Power Station

DR-PPS102542FL01（1000W/2009.6Wh)
DR-PPS501512FL02 (500W/1004.8Wh)
DR-PPS501542FL03 (500W/2009.6Wh)

Version: 2.5

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Legal Information

Disclaimer

The products, services, and features described in this manual are subject to the actual purchase contract and may not reflect your purchase in whole or in part. Unless otherwise agreed in the contract, the company makes no express or implied representations or warranties regarding the contents of this manual.

This manual contains important safety information regarding the correct use and maintenance of the product to prevent personal injury or property damage. Before using the equipment, carefully read and understand the entire manual and strictly follow the safety precautions stated herein. The company assumes no legal liability for any damage or loss caused by improper operation of the product.

This manual includes instructions on safety, operation, and maintenance. Be sure to read the user manual carefully.

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This manual may be updated based on user feedback.
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Please keep this manual in a safe place.

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1 Precautions

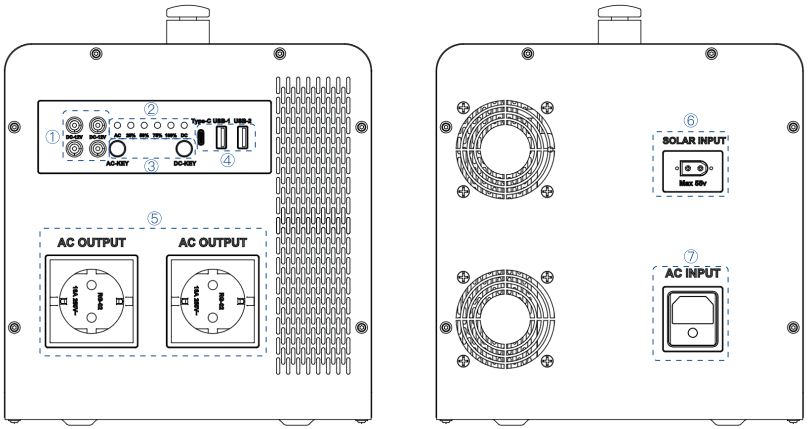
- Please be sure to use the dedicated accessories specially designed for this product. Our company is not responsible for any problems or consequences resulting from the use of mismatched accessories or improper use.
- It is important to use the product in a dry and well-ventilated environment and avoid blocking the vents.
- Please recycle or dispose of the products in accordance with local laws and regulations.
- Please keep the product away from liquid contact, and avoid using it in rainy or humid conditions.
- When connecting product accessories or input/output lines, please remember to turn off the power of the device.
- If the working temperature exceeds the recommended working temperature, the product may not operate normally.
- Do not disassemble the product or pierce it with sharp objects, as this may cause internal malfunctions and fire hazards.
- The equipment must be modified or repaired by the manufacturer, the maintenance department or professionals.
- It is strictly prohibited to short-circuit the product with wires or metal objects, as this will pose a fire risk.
- The use of electrical products inevitably generates electromagnetic fields. For equipment that is vulnerable to electromagnetic interference, please consult the manufacturer for relevant usage restrictions.
- Devices like refrigerators that require peak power at startup may cause the AC output to turn off when connected to this equipment. For refrigerators used to store high-value items such as medicines and vaccines, please ensure a comprehensive test is conducted before using the equipment to power them.
- If the product has been stored for more than three months without use. Please use a charger within the specified parameter range to perform one charge and discharge cycle on the product.
- This product supports photovoltaic input, but the open-circuit voltage must not exceed 60V; otherwise, the equipment will be damaged.
- The "AC OUTPUT" interface cannot be directly connected to the power grid for use; otherwise, it will cause damage to the equipment. The power grid can only be connected to the "AC INPUT".
- The storage environment temperature for this product is -20℃ to 60℃. The working environment temperature is as follows: charging :0℃ to 45℃, discharging :-10°C to 45℃.
- The working altitude of this product is: ≤3000m， The humidity of the working environment is 20 to 85%RH, with no condensation.
- Full discharge and full recharge are very important for the equipment, and should be carried out at least once every three months. This involves discharging the product to 25% of its capacity and then recharging it to 75% of its capacity to maintain its performance.

Reference for the usage duration of common electrical equipment

DR-PPS501512FL02			
 Light 20W ≈40h	 Fan 30W ≈25h	 Radio 10W ≈80h	 Cell phone 2942 mAh ≈85times
 Laptops 60W ≈14h	 Hairdryer 200W ≈4h	 TV 100W ≈8h	 Rice cooker 400W ≈2h
DR-PPS102542FL01/DR-PPS501542FL03			
 Light 20W ≈80h	 Fan 30W ≈50h	 Radio 10W ≈160h	 Cell phone 2942 mAh ≈170times
 Laptops 60W ≈28h	 Hairdryer 200W ≈8h	 TV 100W ≈16h	 Rice cooker 400W ≈4h

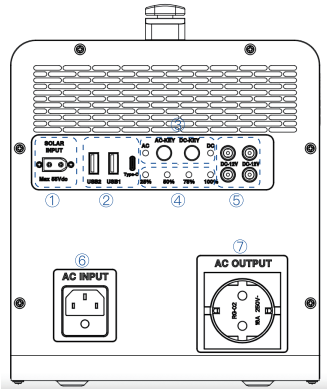
2 Product Parameters

DR-PPS102542FL01



① DC12V output
② Output switch indicator light & battery level indicator light
③ AC&DC output switch
④ USB & Type-C output
⑤ AC output
⑥ PV input
⑦ AC input

DR-PPS501512FL02/DR-PPS501542FL03



① Photovoltaic input
② USB output
③ Output switch & switch indicator light
④ Battery level indicator light
⑤ DC output
⑥ AC input
⑦ AC output

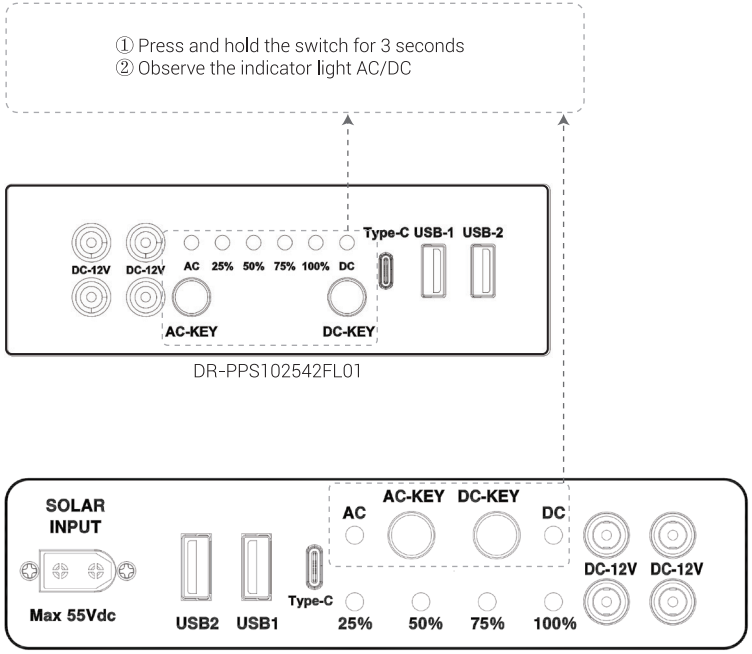
Data Sheet				
Item	DR-PPS102542FL01 2009.6Wh/1000W	DR-PPS501512FL02 1004.8Wh/500W	DR-PPS501542FL03 2009.6Wh/500W	Remark
PV input voltage	11~55Vdc			
PV Max. charging power	550W	400W	400W	
PV Max. input current	15A	13.5A	13.5A	
USB output	USB2:5V3A 15W			
	USB1:QC2.0 5V/3A,9V/2.22A,12V/1.67A 20W			Support Agreement: QC2.0/QC3.0/QC3.0+ (classA)/FCP/SCP/AFC /APPLE2.4A/BC1.2
	TYPE-C:QC2.0 5V/3A,9V/2.22A,12V/1.67A 20W			
DC output	DC5521*4: 12V/4A 48W			
AC input voltage	90V~280Vac			
AC input frequency	45~65Hz			
AC output voltage	230Vac			
AC output frequency	50Hz			
Maximum AC output power	1000W	500W	500W	
Battery type	$LiFePO_4$			
Battery capacity	314Ah	314Ah	628Ah	
Battery voltage	6.4V	3.2V	3.2V	
Working noise	≤55dB			
Working Temp	Charging: 0℃~45℃ / DisCharging: -10℃~45℃			
Product dimensions	280*225*220mm	300*200*220mm		
Product weight	18.1kg	11.5kg	16.9kg	
Protection level	IP20			

3 Operating Instructions

Startup operation

1. DC output operation: Long press "DC-KEY" for 3 seconds, observe the "DC" indicator light. After the indicator light is on, the DC side can output normally.

2. AC output operation: Long press "AC-Key" for 3 seconds, observe the "AC" indicator light. After the indicator light is on, the AC side can output normally.



DR-PPS102542FL01

DR-PPS501512FL02/DR-PPS501542FL03

Indicator light status						
	AC light	25% light	50% light	75% light	100% light	DC light
Off state						
	○	○	○	○	○	○
Fault state Battery level indicator light Display according to the actual status						
	◉	○	○	○	○	○
Charging state AC/DC light Display according to the actual status						
SOC ＜25%	○	◉	◉	◉	◉	○
SOC 25%~49%	○	●	◉	◉	◉	○
SOC 50%~74%	○	●	●	◉	◉	○
SOC 75%~99%	○	●	●	●	◉	○
SOC＞99%	○	●	●	●	●	○
Discharging state AC/DC light Display according to the actual status						
SOC 76%~100%	●	●	●	●	●	●
SOC 51%~75%	●	●	●	●	○	●
SOC 26%~50%	●	●	●	○	○	●
SOC 10%~25%	●	●	○	○	○	●
SOC＜10%	●	◉	○	○	○	●

Note: "○" indicates that the indicator light is not on, "●" indicates that the indicator light is constantly on, "◉" indicates that the indicator light is flashing

⚠ **NOTE:** Do not connect the DC output port of the unit to its own PV input port during testing, as this will cause the fuse to blow. To test the PV charging function, please use another unit, a genuine photovoltaic panel or an external DC power supply.

4 Operation mode

1.Photovoltaic charging: After connecting to the photovoltaic system, the device will charge the battery until it is fully charged.

Maximum power of photovoltaic charging:

DR-PPS102542FL01	DR-PPS501512FL02	DR-PPS501542FL03
550W	400W	400W

2.Mains power charging: After connecting to the mains power, the device will charge the battery until it is fully charged.

Maximum power of mains charging:

DR-PPS102542FL01	DR-PPS501512FL02	DR-PPS501542FL03
1000W	500W	500W

3.Mains power & photovoltaic with load: After connection, the battery charging power is 500W/1000W, and all the energy of the photovoltaic will be prioritized to charge the battery. The mains power supplies power to the load and charges the battery.

When using mains power and photovoltaic charging, the mains power charging power:

DR-PPS102542FL01	DR-PPS501512FL02	DR-PPS501542FL03
Power=1000W-(PV Input Power)	Power=500W-(PV Input Power)	Power=500W-(PV Input Power)

4.Photovoltaic+Battery with load: After connecting the photovoltaic, the equipment charges the battery. After turning on the DC or AC switch, the device will supply power to the load.

Inverter output power:

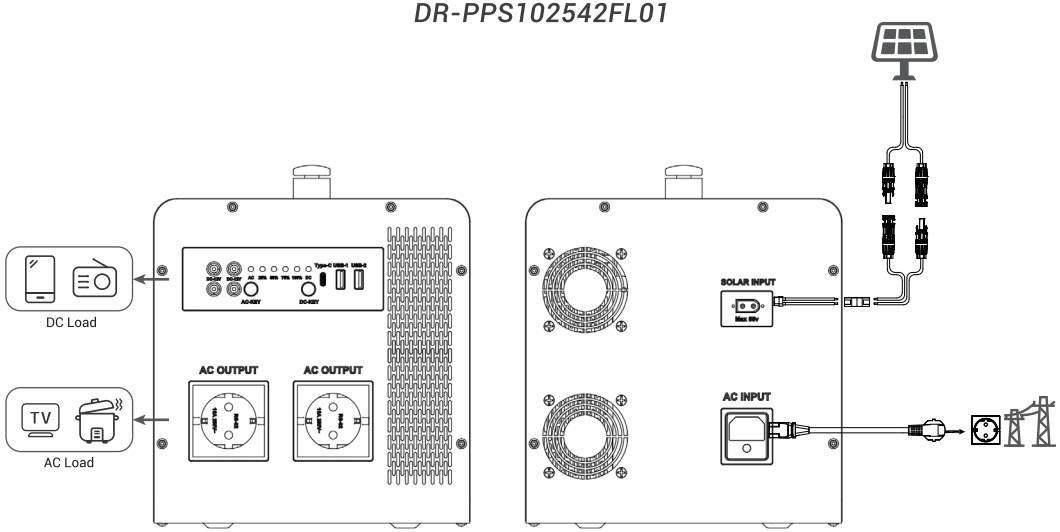
DR-PPS102542FL01	DR-PPS501512FL02	DR-PPS501542FL03
1000W	500W	500W

5.Mains power with load: After connecting to the mains power, the device prioritizes carrying the load while charging the battery (AC and DC need to be turned on).

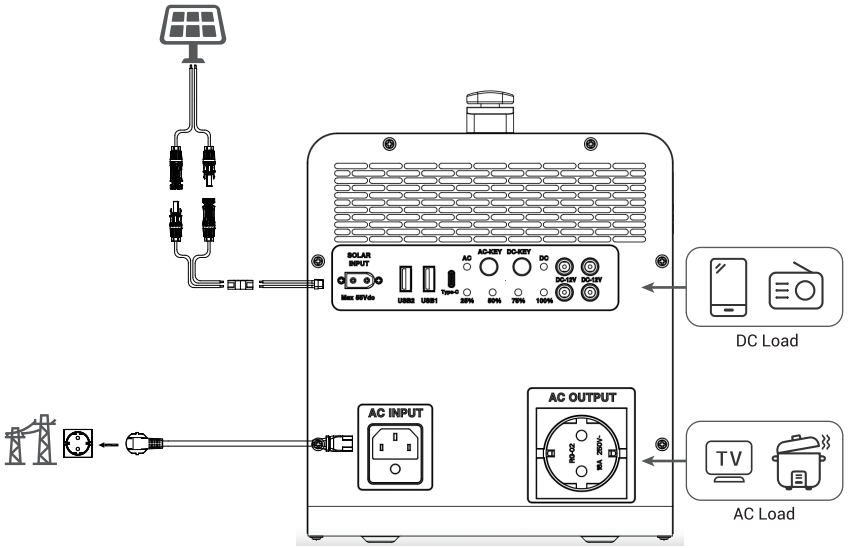
Bypass output power:

DR-PPS102542FL01	DR-PPS501512FL02	DR-PPS501542FL03
1400W	800W	800W

DR-PPS102542FL01



DR-PPS501512FL02/DR-PPS501542FL03



5 Frequently Asked Questions

Why can't it discharge?

1. Please ensure that you use a charging cable and power socket that meet the specifications of your device. Charging cables and power sockets that do not meet the specifications may not be compatible with this equipment.
2. Make sure the product is turned on. Press and hold the power button for 3 seconds, and the product indicator light will light up.
3. Check if the product has sufficient battery power. If you only see the "25%" indicator light, it means the battery is low. Please connect the charging cable to charge the product first.
4. If the product indicator light does not display normally, please turn off the product and then restart it. If the discharge still fails, please contact our after-sales service team.

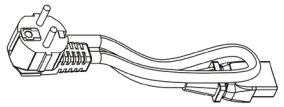
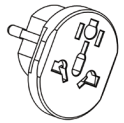
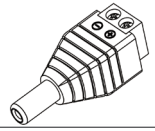
How does the indicator light indicate when the equipment malfunctions

When the equipment malfunctions, the "AC" indicator light will flash, indicating that the product has stopped working due to issues such as excessive load or internal overheating. Please unplug all devices and hold down the power button for 3 seconds to turn it off. After 10 minutes, restart the device and check if it is working properly. If the product still doesn't work, please contact our after-sales team.

What types of devices can be connected

It can power daily devices such as fans, TVS, monitors, laptops, mobile phone chargers, table lamps and other similar appliances. Before connecting any device to another device, please be sure to read the device's manual carefully to ensure that the total power of all devices connected to the device does not exceed Rated Power.(For reference, please refer to "Reference for the usage duration of common electrical equipment")

6 Parts List

No	Name	Description	Quantity
①	AC Input Cable		1
②	PV Input Cable 1		1
③	User Operation Manual		1
④	Certificate of conformity		1
⑤	AC output adapter plug		1
⑥	DC adapter connector		1

Note: ⑥ "AC output adapter plug" is an accessory. During packaging, this accessory will be installed inside the "AC OUTPUT" socket of the product. When this accessory is not needed, it can be unplugged and used directly.

Warranty Card			
Product Name		Production Date	
Product Bar code			
Dealer Name		Sale Date	
Dealer Address			

Customer Information			
Customer Name		Purchase Date	
Customer Tel.		Customer Fax	
Customer Address			