



# PORTABLE

## POWER BANK

Portable Power Bank is a "mobile power station" granted to us by modern technology. It can meet the power needs of various scenarios such as outdoor camping, road trips, business travel, and family emergencies, providing a stable power supply for devices like smartphones, laptops, and small appliances.

With the use of eco-friendly battery technology, it is safe, durable, pollution-free, and low-noise, satisfying your desire for freedom while also embodying the concept of green living.

Thanks to its powerful energy storage capacity and durability, it liberates energy from limitations.

Picture

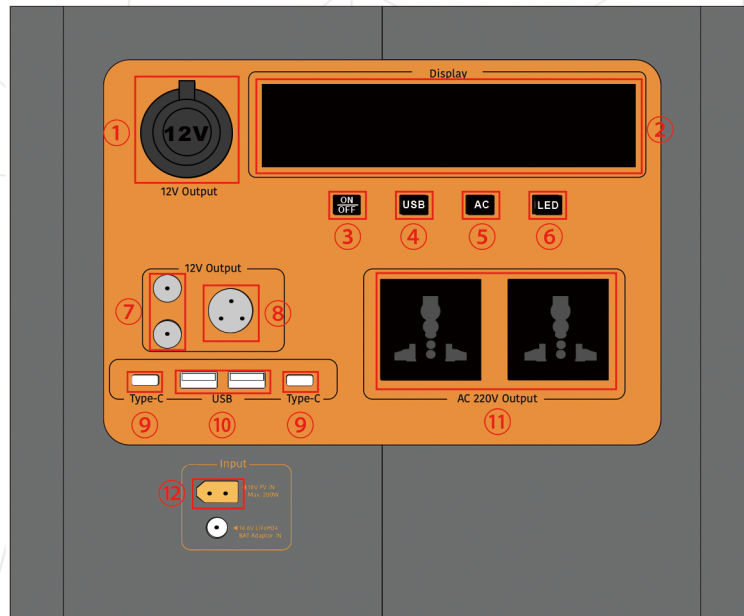


Battery Information			
Product NO.	PB-1210	PB-1220	PB-1520
Battery Type	Lithium iron phosphate battery(LiFePO4)		
Battery Rate Voltage		12.8V	
MAX. Charging Voltage		14.6V	
Battery Capacity	1000Wh	2000Wh	2000Wh
AC Output Information			
Inverter Type	Pure sine wave inverter		
Inverter Rate Power	1200W	1200W	1500W
Inverter Peak Power	2400W	2400W	3000W
AC Output Voltage		220V	
AC Output Frequency	50-60Hz intelligent monitor		
DC Output Information			
USB Output	USB * 2, Type-C *2	USB *10, Type-C *2	USB * 5, Type-C *1
DC Output	DC Output 3-port 12V 15A, DC Output 1-port 12V 5A		
Car Charge Output		12V 10A	
Product Input Information			
Battery Adaptor Input		14.6V 10A LiFePO4	
Solar Controller		Build-in MPPT	
Solar Input Voltage	18V MAX. 200W	18V MAX. 200W	18V MAX. 100W 18V MAX. 200W
General Information			
Product Size	280*220*305 mm		315*250*300 mm
Working Temperature		-10°C ~ +40°C	
Working Altitude		less than 2000m	
Product Weight	9.6KG	14KG	15.9KG
Protection System			
Over/Under Voltage Protection		YES	
Over Current Protection		YES	
Over/Under Temperature Protection		YES	

1. Test conditions: 25 °C 100% depth of discharge (DOD), 1C charge and 1.5C discharge.

2. Refer to battery warranty letter for conditional application.

# Function Area *PB-1210 / PB-1220*



- |                          |                                       |                  |
|--------------------------|---------------------------------------|------------------|
| ① Car Charge Output      | ② Display                             | ③ ON / OFF       |
| ④ USB                    | ⑤ AC                                  | ⑥ LED            |
| ⑦ DC Output 1-port       | ⑧ DC Output 3-port & AC Adaptor Input |                  |
| ⑨ Type-C Output          | ⑩ USB Output                          | ⑪ AC 220V Output |
| ⑫ 18V PV Input MAX. 200W |                                       |                  |

## Use Step

### 1. Charge

Press '③ ON/OFF', then the system turns on.

- Solar Charge** : Connect '⑫ 18V PV Input MAX. 200W' using a 'Solar Panel', and '② Display' will show voltage and the battery percentage bars will flash.
- Adaptor Charge** : Connect '⑧ DC Output 3-port & AC Adaptor Input' using an 'Adaptor', and '② Display' will show voltage and the battery percentage bars will flash.

**Note:** Adapter charging **can't** be used alongside PV charging.

**DC Output 3-port and AC Adaptor Input are the same port.**

### 2. Discharge

Press '③ ON/OFF', then the system turns on.

- USB Output** : Press the '④ USB' button, and then '⑩ USB Output' and '⑨ Type-C Output' are ready for use.
- AC 220V Output** : Press the '⑤ AC' button, and then '⑪ AC 220V Output' is ready for use.

**Note:** Press '③ ON/OFF' first, then plug in the appliance, and finally turn on the appliance switch.

- LED** : Press '⑥ LED' button, the side LED lights will light up.
- 12V Output** : Connect '① Car Charge Output', '⑦ DC Output 1-port' and '⑧ DC Output 3-port & AC Adaptor Input', they will then be ready for use.

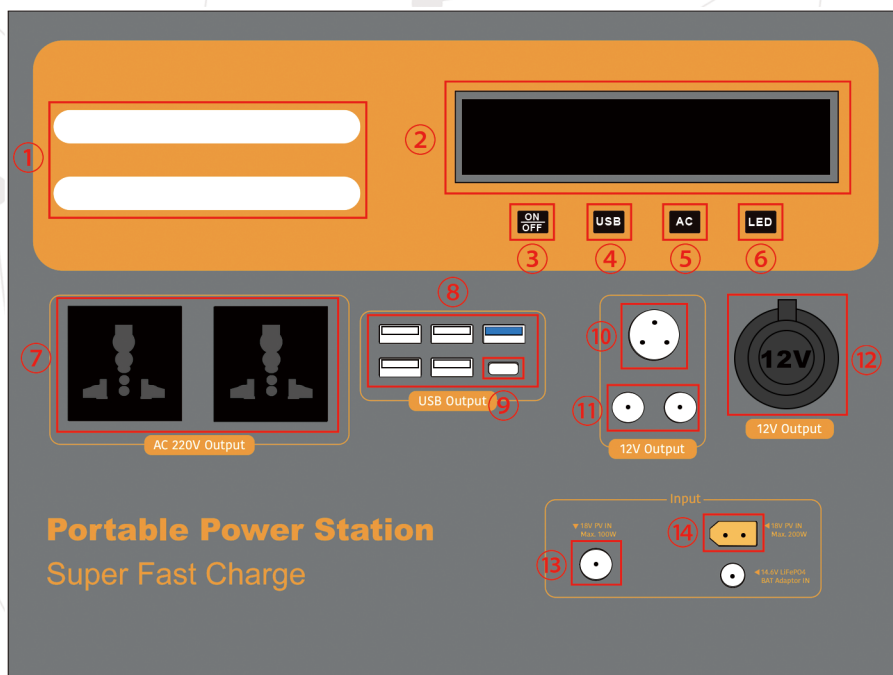
### 3. Close

When the system is not in use. Press '③ ON/OFF' again, and then the system will shut down.

### 4. Note

- Press '③ ON/OFF', then '② Display' stays on.
- Please charge the battery every month to prevent it from being undercharged.**

# Function Area **PB-1520**



- |                                       |                          |                     |
|---------------------------------------|--------------------------|---------------------|
| ① LED Light                           | ② Display                | ③ ON / OFF          |
| ④ USB                                 | ⑤ AC                     | ⑥ LED               |
| ⑦ AC 220V Output                      | ⑧ USB Output             | ⑨ Type-C Output     |
| ⑩ DC Output 3-port & AC Adaptor Input | ⑪ DC Output 1-port       | ⑫ Car Charge Output |
| ⑬ 18V PV Input MAX. 100W              | ⑭ 18V PV Input MAX. 200W |                     |

## Use Step

### 1. Charge

Press '③ ON/OFF', then the system turns on.

a) **Solar Charge** : Connect '⑬ 18V PV Input MAX. 100W' or '⑭ 18V PV Input MAX. 200W' using a 'Solar Panel', and '② Display' will show voltage and the battery percentage bars will flash.

b) **Adaptor Charge** : Connect '⑩ DC Output 3-port & AC Adaptor Input' using an 'Adaptor', and '② Display' will show voltage and the battery percentage bars will flash.

**Note:** Adapter charging **cannot** be used alongside PV charging at the same time.

PV charging can be used at the same time.

**DC Output 3-port and AC Adaptor Input are the same port.**

### 2. Discharge

Press '③ ON/OFF', then the system turns on.

a) **USB Output** : Press '④ USB' button, '⑧ USB Output' and '⑨ Type-C Output' are ready for use

b) **AC 220V Output** : Press '⑤ AC' button, '⑦ AC 220V Output' is ready for use.

**Note:** Press '③ ON/OFF' at first, then plug in the appliance, finally turn on the appliance switch.

c) **LED** : Press '⑥ LED' button, '① LED Light' will light up.

d) **12V Output** : Connect '⑩ DC Output 3-port & AC Adaptor Input', '⑪ DC Output 1-port' and '⑫ Car Charge Output', and then are ready for use.

### 3. Close

When system is not in use. Press '③ ON/OFF' again, and then the system will shut down.

### 4. Note

a) Press '③ ON/OFF', then '② Display' stays on.

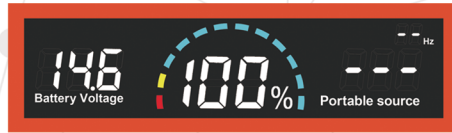
b) **Please charge the battery every month to prevent it from being undercharged.**

# Frequent Questions & Answers

1. Why does the product cannot be turned on, but shows “100%” when charging with adapter , and still cannot start after being unplugged ?



①



②



③

When the battery voltage is below 10V or the product fails to power on due to undervoltage, please use a solar panel to charge. It takes approximately two hours for the voltage to return to the 10V startup voltage. During this phase (when the solar panel is charging the battery with a low current), the screen may display unstable voltage readings. This is normal and indicates the low-voltage battery protection system is functioning properly.

When the battery voltage is below 10V, do not use the adapter to charge the product (as it is below adapter's operating voltage). Once the battery voltage rises above 10V, the adapter can be used for normal charging.

2. Why does the product battery shows 100% charged during the day but runs out of power quickly at night?

A: The product is not fully charged.



①



②

When the product is charged to 13.2V, the display will show "100%." This value is for reference only; the actual battery voltage should be used as the primary indicator. A battery voltage of at least 14.6V confirms a full charge

It's normal for the battery voltage to drop to around 13V after disconnecting the solar panel. Due to the charging characteristics of LiFePO4 batteries, once disconnected from power after being fully charged, the voltage will naturally stabilize at around 13V. **This is a normal phenomenon.**

B: The battery drains rapidly after connecting a load.

Please disconnect the load. If the voltage rises after disconnecting the load, it indicates that the connected load has a high power consumption. This is normal. Please use a lower-power load.

If the voltage does not rise after disconnecting the load, it means the battery is not fully charged.

**Please fully charge the battery, and charge the voltage to 14.6V before using the product.**

# Maintenance & Contact Information

**When using this product, the following basic precautions must be observed:**

1. Read all instructions before using this product.
2. To reduce danger, close supervision is necessary when this product is used near children.
3. Using accessories not recommended or sold by the product manufacturer may create a risk of electric shock.
4. When the product is not in use, unplug the power cord from the product socket.
5. Do not disassemble this product. Disassembly may cause unpredictable risks such as fire, explosion, or electric shock.
6. Do not use damaged charging cords, damaged plugs, or damaged output cables to connect or use this product. There is a risk of electric shock.
7. Charge the product in a well-ventilated area and do not obstruct the ventilation of the product.
8. Place the product in a ventilated and dry location, and avoid exposing it to water. There is a risk of electric shock if the product gets wet.
9. Do not place the product near a heat source or in an environment with a temperature higher than 130°C, as this may cause the product to catch fire, explode, or result in other safety accidents.
10. Do not use or store the product in high-temperature environments (such as direct sunlight or hot vehicle interiors), as this may cause the battery to overheat potentially, catch fire, or result in functional failure and reduced lifespan.
11. **If the product is not used for an extended period, please charge the battery once a month to prevent the battery from entering an under-voltage state and losing power, which may cause the product to fail to start normally.**
12. **Note: DC Output 3-port and Battery Adaptor Input are the same port.**

Certification	
Inspector	
M.O.D	