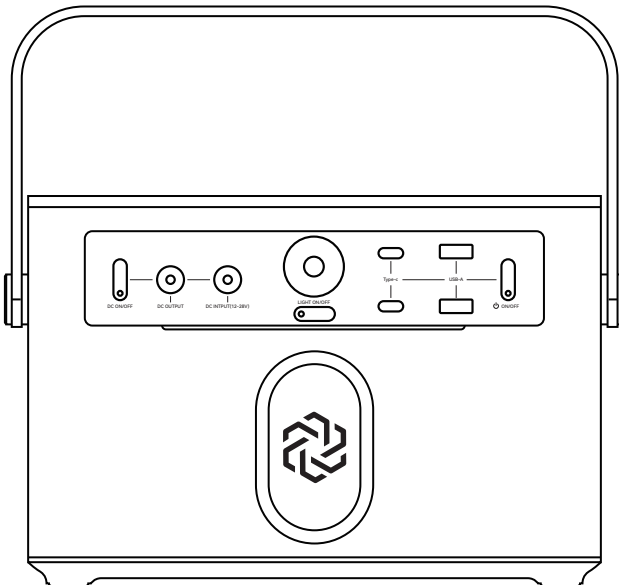




# IMMOTOR PORTABLE POWER STATION

BAY500

## PRODUCT MANUAL



\* It is a portable energy storage power supply, DO NOT let children play.

\* Please read the product instructions carefully before using.

\* If it is stored for a long time (more than a month), please charge the product to about 70% of the electricity.

\* Do not charge, use or place the product near the source of fire or overheating.

\* Products and accessories are subject to change without notice.

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# 1. Product introduction

This product is a portable multi-functional power source that can store energy, and it is equipped with high-efficiency power lithium-ion battery, safe lithium battery management system (BMS), high-efficiency energy conversion circuit, and it is wrapped by high-strength aluminum alloy with refined leathered handle. The top design and mature production control, the products are safe and reliable, which can be powered by solar power, vehicle power generation, and electric supply charging. The product features light weight, integrated design and high power, which can provide customers with convenient mobile energy. The main features of the product are:

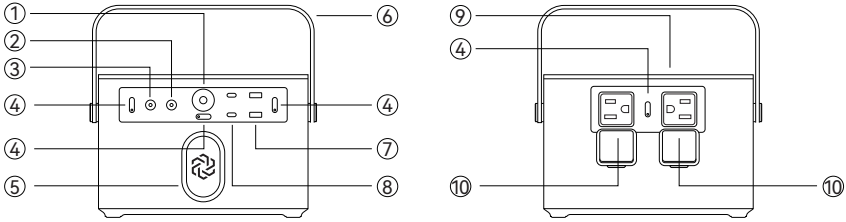
1	100V-120Vac; 50Hz / 60Hz Pure sinusoidal output * 2 (Setting according to national or regional power standards)
2	Solar energy MPPT Charging system (Maximum Power Point Tracking)
3	Automatic Adaptive Adapter for Electric Charging
4	Car charging
5	12V DC5521 output port*1
6	10W Wireless charging
7	USB-C PD 100W output*2 (with 100W charging input ability)
8	USB-A QC3.0 18W (MAX) output *2
9	≥90%High conversion efficiency (Reduce heat, Increase actual output energy)
10	Intelligent Ambient Lighting
11	LED High-brightness Lighting Lamp
12	BMS Multilevel protection system
13	Intelligent APP (Bluetooth) indicating device power, accurate display of remaining usage time and real-time power output, controlling ambient light, etc.
14	With overcharge, over-discharge, high and low temperature, multilevel over current, short circuit and other protection functions
15	Ultra-long cycle life, 1000 + cycles
16	Fanless design with 0 noise using experience
17	Sandblasting oxidation treatment of industrial aluminum casing

Products can meet the demand of power supply for most household appliances, such as rice cookers, mini - refrigerators, speakers, televisions, mobile phones, computers, digital cameras, tablet PC, LED lights, emergency lights, outdoor lighting, outdoor construction, electric tools, pumps, medical equipment, etc. It includes a

wide range of applications, such as rescue and relief work, emergency rescue, first aid, excavation, decoration, construction, tourism, camping, solar power generation and other fields.

## 2. Product diagram

### 2.1 Product function description



No.	Function Description		
1	LED Light	6	Foldable leathered handle
2	DC input port*1	7	USB-A* 2
3	DC 5521 output*1	8	USB-C PD 100W output port * 2
4	USB, DC, AC, LED light switch	9	Wireless charging
5	Intelligent Ambient Light	10	AC output socket * 2 (with cover)

## 3. Product parameters

Project	Parameter	BAY500
Battery	Battery class	Lithium ion battery
	Battery capacity	542.9Wh
	Cycle life	1000 cycles
	BMS protection	over voltage, under voltage, high and low temperature, three-stage over current, short circuit protection
AC output	Output voltage	100V-120Vac / 200V-230Vac (depending on the factory settings in different countries and regions)
	Output frequency	50 / 60Hz (Manual switching)
	Waveform	Pure sine wave
	Efficiency	70% load > 90%
DC output	DC5521 Port	DC12V6A
	Efficiency	70% load > 90%

USB output	USB-A	QC3.0, 18W (MAX)
	USB-C	PD 100W (MAX)
LED light	Wattage	5W
Charge	Adapter	20-22V, 5A
	Car	13V8A
	PV	18V/100W
Product weight	Net weight	13lb (TBD)
	Gross weight	7.5KG (TBD)
Product volume	Host	9.5*7.8*6.2inch
	Packing	12.7*10.2*9.2inch
Temperature	Charge	0-45°C (32~113°F)
	Discharge	-20~60°C (-4~140°F)
	Storage	-40~60°C (-40~140°F)

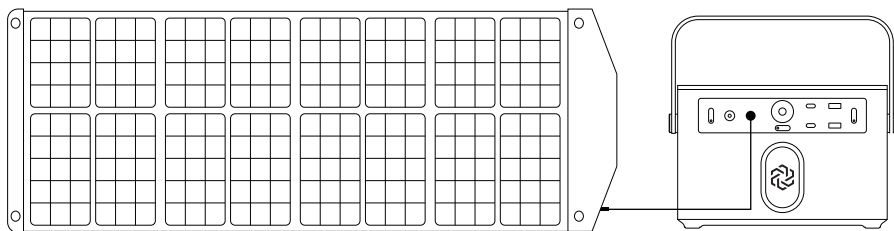
## 4. Operating instruction for the products

### 4.1 How to charge

**STEP.** The product has a charging protection function, and it will automatically stop charging, after the product is fully charged according to the normal charging operation. In order to avoid other unexpected events, it is recommended to disconnect the charging connection in time after the product shows it is fully charged. While it is used, it needs to be charged, if the output power is less than 100W, the product will be fully charged gradually according to the internal battery cell capacity, if the output power is more than 100W, the product will slowly use up the internal battery capacity, and the product can be used normally after a full charge. The product features design of one charging interfaces, the DC5521 input port in the front side. The Input interface supports adapter charging and solar panel charging that meets voltage requirements 18V-24V/ 5A Max, car charging 12V/ 8A.

#### 4.1.1 Solar power charging

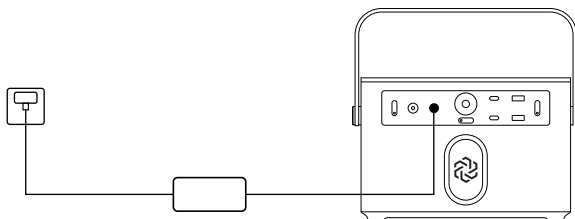
Insert the plug of the unfolded solar panel into the “DC input” interface. The solar panel power is affected by the light, and the generated power will change, so it can result in the remaining time dynamically changes, which is normal.



#### 4.1.2 Adapter charging

**STEP 1.** Insert the adapter AC input plug into the electric supply.

**STEP 2.** Insert the adapter DC output plug into the “DC input” interface, when charging is started, the system will automatically detect the input power, the remaining time will change dynamically, which is normal.

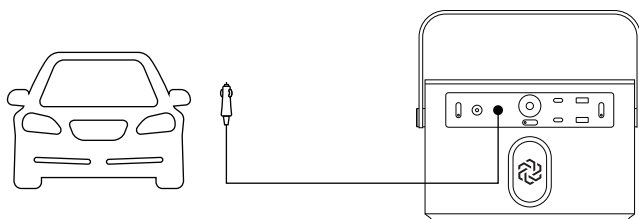


#### 4.1.3 Vehicle power supply charging

**STEP 1.** Start the car,

**STEP 2.** Insert the car charger cable into the car cigar lighter,

**STEP 3.** Insert the DC end into the "DC input" interface on the front of the product.



#### 4.1.4 Charge warning

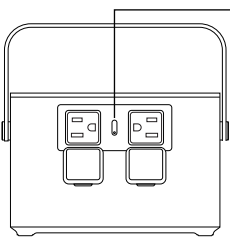
The ambient light will flash when the remaining power is below 25%, reminding the user to charge in time.

#### 4.2 Product output (electricity consumption)

The product has high low voltage, high low temperature, multiple over-current, short circuit and other protection circuits. If the output is suddenly interrupted, first

check whether the peripheral electrical equipment exceeds the power or short circuit occurs, restart the machine to check whether there is power. After the power is used up, in order to save the power, please manually shut down the machine after using, if there is any malfunction, please contact the manufacturer or dealer.

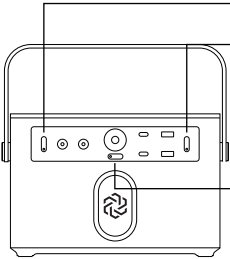
This product is designed with 4 regional function outputs, which are DC area, USB area, AC area and Light area. Each area is provided with a corresponding button for turning on or off the function output and all interfaces of the corresponding area. Press and hold the button of the corresponding area for about 1 second to open all the interfaces of the corresponding area, and the corresponding button will be lit and it is blue, and press the button again for about 1.5 second to shut down all interfaces in the corresponding area. If the button is pressed for more than 3 seconds during the shutdown process, the entire system will be shut down.



**4.2.1 AC output**

Short press for 1.5s to switch on / off

Long press for 3s to switch off the whole system



**4.2.2 DC area output**

Short press for 1.5s to switch on / off

Long press for 3s to switch off the whole system

**4.2.3 USB area output**

Short press for 1.5s to switch on / off

Long press for 3s to switch off the whole system

**4.2.4 LED lighting**

Short press for 1.5s to switch on / off

Long press for 3s to switch off the whole system

## 5. Precaution

Please read the precautions that indicate “Danger”, “Warning” and “Caution” levels.

“Danger” indicates it will cause the personal injury.



“Warning” indicates it will happen the dangerous things.



“Caution” indicates it will cause the damage to the product or shorten the service life.



- The product outputs high-voltage AC. Please do not insert the hand or hand-held metal conductor into the AC socket.
- Non-professionals should not open the product without authorization to avoid dangerous things such as electric shock or short circuit.
- Do not place the product in a high temperature environment (over 50 degrees Celsius) or near a fire source.
- The product is not a toy for children to play.
- Do not use it in a humid environment.
- Do not hit or strike the product.



- Please read the specific battery charger manual before use.
- Do not disassemble the product
- Do not use obviously broken product
- Please use the original adapter to charge or the adaptor that meets the manufacturer's specified electrical parameters.
- Please select the solar panel according to the electrical parameters specified by the manufacturer. It is not allowed to charge with solar panels higher than 25V.
- Charge the battery cell within the temperature range of 0 to 45 °C, under too low temperature conditions, it will shorten the cycle life of the battery cell.
- On the condition of long-term storage (more than 3 months), it should be stored in a low-humidity environment without corrosive gas in a half-electrical state at a



temperature of -10 to 35 °C.

- If the product emits undesirable smell and heating during charging or storage, stop charging immediately and place it in an open place for long-distance observation. After confirming the safety, contact the manufacturer or dealer.



- This product is a power supply. Please select the corresponding model according to the power equipment. It is not allowed to use this product with over power or over load.
- Do not output the short circuit.
- This product is set at the factory according to the voltage standards of different countries.
- Before purchasing and using, please consult with the dealer or use the product operating guide book.
- When the power of product runs out, please charge it in time.
- Product parts are environmentally friendly and recyclable. Please recycle it according to local regulations.
- In order to save the power of the product, please turn off the power when the power is used up, and turn it on again when you use it next time.
- If the battery is stored for more than 6 months, please charge and discharge the product 1-2 times in order to extend the service life of battery.

## 6. Solution for the common problems

- Q: If the product has no fan for cooling, is it safe?  
A: The products are designed by top designers and use high-performance components. The products without fan are quieter and safer.
- Q: How long can the product be stored?  
A: Half or above of the battery, it can be generally stored for 6-12 months. It is recommended to charge it every three months.
- Q: How long does it take to fully charge the product?  
A: BAY500 can be charged to 80% in 3 hours with the standard adapter+type-c;
- Q: Can the product be discharged while being charged (output used)?

- A: This product supports discharging while charging, and it can be used at the same time. When the output power is greater than the input power, the battery power is slowly reduced, and when it is reduced to the low battery state, the output is turned off.
- Q: Does the product have temperature protection ?
  - A: When it is used in a high temperature environment, if the internal temperature is higher than 50 °C, the circuit will be turned off for battery safety.
- Q: Will the product automatically shut down?
  - A: After the product is deeply discharged, it will automatically shut down, but under normal circumstances, after turning on it, it will not automatically sleep for continuous power supply.

## 7. Trouble Shooting

### **7.1 There is no response when the product is turned on, and output is unavailable for DC, USB, AC, and Light.**

Solution:

- (1) Remove the product load, then charge it for 5-10 minutes and turn it on again.
- (2) Please ensure that the product is currently used in the normal temperature.

### **7.2 The product can be turned on, but the corresponding output interface has no output (DC, USB, AC).**

Solution:

- (1) Check if the power of product is too low, if so, please charge it in time.
- (2) Check if the power equipment is higher than the output power of the product, which results in the protection, please remove the load, and turn it on again.
- (3) Confirm whether the output of this product meets the power requirements of the electric device.
- (4) Check if there is a short circuit between the output port and the electric device, and then restart the device after removing the device.
- (5) Check if the device is used normally on other power sources, if it is used abnormally, which is caused by incompatibility of certain devices.

### **7.3 Accidentally shutdown during using product.**

Solution:

This product has a built-in real-time monitoring system, which may cause a

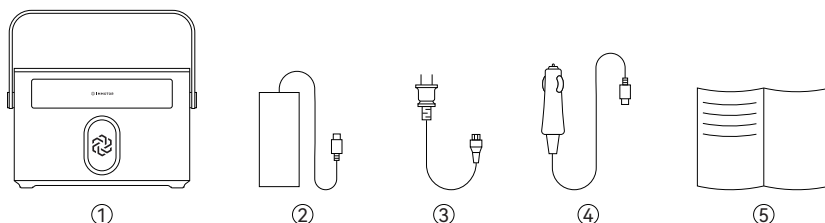
shutdown due to starting internal protection system. The events that may cause the protection system to start, it might be overcharge, over discharge, high temperature, low temperature, over current, and short circuit. In order to solve the problem quickly, please remove all the electrical equipment, keep the temperature of product within the normal temperature, and charge the product for 5-10 minutes, also check if there is any fault in the electrical equipment. Then re-start the product.

#### 7.4 The product cannot be charged.

Solution:

- (1) Check if the electrical parameters of charging are within the charging range of this product.
- (2) Check if the current device has started temperature protection because the temperature is too high or too low.

## 8. Package Contents



NO.	Name	Accessories description
1	Portable Powerstation	IMMOTOR BAY500
2	Adapter	Charging products with municipal electricity
3	Power cord	Adapter to connect to city power
4	Car charger cable	12V car charging cable
5	Instructions	Operational Guidance

**FCC Caution:**

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Any Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

**Note:** This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

## IC Caution:

This device complies with Industry Canada's licence-exempt RSSs. Operation is subject to the following two conditions:

- (1) This device may not cause interference; and
- (2) This device must accept any interference, including interference that may cause undesired operation of the device.

To maintain compliance with RF exposure guidelines, this equipment should be installed and operated with a minimum distance of 20cm between the radiator and your body.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes:

- (1) l'appareil ne doit pas produire de brouillage, et
- (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

Pour maintenir la conformité aux directives d'exposition aux radiofréquences, cet équipement doit être installé et utilisé avec une distance minimale de 20 cm entre le radiateur et votre corps.

## CONTACT US

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