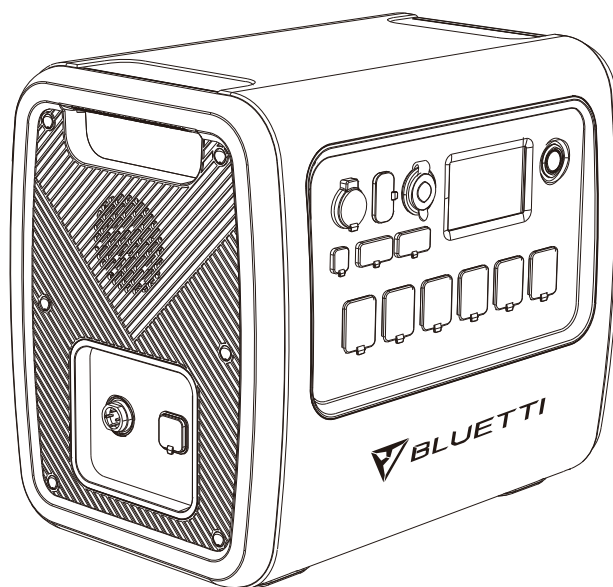


EB200P Portable Power Station

Please read this manual before use and follow its guidance. Keep this manual for future reference.



User Manual

Please read this manual before use and follow its guidance. Keep this manual for future reference.

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1.BRIEF INTRODUCTION

The EB200P features continuous output power at 2,200W from the pure sine wave inverter and a built-in unique 30A NEMA TT-30 receptacle designed for the RV, and 100W PD3.0 USB-C port, 900W MPPT controller are all integrated.

2.ABBREVIATION

- BMS: Battery Management System
- MPPT: Maximum Power Point Tracking
- SOC: State of Charge
- AC: Alternating Current
- DC: Direct Current
- PV: Solar Panel(s) Charging (Photovoltaic)
- Grid: Home Power Supplied by Utility
- T500: 500W Adapter
- DOD: Depth of Discharge
- ECO: A power-saving setting for the EB200P. While it's on, the AC output ports will be automatically turned off if the load on it is less than 50W over a span of 4 hours.

3.SAFETY INSTRUCTION

- DO NOT place the power station near heat sources. It is prohibited to place the equipment in an environment with flammable, explosive gas, or smoke. It is also prohibited to operate the equipment in this environment.
- DO NOT attempt to replace the internal battery or any other component of the equipment by anyone other than authorized electrician.
- DO NOT operate in wet conditions. If the equipment becomes wet, please let the unit dry completely before using.
- Please ensure proper ventilation while in use and do not obstruct fan openings.
- Inadequate ventilation may cause permanent damage to the equipment.
- DO NOT move the unit while operating as vibrations and sudden impacts may lead to poor connections to the hardware inside.
- Warning: DO NOT insert foreign objects into any ports of the EB200P (both AC & DC & ventilation holes). The power station generates the same potentially lethal AC power as a household wall outlet. Please use it carefully and keep children away from it.
- In the case of fire, only a dry powder fire extinguisher is suitable for the product.






- For safety purposes, please use only the original charger and cables designed for the equipment. We are not liable for damage caused by third-party equipment and may render your warranty invalid.

4. IN THE BOX

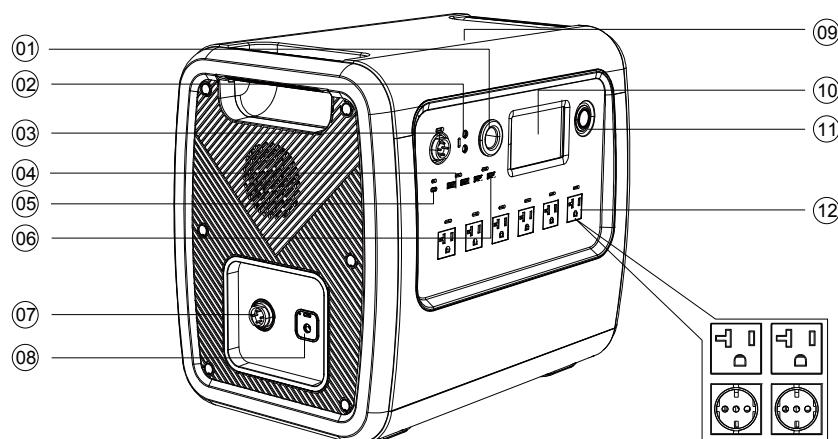
Standard Accessories

No.	Picture	Category	Quantity
1		Power Station(EB200P)	1PCS
2		T500 500W Adapter For AC charging	1PCS
3		PV Charging Cable (XT90 - MC4) For solar charging, up to 15A,900W.	1PCS
4		Car Charging Cable (XT90 - Cigarette Lighter Port) Charge EB200P by car.	1PCS
5		Multi-functional Aviation Cable (XT90 - Aviation) Expand the charging methods via PV input port.	1PCS
6		User Manual Please read the manual before use and follow its guidance, keep this manual for future reference.	1PCS
7		Warranty Card Please keep this Warranty Card properly.	1PCS
8		Certificate of QC PASS	1PCS

Optional Accessories

No.	Picture	Category	Type
9		Lead-acid Battery Charging Clamp Charging EB200P through lead-acid battery only. DO NOT charge the lead-acid battery via this cable.	Optional Input Cable
10		Multi-functional Input Cable (XT90 - DC7909) Expand the charging methods via AC input port.	
11		12V/30A Output Bundle (Aviation - XT60, XT60 - SPC45) Perfect for RV.	Optional Output Accessories
12		XT60 to Anderson Plug (Output)	
13		D300S PV Step Down Module Step down the voltage of solar panels(especially rigid panels) to adapt to EB200P solar input limit range.	Optional Accessories

5. FUNCTIONS



01 DC 12V/10A cigarette lighter port
Output port for devices with corresponding plug such as vehicle-use vacuum, refrigerator.

02 DC 5521 12V/10A output x 2pcs
Traditional ports for routers/cameras, old laptop etc.

03 DC 12V/30A output
Special 30A output port can be adapted to appliances widely, perfect for RV.

04 USB-A 18W output x 2pcs
Quick charge USB-A ports.

05 USB-C 100W output
Can be used via USB-C to USB-C cable to charge most devices in the market such as Pixel Phone, Macbook Pro at 100W Max.

06 USB-A 5V/3A output x 2pcs
Classic USB-A ports.

07 DC input port
Can be connected to solar panels, or achieving car charging, lead-acid battery, extra T500 adapter by extra cables.

08 AC input port
Charging via T500 adapter.

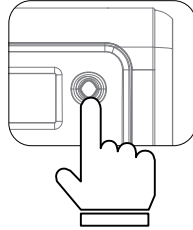
09 Wireless charging 15W x 2pcs
Place your phone(if wireless charging supported) on the top of the EB200P vertically, and turn on the DC in mainpage on screen.

10 Touchable interaction LCD display
Can be pressed/tapped to control the unit by nails.

11 Power button
Lone/Short press to turn ON/OFF the EB200P.

12 US AC output x 6 pcs
(EU/UK AC output x 4pcs)
Standard AC receptacle: widely used in 100-120V areas, generates the almost same AC power as a household wall outlet. High-voltage area uses special sockets.

6. LET`S GET STARTED



(1) Startup: short press the power button, the indicator light is on, and the machine is in standby mode.

(2) Shutdown: press and hold the power button for more than 2 seconds, and the indicator light will be off and the machine shut off.

The LED indicator lamp status warning	
BMS Over current or short circuit protection	Turn off after the indicator light flashes
BMS Startup timeout	The indicator light flashes and not shut down
Normal startup	The indicator light on
Normal shutdown	The indicator light off

(3) DC power switch and AC power switch are integrated in the interaction LCD screen(Figure 1),press“DC ON/OFF”button and “AC ON/OFF”button on the screen to turn on/off the DC /AC output.

7. TOUCHSCREEN

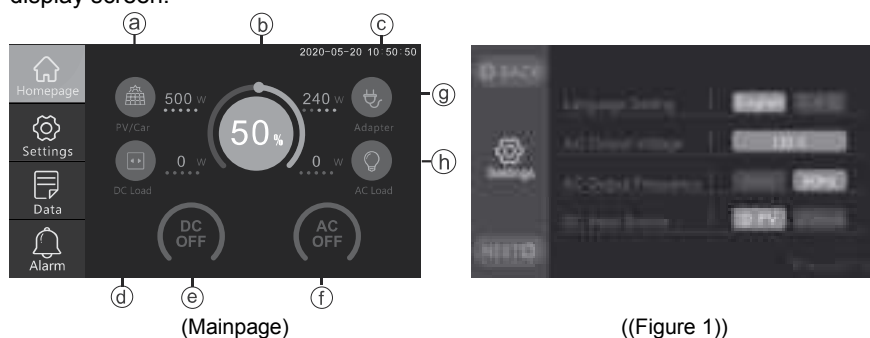
Interaction LCD screen(Information Vision) supports below functions:

- Real time display of voltage, current, power, temperature and state of charge and discharge.
- The user can adjust the output voltage, frequency, charging mode, power consumption mode and time information according to the setting column.
- Support energy-saving, and enable Super ECO mode to save more than 30% of useless energy loss.
- Support users to view fault information, historical fault information, software version independently.

Warm tip:

- The touchable LCD screen is a resistance screen. we recommend to press the touch button by fingernail lightly until it "beeps".
- In order to maximize the lifespan of the LCD screen, please avoid direct sunlight on it.

(1) When press the power button, it will enter the main interface of the LCD display screen:



((Figure 1))

- | | |
|----------------------------|-----------------------------|
| a. PV/Car charging display | e. DC ON/OFF Switch |
| b. BMS Info | f. AC ON/OFF Switch |
| c. Date/Time | g. Adapter charging display |
| d. DC load Info | h. AC load Info |

(2) Click the settings button in the main interface (Figure 2) to enter the setting interface as follows (Figure 3) :

Warm tip: Please enter the setting interface to set the date and time according to the local time zone, and check the output voltage, frequency and other parameters for the first time.

Voltage and Frequency Reference:

- | | |
|------------------------|----------------------|
| • JP output: 100V/50Hz | EU output: 230V/50Hz |
| • US output: 120V/60Hz | UK output: 230V/50Hz |

DC Input Source: Select the right method you choose to charge EB200P.

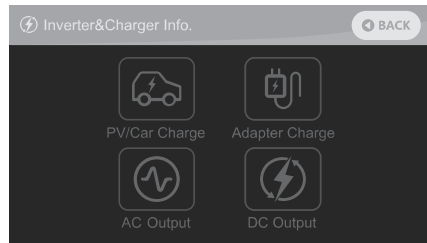
ECO Mode: While it's on, the AC output ports will be automatically turned off if the load on it is less than 50W over 4 hours.

Press "Next" icon to enter date setting as (Figure 3):

Backlight and Sleep time: set the proper value as your need for power saving.

Date and time: 2000-00-00 00: 00: 00, tap the number to set it right.

Just Power On



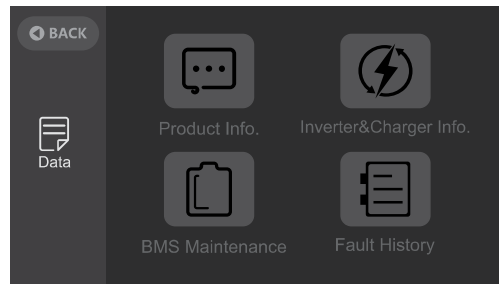
(Figure 2)



(Figure 3)

(3) Return to the mainpage, tap the “Data” icon to enter the Data page (Figure 4) :

- Tap the “Product Info” icon, you can view the product model, software version, BMS version etc;
- Tap the “Inverter & Charger Info” icon, you can view input and output information, which can also be accessed directly from the shortcut icon on the mainpage;
- Tap the “BMS Maintenance” icon to view the status of battery, and it can also be accessed directly from the shortcut icon in the mainpage;
- Tap the “Fault History” icon, all the fault information generated by the EB200P in daily use.



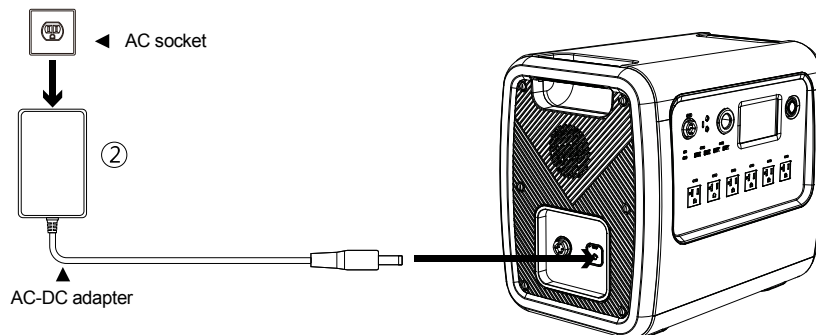
(Figure 4)

(4) Tap Alarm Icon (mainpage) to view the current error information: the fault indicator will display orange if there is a fault occurs.

8. CHARGING

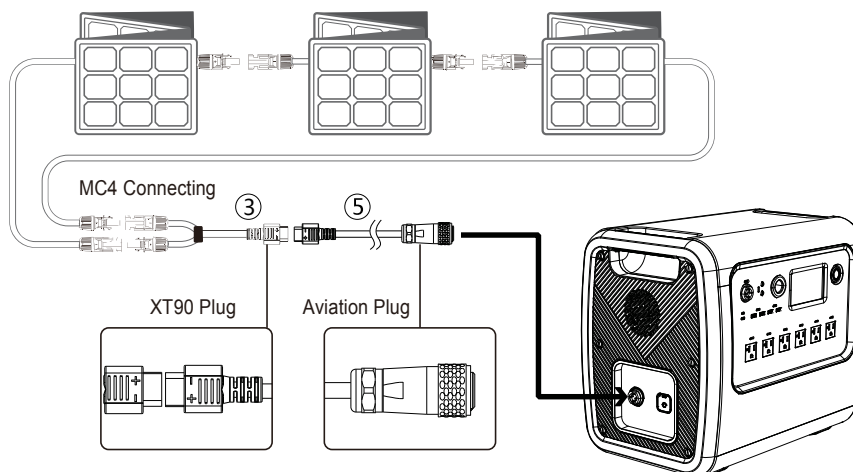
(1) From AC Wall outlet

- Turn EB200P ON and connect the plug of adapter to the wall outlet, the other side to AC input port. Charging will automatically stop when it reaches 100% (4.6-5.1Hrs).



(2) From the solar panels

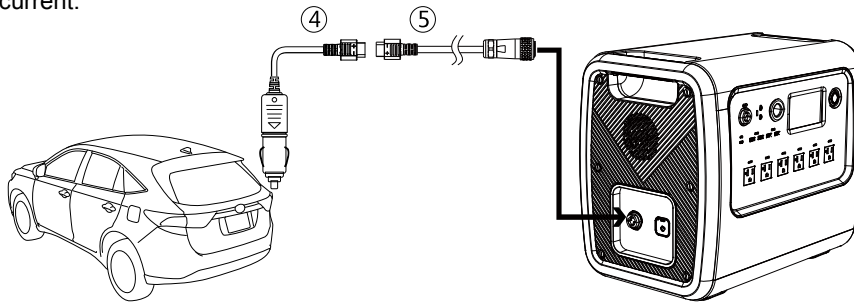
- Connect the solar panels(in series or parallel) with Open Circuit Voltage range 10V-145V.
- Connect the solar panel to EB200P via solar charging cable. (Standard Accessories 5 to Accessories 3)
- Plug and play charging: EB200P will be activated when solar charging system built up successfully.
- Max input current of the solar charging: $15.2A \pm 0.3$.



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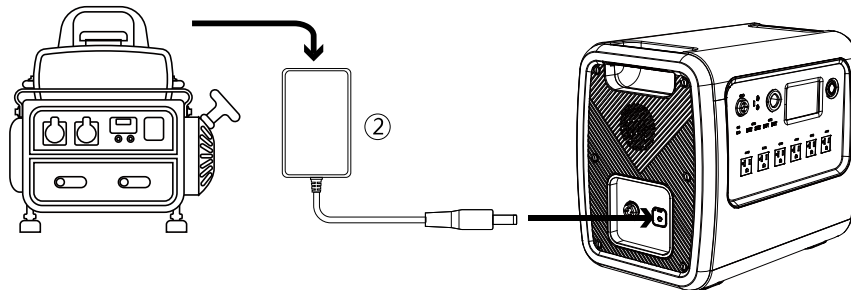
(3) Car Charging

- Press the power button and connect it to the cigarette lighter port through the car charging cable.
- Enter the setting interface as shown in (Figure2) through the display screen to set DC input source to car mode; The product can be charged with 8.2A maximum current.



(4) Generator Charging(gasoline, propane or diesel)

- Connect the AC adapter input to the generator and the output port to the AC charging port of the machine.
- Press the power button, the product will be charged, the charging will automatically stop when it reaches 100%.



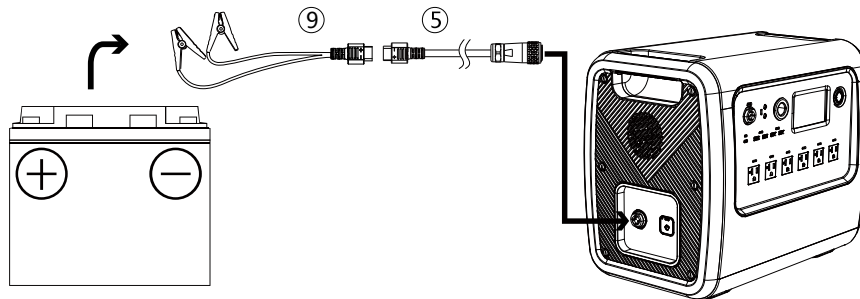
(5) Lead-acid Battery Charging

- Connect to the positive and negative poles of the battery through the Charging Clamp (Accessories 9)

Note: pay attention to distinguish the positive and negative poles of the battery, the red side indicates positive pole.

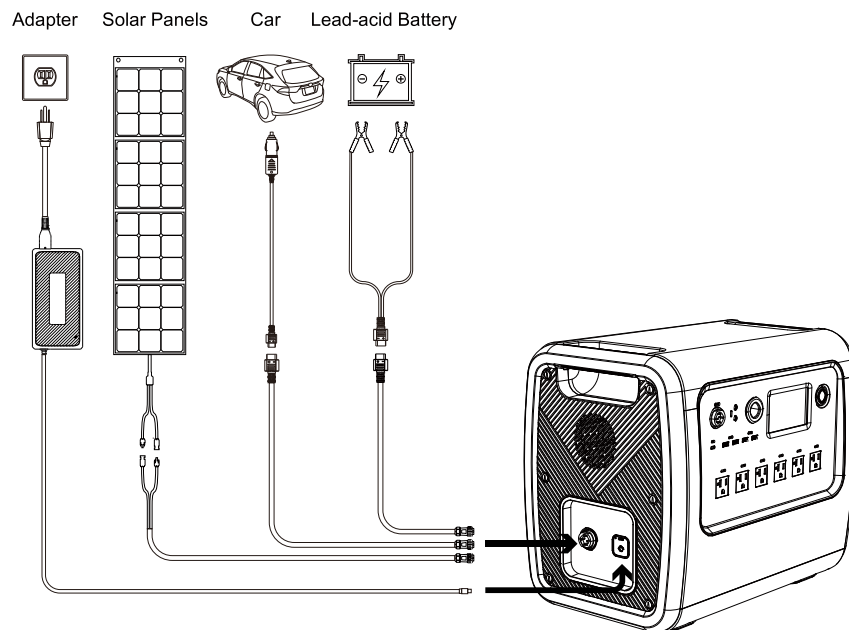
- Enter the setting interface in (Figure 1) through the screen to set DC input source to “car mode” to achieve 12V/24V car charging mode, with the maximum current of 8.2A.

Note: DO NOT charge the battery through this accessory.



(6) Dual Charging

- Set the DC input source to PV to achieve AC + PV Dual Charging
- Set the DC input source to others to achieve AC + T500/Lead-Acid Battery Charging.



(EB200P Dual Charging System)

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9. DISCHARGING

(1) Turn on 12V/30A, 12V/10A, cigarette lighter port, USB and USB-C output: press the power button, then enter the main interface through the touch screen, tap the DC ON/OFF button and confirm, Turn off these output, and also tap the DC ON/OFF button and confirm.

(2) Turn on AC output: press the power button, then enter the mainpage through the touchscreen, tap the AC ON/ OFF button and confirm.

Turn off these AC output ports, and also tap the AC ON/ OFF button and confirm.

10. APPLICATION SCENARIO

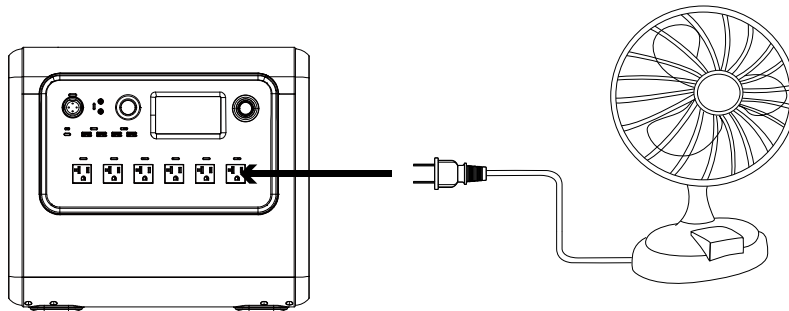
(1) Outdoor:

Car equipment: car fridge, car vacuum cleaner and other car equipment;

Camping equipment: garden electric tools (power tools such as blowers, lawn mowers, electric drills, electric saws), BBQ grills, LED lights, etc.

(2) Indoor:

Refrigerator, kitchen devices such as kettle, toaster, blender, coffee maker, rice cooker, laptops, phones, lighting, etc.



11. EXAMPLES OF LOADS

(1) 12V/30A, 12V/10A, cigarette lighter port, USB-A and USB-C output port are suitable for most products in the market, but some products may trigger overcurrent protection if there is a large current impact at the moment of starting.

(2) The power of electrical products used for AC output should be less than 2200W. According to the different electrical products, when the rated power is less than 2200W, some air conditioners, motors and other devices that need instantaneous

high current when starting may trigger overcurrent when the ratio of peak value of rated current exceeds 3:1. At this time, we recommend that you select the electrical appliances with lower power rate.

(3) When the output is overload, over-current or short circuit, the product will turn off the corresponding output port, and then it will automatically start twice (at an interval of 20s). If there is still an overload, over-current or short circuit alarm, the output port will be locked, and need to be manually troubleshooting and then restart. If the output stops repeatedly after restart, please stop using it immediately (only after troubleshooting) or contact the vendor or maintenance agent for help.

(4) When the battery power is discharged to 0%, the DC and AC output will automatically turn off. Only when the battery power is charged to more than 5%, the DC and AC output can be turned on, which is to protect the battery and enhance its cycle life.

(5) This machine supports charging and discharging simultaneously.

12. ESTIMATION OF OPERATING TIME










<div>Smartphone</div> <div>165-200Times 10W</div>	<div>LED Light Bulb</div> <div>Around 75-85hrs 20W</div>	<div>Television</div> <div>Around 21-23hrs 75W</div>
<div>Electronic Tools</div> <div>Around 19-21hrs 80W</div>	<div>Refrigerator</div> <div>Around 17-19hrs 90W</div>	<div>Slow Cooker</div> <div>Around 7-9hrs 200W</div>

$2048\text{Wh} \times \text{DOD} \times \eta \div (\text{load W}) = \text{charging time (unit: h)}$









Note: DOD is the battery discharge depth, η is the local inverter efficiency,-
DOD=90%, η =88%。

13. TECHNICAL SPECIFICATIONS





General Specs

 Rated Output power		 Typical Capacity	 Battery Type	 Net Weight
2000W 2000W<load<2500W,2min; 2500W<load,8~10S	2200W 2200W<load<2750W,2min; 2750W<load,8~10S	2048Wh	Lithium-ion Battery	About 28.1KG/61.9lbs (The weight may subject toslightly change without notice)
 Dimensions	 Charging Temperature	 Discharge Temperature	 Working Humidity	 Working Noise
440x296x387.5mm (17.3x11.6x15.3 inches)	0-40°C 32-104°F	-20-40°C -4-104°F	10%-90%	≤53dB

Output Specs

 AC	 USB-A x2	 USB-A x2	 USB-C x1	 Cigarette Lighter x1	 5521 x2	 RV x1	 Wireless Charging Pad x2
100-110VAC×6,2000W Total; 110-120VAC×6,2200W Total; 220-240VAC×4,2200W Total;	5-12VDC, 3A, 18Wx2	5VDC,3A 15W Total	5-15VDC,3A 20VDC,5A	12VDC,10A Total	12VDC, 30A		5/7.5/10/15W

Input Specs

 AC-DC Adapter	 Solar Charging	 Car Charging	 Battery Charging
58.8VDC,8A	10V-145VDC/15A	11-28.8VDC/8.2A	

14. TROUBLESHOOTINGS

Error Code	Description
001	PV Over Voltage
004	DC Output Short Circuit
005	Adapter Over Voltage
006	Adapter Low Voltage
007	Adapter Relay Error
008	Adapter Over Current
010	USB/TYPE-C/PD Over Current
011	12V/10A Over Current
012	12V/30A Over Current
014	DC Start Failure
015	DC Output Relay Error
016	Bus Start Failure
017	Inverter Start Failure
018	Bus Low Voltage
019	Bus High Voltage
020	Inverter Low Voltage
021	Inverter High Voltage
022	Inverter Low Frequency
023	Inverter High Frequency
025	Battery High Voltage
026	Battery Low Voltage
027	Battery Unconnected
028	Fan Error
029	NTC Error
030	Calibration Error
031	Inverter Over Load
032	Inverter Short Circuit
033	DSP Communication Error
034	BMS Communication Error
035	EEPROM Read_write Error

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036	Parameters of Control Module Error
041	BMS Temperature Error
042	BMS Over Voltage
043	BMS Low Voltage
044	BMS Over Current
045	BMS Pre-charge Failure
046	BMS Output Short Circuit
051	AC Output Locked
053	USB/TYPE-C/PD Locked
054	12V10A Locked
055	12V30A Locked

15. FAQ (Frequently Asked Questions)

- How to claim the warranty?

Please place your after-sale requirement as the warranty card written to the vendor where you order the product.

- Can it be charged and discharged at the same time?

Yes.

- How to store the EB200P?

We recommend charging the unit to 60-80% SOC every 3 months to extend the battery life.

16. DECLARATION

- Some changes may occur without notice such as external appearance or specifications due to availability of material supplies or hardware improvements of the product over time.
- Our company shall not be liable for any damage caused by force majeure such as fires, typhoons, floods, earthquakes or the user's intentional negligence, misuse or other abnormal conditions.
- No compensation for damages shall be made for utilizing non-standard adapters and accessories.
- This unit is not suitable for use on the relevant equipment or machines involving: Personal safety, such as atomic energy devices, Hi-Fi player devices, emergency medical devices, etc., or any equipment or machines that require extremely highly reliable power sources. We are not responsible for accidents, fires, wrongful or negligent actions caused by such equipment or machines which results in damage.
-

FCC Warning

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.

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.

FCC RF exposure statement:

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



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