



User Manual

Power Station Heavy Duty 5000W

BAT-HDESS-5-MG

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Scan the QR code to access the
English manual.



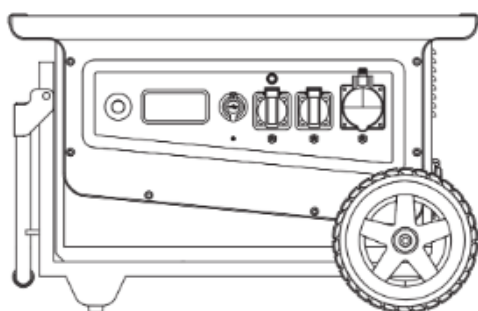
Scan the QR code to access the
Czech manual.

Disclaimer

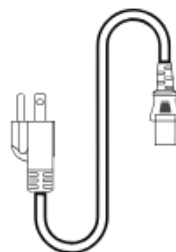
Before using this product, please read this user manual carefully to ensure that you fully understand the product and can use it correctly. After reading this user manual, please keep it in a safe place for future reference. Improper use of this product may cause serious injury to yourself or others, or result in product damage and property loss. By using this product, you are deemed to have understood, recognized and accepted all the terms and contents of this document. The Company shall not be responsible for any damages caused by the user's failure to use this product in accordance with this user manual. In accordance with laws and regulations, the company reserves the right of final interpretation of this document and all documents related to this product. This document is subject to change, update, revision or termination without notice.

Please visit our website for the latest product information.

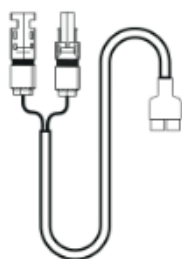
Product list



1x Power station



1x Charging cable



1x MC4 to Anderson Cable

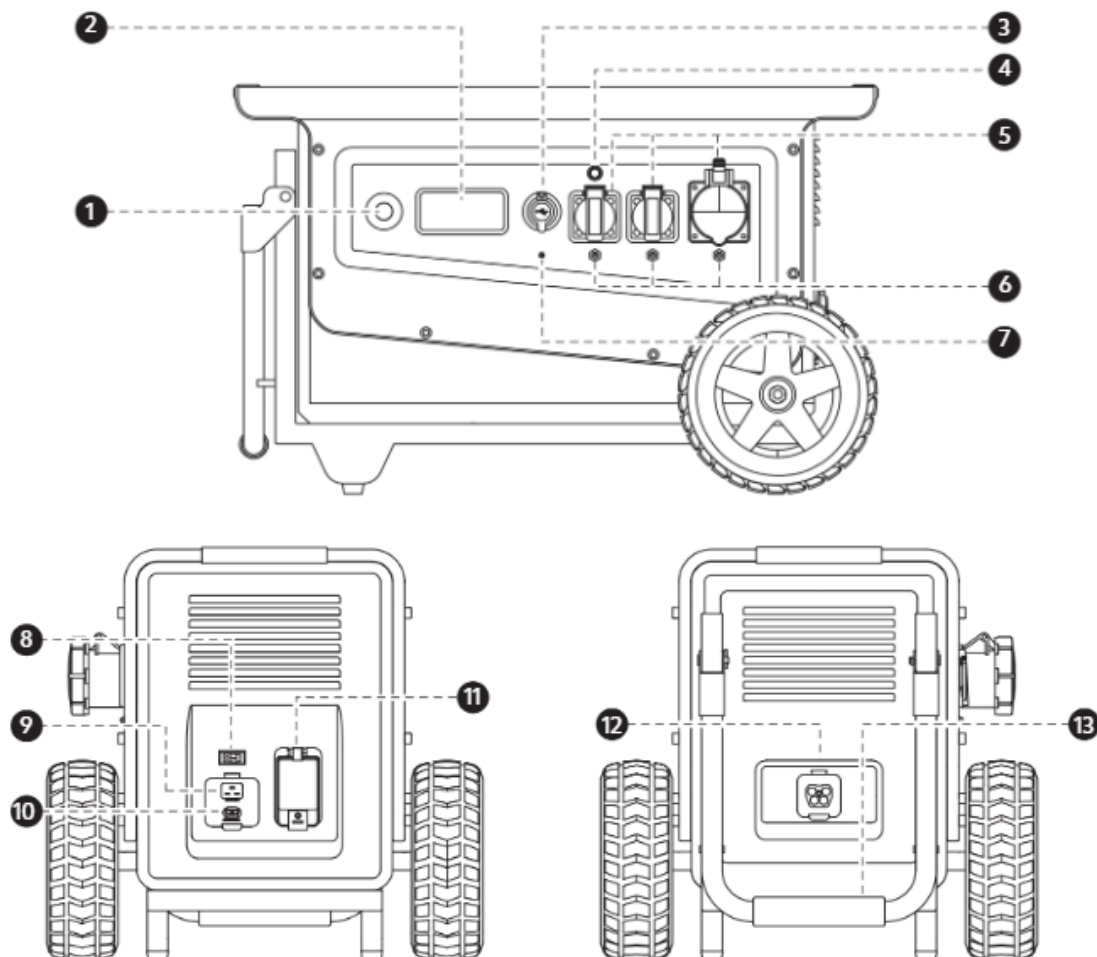


1x User manual

Specifications

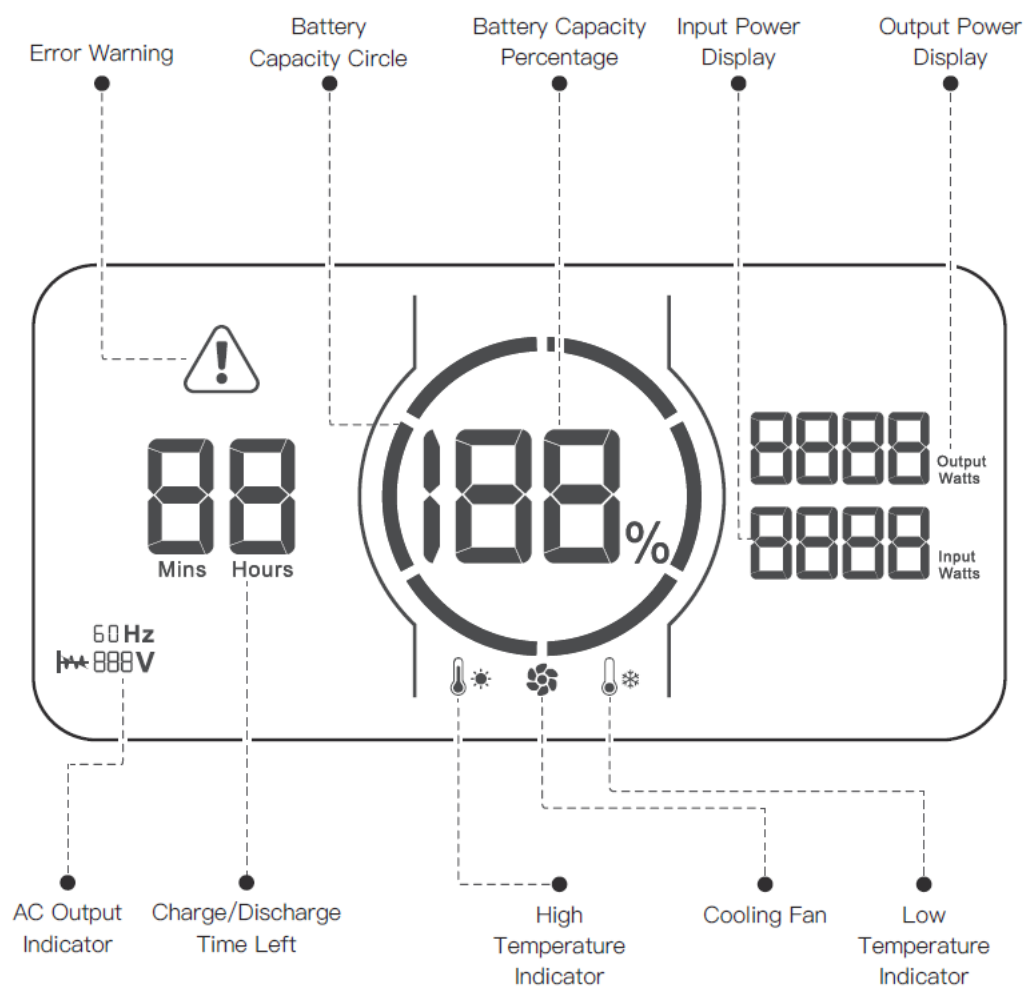
| | |
|---------------------------------|---|
| Model | BAT-HDESS-5-MG |
| Battery capacity | 5040 Wh (48 V / 105 Ah) |
| Battery Type | LiFePO ₄ |
| Working temperature | 0 °C - 40 °C |
| Storage temperature | -20 °C - 60 °C |
| Dimension | 852,5 × 512 × 502 mm |
| Weight | 68,3 kg |
| AC output | 220–240 V, 50/60 Hz; 5000 W max (surge: 7000 W); Bypass 5000 W |
| USB-A output | 5 V/3 A; 9 V/2 A; 12 V/1,5 A; max 18 W |
| USB-C output | 5 V/3 A; 7,2 V/2,4 A; 9 V/1,8 A; 12 V/1,5 A; max 18 W |
| AC input | 190–250 V, 50/60 Hz; 13 A; max 2500 W |
| Solar input | 12–148 V; MPPT 18–140 V; 15 A; max 2100 W |
| Safety features and protections | Protection against overheating of both the inverter and the battery Overvoltage and undervoltage protection Overcurrent and overload protection Short-circuit protection on AC outputs Monitoring of battery cell temperatures Automatic shutdown in the event of fault conditions |
| Life cycle | 3500x DOD ≥ 80 % |

Overview



| | | | | | |
|----|---------------------------|-----|---------------------------|-----|-------------------------------------|
| 1. | Main Power Button | 6. | AC Output Protector | 11. | AC Input Circuit Breaker Protection |
| 2. | LCD Screen | 7. | Grounding Protection | 12. | Extra Battery Port |
| 3. | USB-A & USB-C Output Port | 8. | Fast&Slow Charging Switch | 13. | Handle |
| 4. | AC Output Power Button | 9. | AC Input Port | | |
| 5. | AC Output Socket | 10. | Solar Input Port | | |

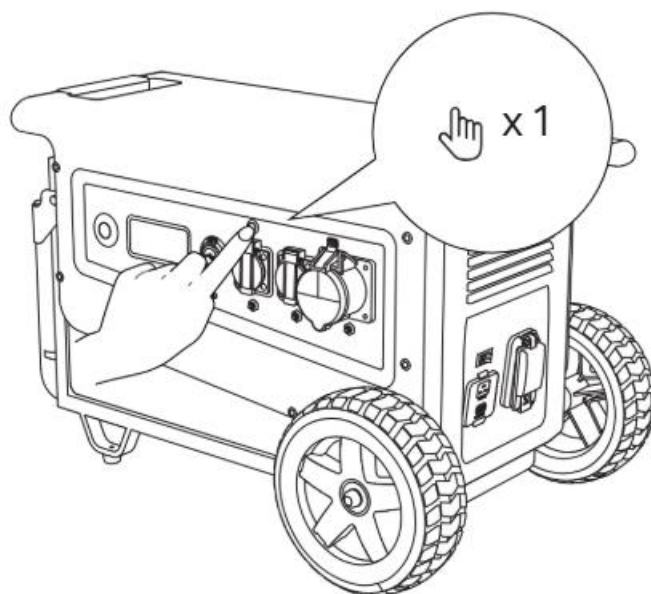
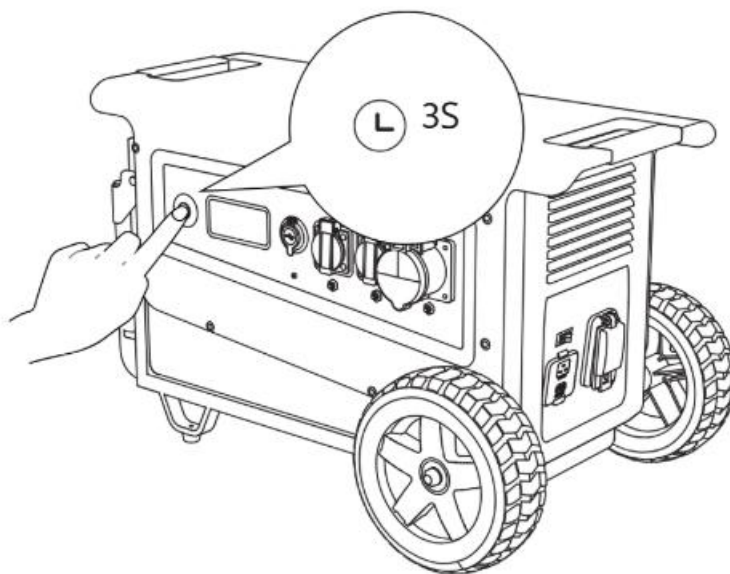
LCD Screen



When the power station is charging and discharging simultaneously, it displays the remaining charge time if the input power exceeds output power; Otherwise, it shows a fixed number "99".

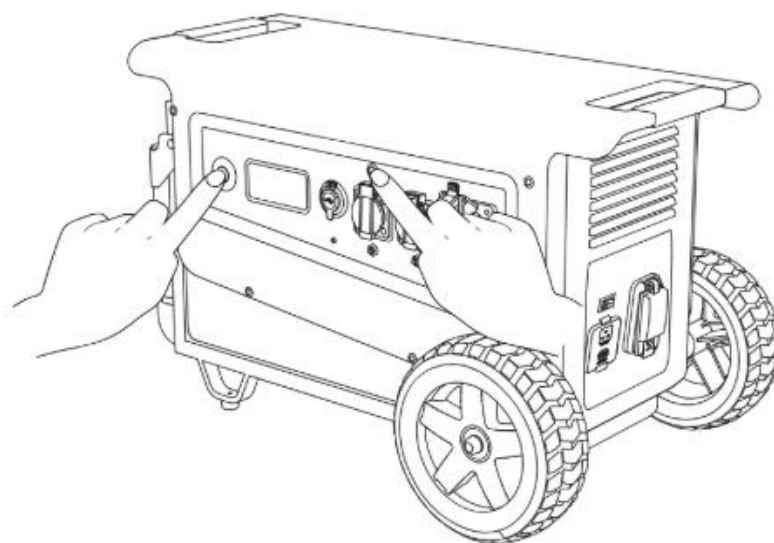
Power ON/OFF

Press and hold the main power button for 3 seconds to turn the main power on or off. When the main power is on, press AC output power button to turn the AC power on or off. When the main power is on, short press the main power button to turn the screen on or off.



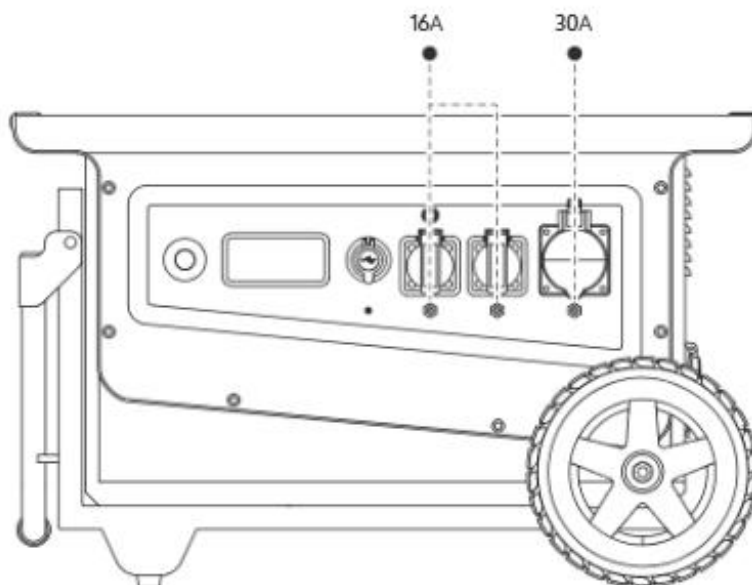
Frequency Switching

Turn off the AC output power. Simultaneously press and hold AC output power button and main power button for 3-5 seconds, till the frequency sign flashes on the screen. Press AC output power button to choose frequency "50" or "60". Long press the main power to confirm, then the abbreviation "SUC" will flicker, indicating a successful setting. Long press the main power button to exit the setting mode.



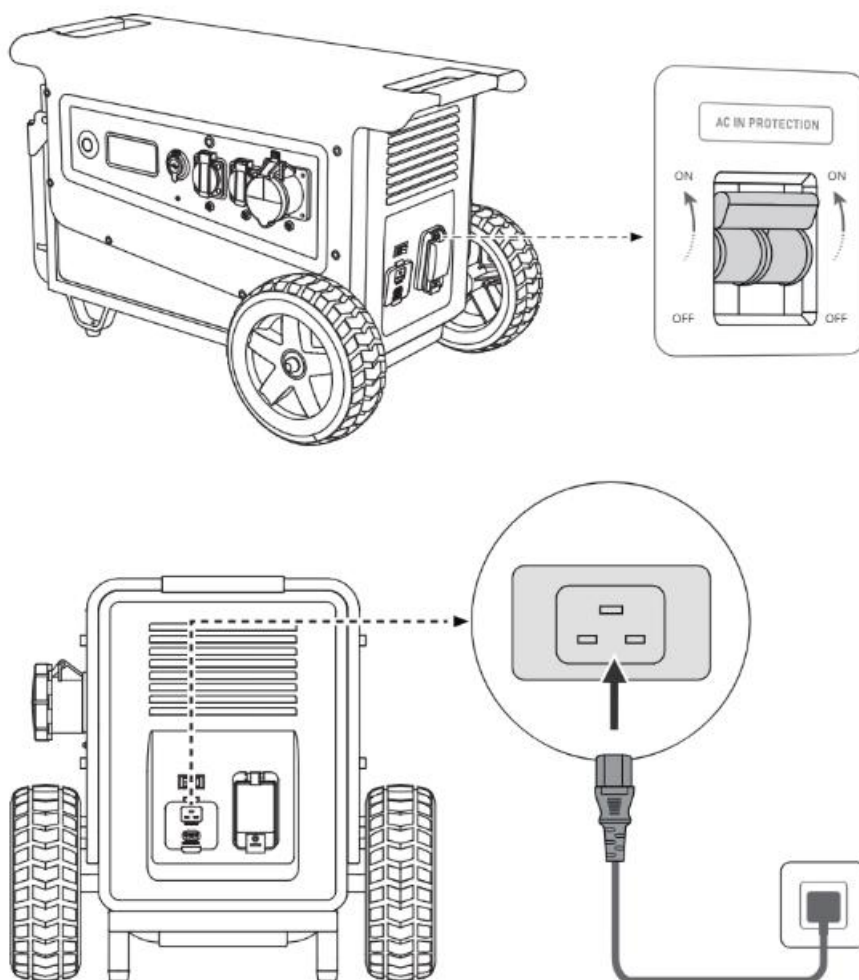
AC Output Protection

When AC output exceeds 16A/30A, the AC output overload protection button will pop out. Please disconnect all the connections for safety reason, and ensure that the current is lower than 16A/30A. Then press the button back down to resume using.



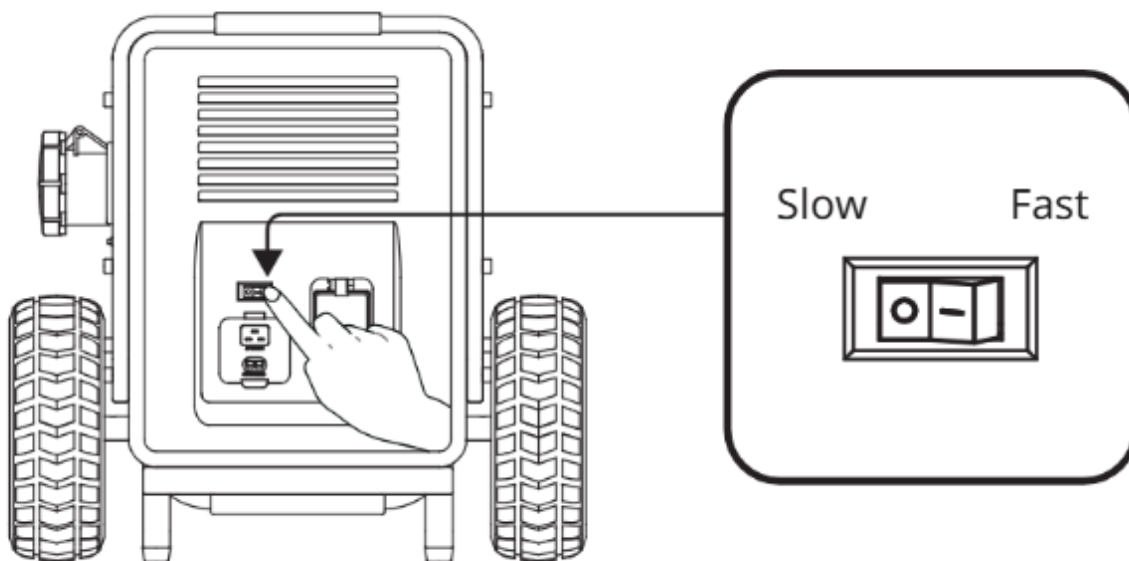
AC Charging

Flip up AC IN breaker before using the product. When AC input exceeds 32A, the AC IN breaker will flip down automatically. Please disconnect all the connections for safety reason, and ensure that the current is lower than 32A. Then flip up the AC IN to resume using. Use AC charging cable to connect the power station to an AC wall outlet.



Fast & Slow Charging Switch

Do not switch charging speed when the power station is charged or AC output power is on. Press fast to enable maximum charging speed at 2500 W. Press slow to switch to slow charging speed at 1250 W.

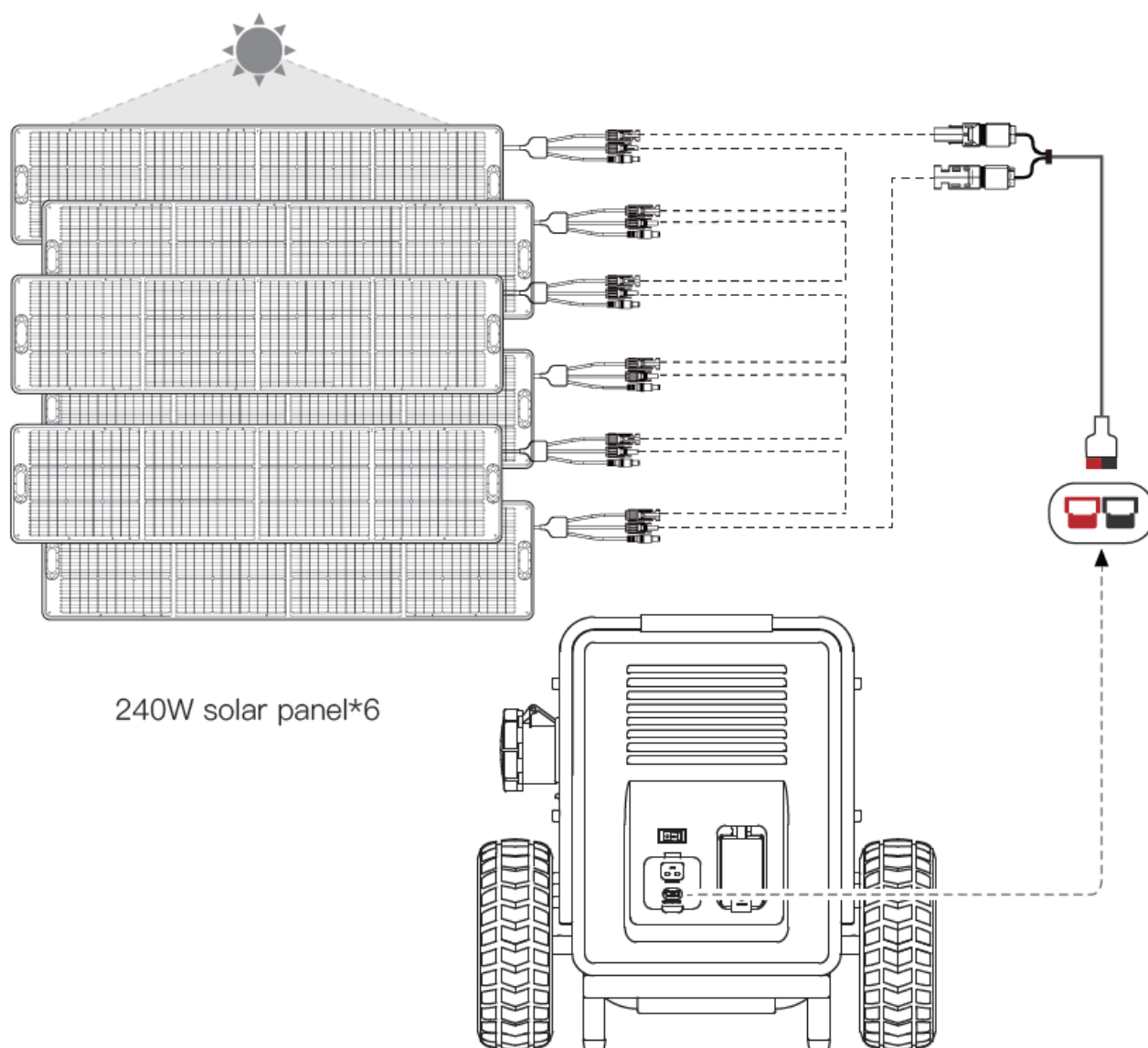


Solar Charging

Use MC4 to Anderson charging cable to connect solar panels to the power station. Connect 6*240W solar panels at most in series to get maximum power.

Make sure the solar panels meet the following requirements:

- **OCV:** 148 V
- **Current:** 15 A
- **Max. Power:** 2100 W

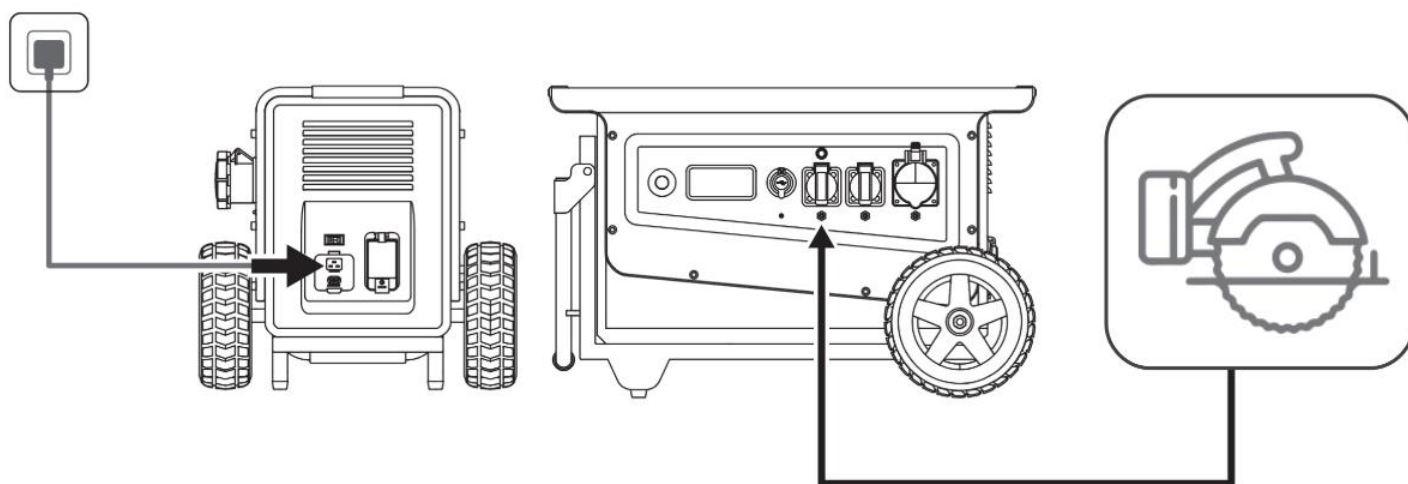


EPS (Emergency Power Supply)

















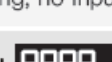

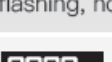



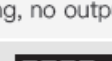

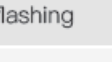

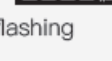




EPS function is enabled by default with a 20ms switching when grid power is cut off. Flip up AC IN breaker. Charge the power station from power grid and connect the device to AC output port as shown in the picture, then press AC output power button on.






Please do not connect the power station to equipment requiring 0ms uninterrupted power supply. Please test and make sure the device is compatible with EPS function.

The total input and output power should lower than 5000W. Otherwise, the powerstation will shut down in 1 minute.



Error Code & Trouble Shooting

| Error Code | Status | Cause | Solution |
|------------|--|---|---|
| E000 |  +  +  flashing, no output | Short circuit of AC output | Press the AC output power button to restore. |
| E001 |  +  +  flashing, no output | Overload of AC output | Press the AC output power button to restore. |
| E002 |  +  +  flashing, no output | Battery voltage of inverter input is low | Charge the device in time and restart the corresponding function button to restore. |
| E003 |  +  +  flashing, no output | Over voltage and under voltage of AC output | Press the AC output power button to restore. |
| E004 |  +  +  flashing, no input | Abnormal AC input frequency | Automatically restores after frequency returning to normal. |
| E005 |  +  flashing, no output | High and low bus voltage | Press the AC output power button to restore. |
| E006 |  +  +  +  flashing, no output | Over temperature of Inverter | Turn off output power and rest the device to restore. |
| E020 |  +  flashing | BMS communication failure. | Contact after sales service team for further support. |
| E021 |  +  flashing | Over voltage of single battery cell. | Stop charging and discharge until the battery voltage returns to normal. |
| E022 |  +  flashing, no output | Low voltage of single battery cell. | Charge the device until the voltage returns to normal. |
| E023 |  +  flashing | Battery total voltage too high. | Stop charging and start discharging until the battery voltage returns to normal. |
| E024 |  +  flashing, no output | Battery total voltage too low. | Charge the device until the voltage returns to normal. |

| Error Code | Status | Cause | Solution |
|------------|--|--------------------------------------|--|
| E025 |  flashing, no output | High temperature of battery. | The device will automatically return to normal when the temperature returns to normal. |
| E026 |  flashing, no output | Low temperature of battery. | The device will automatically return to normal when the temperature returns to normal. |
| E028 |  flashing, no input | Charge over temperature | Charge the device after the temperature returning to normal. |
| E029 |  flashing, no input | Over temperature of MOSFET. | The device will automatically return to normal when the temperature returns to normal. |
| E030 |  flashing | Connect the wrong expansion battery. | Connect correct extra battery to restore. |

FAQ

How to clean the product?

Please use a dry, soft, clean cloth or paper towel to gently wipe the product.

How to store the product?

Store it in a dry, well-ventilated place at room temperature. The recommended storage temperature is -20°C~60°C and keep it away from water resources, heat resources, metal objects and chemical substances.

How to maintain the product?

Charge it to around 60% capacity and turn off the product before storing it. Please use a dry, soft, clean cloth or paper towel to gently wipe the product. For long-term storage, it is recommended to fully discharge and then fully charge the battery (0%-100%) once every 3 months. And the warranty will be voided if the product has not been charged or discharged in 6 months.

Safety Warnings and Precautions

1. Carefully read the user manual before using this device.
2. Exercise extra caution when using this device.
3. DO NOT USE this device if it is damaged in any way.
4. This device MUST NOT be used by minors or persons with limited abilities without supervision.
5. DO NOT USE this device as a toy.
6. Avoid contact of the device with water or moisture.
7. DO NOT SUBMERGE the device in water.
8. DO NOT USE the device in environments with flammable liquids, gases, or dust.
9. DO NOT OPEN or repair the device yourself. Repairs must only be carried out by a qualified technician.
10. Do not expose the device to extreme heat or fire.
11. When working with batteries, have someone nearby who can assist you in case of emergency.
12. Do not throw or drop the device. If it experiences a strong impact or damage, have it checked by a qualified technician.
13. Do not store or place the device in areas where the temperature may exceed 70°C.
14. Do not overcharge the internal battery. Refer to the user manual.
15. Do not smoke, strike matches, or create sparks near the BATTERY.
16. Charge the internal battery only in a well-ventilated area.
17. Only connect the device to properly grounded outlets. There is a risk of electric shock.
18. Do not use this product if the power cable or battery cables are damaged in any way. There is a risk of personal injury.
19. Protect the device from moisture or water. Do not use it outdoors on rainy days.
20. DO NOT PLACE anything on the device, whether storing it or using it.
21. Always use connection cables with a type F plug. This is a power cable with a Schuko plug, which ensures a safe connection of the device to a 230 V electrical network.

Warranty

1. We provide the buyer with a 24-month warranty from the date the buyer receives the product. The warranty covers defects in the product that occur during the warranty period and result from manufacturing defects or other faults that are not caused by improper use or normal wear and tear.
2. If a defect occurs during the warranty period, the buyer is entitled to:
 - Repair of the product
 - Replacement of the product with a new one
 - Or, if the defect is irreparable, withdrawal from the contract and a refund of the purchase price.
3. The buyer must inform the seller of defects without undue delay after discovering them. The warranty does not cover defects caused by improper use of the product, physical damage, or normal wear and tear.
4. The warranty is valid only when the original proof of purchase (from the seller/merchant) is presented by the original buyer along with the product for repair or replacement.
5. The warranty is void if the serial number label or tag has been removed.
6. The warranty does not cover damage or faults caused by:
 - Normal wear and tear
 - Physical damage
 - Improper installation
 - Misuse
 - Modifications or repairs performed by unauthorized third parties
7. We are not liable for any loss or damage incurred during transportation or due to force majeure. (Force majeure includes unforeseeable events such as natural disasters, wars, terrorist attacks, government actions, and other factors beyond our control.)
8. We are not responsible for any incidental or consequential damages resulting from the use or misuse of this product.
9. All warranty claims are limited to the repair or replacement of the defective product, solely at our discretion.



Power the future with
a century of experience

10. If we repair or replace the product, it remains covered by the remaining period of the original warranty.

- Repair or replacement may include refurbished units with equivalent functionality.
- The replaced part or product becomes our property.

Importer Information

EU Declaration of Conformity

Bateria Slaný CZ, s.r.o., CZ25139096, as the authorized representative of the manufacturer for the EU, hereby declares that this device complies with the essential requirements and other relevant provisions of the following regulations:

- Government Regulation No. 118/2016 Coll. – on technical requirements for low voltage electrical equipment
- European Parliament and Council Directive 2014/35/EU (Low Voltage Directive – LVD)
- European Parliament and Council Directive 2014/30/EU (Electromagnetic Compatibility Directive – EMC)
- European Parliament and Council Directive 2011/65/EU (Restriction of Hazardous Substances – RoHS)

This declaration is issued based on the technical documentation and test protocols provided by the manufacturer in accordance with applicable standards, such as ČSN EN 62368-1 or other relevant standards.

Take-back and Recycling Declaration

In accordance with Act No. 542/2020 Coll. on end-of-life products and the European Union directives WEEE (2012/19/EU) and RoHS (2011/65/EU), Bateria Slaný CZ, s.r.o. ensures:

- Take-back and recycling of electrical and electronic equipment, batteries, and accumulators
- Separate waste collection within an authorized collective system ECOBAT
- Environmental management of waste and responsible recycling

This product must not be disposed of as regular municipal waste. It must be handed over to a collection point designated for recycling of electrical and electronic equipment.

Use of Hazardous Substances

This product complies with the requirements of the RoHS Directive (2011/65/EU), which restricts the use of hazardous substances such as:

- Lead (Pb)
- Mercury (Hg)
- Cadmium (Cd)
- Hexavalent chromium (Cr6+)
- Polybrominated biphenyls (PBB)
- Polybrominated diphenyl ethers (PBDE)

Importer

Company Name: Bateria Slaný CZ, s.r.o.

Company Address: Netovická 875, Slaný, 274 01, Czech Republic

Company ID: 25139096

VAT ID: CZ25139096

Email: sales@bateria.cz

Phone: +420 720 838 482

Country of Origin: Made in China

