



**GLOBAL POWER**

**GP3.6KW-4800Wh-4PV Mini ESS**  
**User Manual**





# Thank you for choosing our product!

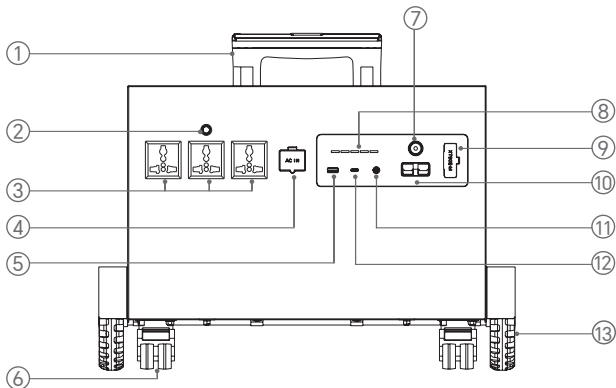
Please read this user manual carefully and follow the instructions to ensure proper operation, helping you quickly become familiar with the product in a more convenient and efficient way.

## **Friendly Reminder**

The specifications and images in this manual are for reference only. This product is designed for emergency use only and is not a replacement for standard AC power sources of household appliances or digital devices.

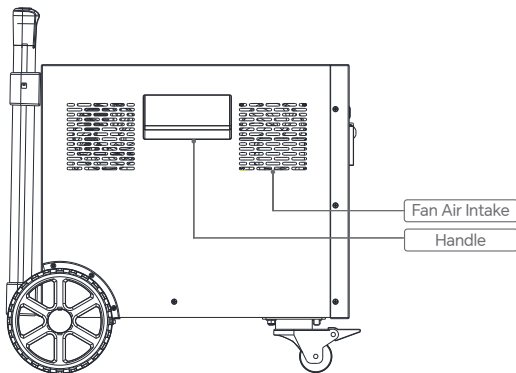
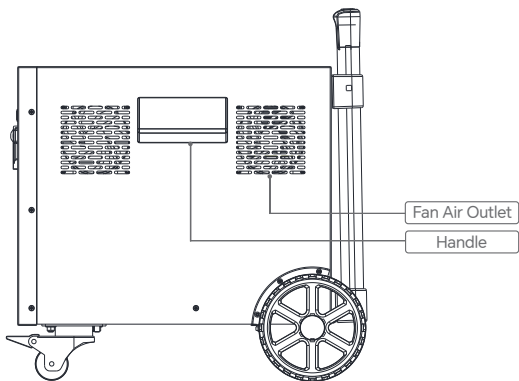
AC power sockets and power adapters may vary depending on the customer's region.

# Product Front View



①	Telescopic Handle	⑧	5-Level Battery Indicator
②	AC Output Switch Button	⑨	DC Output Port (XT90)
③	AC Output Port	⑩	DC Input Port (Anderson)
④	AC Input Port	⑪	DC Output Port (DC5521)
⑤	USB-A Output Port	⑫	USB-C Output Port
⑥	Swivel Casters	⑬	All-Terrain Casters
⑦	Power Button		

# Product Side View



## Product Features

1. This product features a large battery capacity, high output power, and a variety of ports, making it flexible for use in multiple scenarios.



Long-Distance Travel



Camping & Outings



Outdoor Exploration

2. With AC inverter functionality, it can provide emergency power for household appliances such as computers, refrigerators, rice cookers, lighting, etc.



Fan



RiceCooker



Lighting

3. The DC output function allows it to power digital devices such as mobile phones and smartwatches, as well as toys and vehicle-mounted small electronics. It supports USB-A and USB-C charging, and includes DC5521/XT90 output ports for powering 12V vehicle electronics.



Tablet



Smartphone



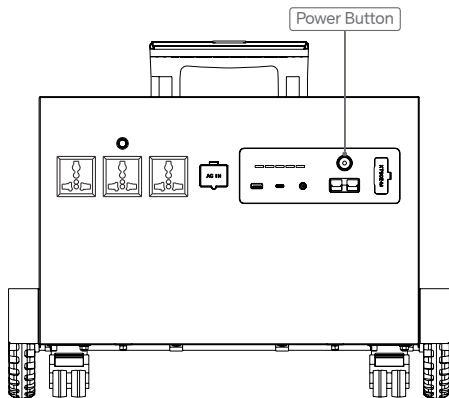
Vehicle Electronics

(This product is not waterproof. Do not use in rain, snow, or damp environments.)

# Detailed Product Functions

## 1. Powering On/Off the Product

Press and hold the “Power Button” for 2 seconds to power on. The fan will run for a self-check and automatically turn off after 3 seconds, with the current battery level displayed. When powered on, press and hold the “Power Button” for 2 seconds to power off.



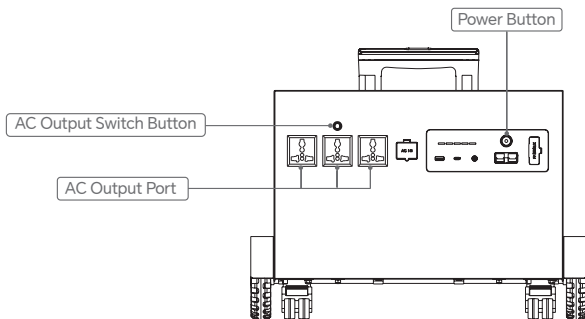
## 2. Using DC/USB Output Functions

Once powered on, the DC/USB-A/USB-C outputs are activated directly. Connect to digital devices or other DC-powered equipment using a USB/USB-C cable or the corresponding cable for the DC device to supply power.

Short press the “Power Button” once to turn off the USB-A/USB-C/DC outputs. When no output is active, the product will automatically power off after 3 minutes.

### 3. Using the AC Output Function

After powering on, short press the “AC Output Switch Button” to activate the AC output function. The indicator light on the AC Output Switch Button will turn red. Insert the device to be powered into the AC output port to supply power. When AC output is no longer needed, short press the “AC Output Switch Button” again to turn off the AC output, then unplug the device.



# Charging the Product

## 1. Charging via the AC Input Port

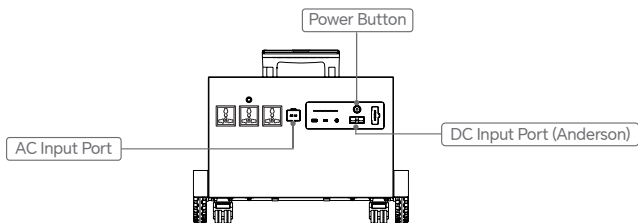
**Fast Charging:** At home, use the supplied AC power cord to charge from a mains outlet. The charging power is 2000W. (The product's maximum AC charging power is 2000W. It is normal for the charging power to be reduced due to factors such as low battery level, near-full battery level, or ambient temperature.)

**Standard Charging:** Short press the “POWER Button” twice to switch from Fast Charging Mode to Standard Charging Mode with a charging power of 1000W. In this mode, the fan noise is moderate.

**Silent Charging:** In Standard Charging Mode, short press the “Power Button” twice to switch to Silent Charging Mode with a charging power of 400W. In this mode, the fan noise is minimal.

Short press the “Power Button” twice while in Silent Charging Mode to switch back to Fast Charging Mode, cycling through the modes.

**Note:** Please use the supplied charging cable. When charging, use an outlet or power strip rated for 10A or higher. Do not use power strip outlets that are scorched or deformed.



## 2. Charging via the DC Input Port (Anderson)

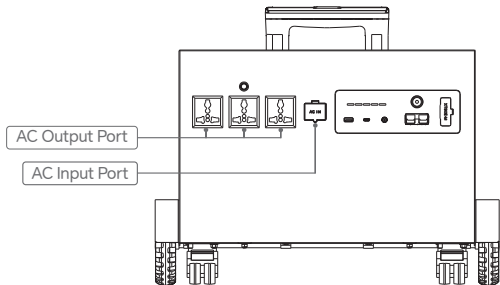
This product features an Anderson input port that supports DC 15–120V/40A, with a maximum charging power of 4000W.

If both the AC input port and the Anderson input port are used for simultaneous charging, the maximum total charging power is 4000W, with the AC charging power capped at 1500W.

### Using the UPS Function

When the product is being charged via AC mains power, the UPS function will activate automatically, and the AC output will be enabled simultaneously. If the charging cable is unplugged or a power outage occurs, the product will switch from mains power to supplying power to your connected devices within 20ms.

**Note:** Due to differences in electrical devices, the UPS function may not be compatible with all equipment. If your device requires UPS functionality, please test it in advance to ensure compatibility.



## Using the Grid-Tied Function

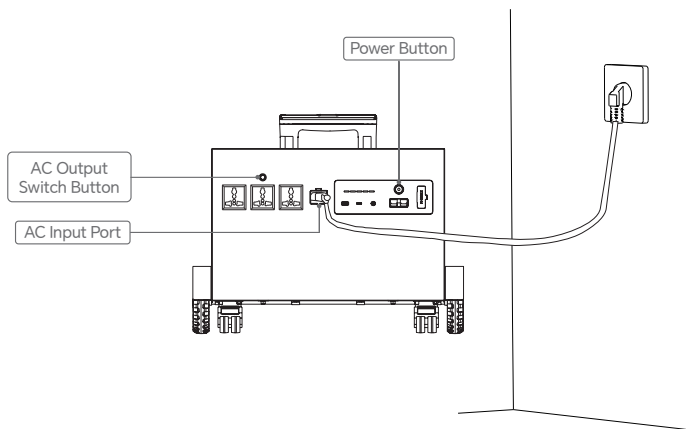
After powering on, connect the product's AC input port to a home outlet using the supplied AC power cord. Press and hold the "AC Output Switch Button" for 5 seconds to enable Grid-Tied Output. When Grid-Tied Mode is active, the indicator light on the AC Output Switch Button will turn blue. The maximum grid-tied power is 800W and cannot be adjusted. When the battery level drops to 5%, the grid-tied function will automatically turn off, and the blue indicator light will begin to flash. If the product is connected to a solar panel, it will be charged by the solar panel, and the grid-tied function will automatically resume when the battery level reaches 15%.

### **Note:**

1. Before using the grid-tied function, ensure the mains grid is energized and the product's AC input port is connected to the grid using the AC power cord.
2. In Grid-Tied Mode, the product outputs a maximum of 800W to the grid. Ensure the outlet and wiring connected to the product can handle this power level to prevent safety incidents.

## How to Exit Grid-Tied Mode





While in Grid-Tied Mode, press and hold the “AC Output Switch Button” for 5 seconds to switch back to Normal Mode. The indicator light on the AC Output Switch Button will turn red.



## Product Specifications

Battery Pack Capacity	48V 100Ah, 4800Wh
PV Input	15-120V $\approx$ 40A(Max 4000W)
AC Input	220V~50/60Hz, 2000W
DC Output (5521)	12V $\approx$ 10A
DC Output (XT90)	12V $\approx$ 25A
USB-A Output	5V $\approx$ 3A
USB-C Output	5V $\approx$ 3A
AC Output	220V~50/60Hz, 3600W(Peak 4800W)
Fan Operation	The fan automatically adjusts based on internal temperature and charging/discharging power; no manual operation is required to turn it on.
Operating Temperature	-10 ~ 50°C

## Package Contents

Main Unit $\times$ 1	
AC Power Cord $\times$ 1	
PV Power Cord $\times$ 1	
User Manual $\times$ 1	

## **Important Notes**

1. If the product will not be used for an extended period, it is recommended to maintain a certain battery level and recharge it at least once every three months.
2. Slight heating during use or charging is normal and does not indicate a malfunction.
3. Use the product in a normal temperature environment, and keep it away from moisture, high temperatures, and open flames.
4. Store the product in a dry place away from damp and corrosive materials.
5. Do not clean with harsh chemicals, soaps, or detergents.
6. If the battery shows signs of swelling, leakage, or unusual odor, stop using immediately.
7. Avoid dropping the product during use.
8. Keep the product out of reach of children. If a child needs to use the power station, a parent or guardian should operate it according to the instructions.
9. Do not dispose of the power station with household waste or incinerate it. Please protect the environment.

# Product Fault Analysis

## 5 Battery Indicator Lights Flashing:

1. Solar charging voltage is too high or too low. Charging will resume once the voltage returns to the standard range. Note: Voltage outside the standard range may damage the device.
2. DC/USB-A/USB-C output overload or short circuit: The connected device's power exceeds the rated power, or the charging cable is short-circuited. Disconnect the device and short press the "POWER Button" to restore output.
3. Battery temperature protection: Battery temperature is too high or too low. Once the battery temperature returns to normal, short press the "POWER Button" to restore output.

## 5 Battery Indicator Lights + AC Output Switch Button Red Light Flashing:

1. Overload: The connected device's power exceeds the product's rated power. Reduce the load to within the rated power range, then short press the "AC Output Switch Button" to restart output.
2. Short circuit: The power cord of the connected device is shorted. Disconnect the device, then short press the "AC Output Switch Button" to restart output.
3. Temperature protection: Device temperature is too high. Once the temperature returns to normal, short press the "AC Output Switch Button" to restart output.
4. Mains overvoltage: The grid voltage is higher than the product's rated voltage. Charging will resume automatically when the voltage returns to normal, or try unplugging and re-plugging the power cord.

5. Mains undervoltage: The grid voltage is lower than the product's rated voltage. Charging will resume automatically when the voltage returns to normal, or try unplugging and re-plugging the power cord.

## **5 Battery Indicator Lights + AC Output Switch Button Red Light Flashing:**

1. Grid-Tied overvoltage: The grid voltage is higher than the product's rated voltage. Grid connection will resume automatically when the voltage returns to normal, or try unplugging and re-plugging the power cord.

2. Grid-Tied undervoltage: The grid voltage is lower than the product's rated voltage. Grid connection will resume automatically when the voltage returns to normal, or try unplugging and re-plugging the power cord.

## **AC Output Switch Button Blue Light Flashing:**

1. No mains power detected in Grid-Tied Mode.
2. Battery level is below 5% in Grid-Tied Mode.

## **Battery Indicator Light Flashing:**

1. The first battery indicator light flashes once per second, indicating low battery level.
2. The first battery indicator light flashes once every 2 seconds for 10 seconds, indicating battery over-discharge protection. The device needs to be charged.

## **Frequently Asked Questions**

### **Q1: Does the product automatically shut down when idle?**

When powered on, DC/USB-A/USB-C outputs are automatically enabled, and the product will not shut down when idle. If you manually short press the “POWER Button” once, the DC/USB-A/USB-C outputs will turn off. If no outputs are enabled, the product will automatically power off after 3 minutes.

### **Q2: Why is the battery level sometimes inaccurate?**

Battery level inaccuracies can occur due to weather conditions, prolonged shallow charging/discharging cycles, or extended periods of non-use. The battery needs to be fully charged to recalibrate.

### **Q3: Does the product support simultaneous charging and discharging?**

Yes, the product supports simultaneous charging and discharging. When charging via AC, the AC output is powered by mains bypass. When charging via solar, it can normally power connected devices.

### **Q4: Does the product support AC and DC charging simultaneously?**

Yes, simultaneous charging is supported. When charging from both sources simultaneously, solar charging takes priority.

**Q5: How does the product's fan work?**

The fan automatically adjusts its speed based on internal temperature and charging/discharging power; no manual operation is required to turn it on.

**Reminder:** Please read the manual thoroughly before use.



**MADE IN CHINA**