G-POWER S500

G-POWER Portable Power Station S500 User Manual

Model: S500

1. Product Overview

The G-POWER Portable Power Station S500 is a versatile and robust power solution designed for various applications, including outdoor activities, emergency backup, and general portable power needs. It features a high-capacity LiFePO4 battery, multiple output ports, and various recharging options.

Key Features:

- **High Capacity:** 556.8 Wh battery with 500W AC output (1000W peak).
- **Advanced Battery Technology:** Equipped with a LiFePO4 battery, offering over 3000 regular cycles and a lifespan of up to 10 years. Integrated BMS (Battery Management System) provides protection against overvoltage, undervoltage, overcurrent, short circuit, and over-temperature.
- **Multiple Charging Options:** Supports 4 recharging methods: AC wall outlet (1.5 hours to 85%), solar panel, car charger, and USB-C PD.
- **Versatile Outputs:** Includes 1 DC input, 1 PD Type-C port (100W), 1 standard Type-C port, 2 USB-A ports, 1 car charger output, and 1 AC output.
- **Integrated LED Light:** Features a 10W LED emergency light with High Brightness, Low Brightness, and SOS/Flash modes.
- **Pure Sine Wave Output:** Ensures stable and clean power for sensitive electronics.
- **Portable Design:** Weighs approximately 13 pounds (5.9 kg) with a compact design and curved handle for easy transport.
- **LCD Display:** Provides real-time information on battery capacity, charging status, and output wattage.



Figure 1: Front and side view of the G-POWER S500 Portable Power Station, highlighting the various input and output ports, power button, LED light button, and AC/DC controllers.

2. Safety Instructions

Please read and understand all safety instructions before operating the G-POWER Portable Power Station S500. Failure to follow these instructions may result in electric shock, fire, or serious injury.

- Do not disassemble, repair, or modify the unit. Incorrect reassembly may cause fire or electric shock.
- Do not expose the unit to fire or direct heat sources.
- Do not use or store the unit in bathrooms or areas exposed to water or high humidity.
- Do not use or store the unit near strong electrostatic fields or strong magnetic fields.
- Do not use non-G-POWER components or accessories.
- Do not use the unit if it is damaged or has been dropped.
- Ensure proper ventilation during use. Do not block the ventilation openings.
- Keep out of reach of children and pets.
- Dispose of the product according to local regulations.

3. Setup Guide

Unpacking and Initial Inspection:

1. Carefully remove the power station and all accessories from the packaging.
2. Verify that all items listed in the 'Box Contents' are present: 1 Portable Power Station, 1 AC Adapter, 1 User Manual.
3. Inspect the unit for any visible damage. If damage is found, do not use the unit and contact customer support.

Initial Charging:

It is recommended to fully charge the power station before first use to optimize battery performance and lifespan.

1. Connect the provided AC adapter to the AC input port on the power station.
2. Plug the AC adapter into a standard wall outlet.
3. The LCD display will show the charging status. The unit is fully charged when the battery indicator reaches 100%.

4. Operating Instructions

Turning the Unit On/Off:

- To turn on: Press and hold the main Power Button for 3 seconds. The LCD display will illuminate.
- To turn off: Press and hold the main Power Button for 3 seconds. The LCD display will turn off.

Using Output Ports:

Each output section (AC, DC, USB) has its own power button. Press the respective button to activate or deactivate the ports.

- **AC Output:** Press the 'AC Controller' button to enable the AC outlets. The AC icon will appear on the LCD. Plug in your AC-powered devices.
- **DC Output (Car Charger):** Press the 'DC Controller' button to enable the 12V car charger output. The DC icon will appear on the LCD.
- **USB Outputs (USB-A, Type-C, PD Type-C):** These ports are typically active when the main unit is on. Connect your USB-powered devices.



Figure 2: The G-POWER S500 Portable Power Station providing 500W rated output power, shown charging a laptop, smartphone, and camera on a picnic table, illustrating its use for camping trips.

Recharging the Power Station:

The S500 offers four methods for recharging:

1. **AC Wall Outlet (Fast Charge):** Connect the AC adapter to the AC input port and a wall outlet. This method can charge the unit from 0% to 85% in approximately 1.5 hours.
2. **Solar Panel:** Connect a compatible solar panel (up to 100W) to the DC input port. The unit will automatically begin charging when sufficient sunlight is detected. Charging time varies based on solar intensity and panel wattage.
3. **Car Charger (12V):** Connect the car charger cable (not explicitly listed in box contents, may be sold separately or integrated) to the DC input port and your vehicle's 12V auxiliary power outlet.
4. **USB-C PD Wall Outlet (100W):** Use a compatible USB-C PD charger and cable to connect to the PD Type-C port for recharging.



Figure 3: Illustration of the four recharging options for the G-POWER S500: AC wall outlet, solar panel, car charger, and USB-C PD wall outlet.

Using the LED Light:

Press the 'LED Light Button' to cycle through the different light modes:

- First press: High Brightness (100%)
- Second press: Low Brightness (50%)
- Third press: SOS/Flash Mode
- Fourth press: Turn off the LED light.



Figure 4: The G-POWER S500 Portable Power Station demonstrating its 10W LED lighting feature, illuminating a campsite at night.

Understanding the LCD Display:

The LCD display provides critical information about the power station's status:

- **Battery Level:** Shows the current battery percentage.
- **Input Power:** Indicates the wattage being drawn during charging.
- **Output Power:** Displays the total wattage being consumed by connected devices.
- **AC/DC Indicators:** Icons illuminate when AC or DC outputs are active.
- **Warning Icons:** May display icons for overload, over-temperature, or other fault conditions.



Figure 5: A detailed view of the G-POWER S500's LCD display, showing battery percentage, output wattage, and AC/DC indicators.

5. Maintenance

Storage:

- Store the power station in a cool, dry place, away from direct sunlight and extreme temperatures.
- For long-term storage, recharge the unit to 50-80% every 3-6 months to maintain battery health.
- Avoid storing the unit in a fully discharged state for extended periods.

Cleaning:

- Use a dry, soft cloth to wipe the exterior of the unit.
- Do not use abrasive cleaners or solvents.
- Keep the ventilation openings clear of dust and debris.

6. Troubleshooting

If you encounter issues with your G-POWER Portable Power Station S500, refer to the following common problems and solutions:

Problem	Possible Cause	Solution
Unit does not turn on	Battery is completely discharged; Power button not pressed long enough.	Charge the unit using the AC adapter; Press and hold the Power Button for 3 seconds.
No output from AC/DC ports	AC/DC output not activated; Overload protection triggered; Low battery.	Press the respective AC/DC controller button; Reduce the load on the ports; Recharge the power station.
Unit not charging	Charging cable/adapter faulty; Input source not providing power; Over-temperature protection.	Check cable and adapter connections; Ensure wall outlet/solar panel/car charger is functional; Allow unit to cool down.
LCD display not working	Unit is off; Display malfunction.	Turn on the unit; If issue persists, contact customer support.

If the problem persists after attempting these solutions, please contact G-POWER customer support for assistance.

7. Specifications

Feature	Detail
Model Name	S500
Battery Type	LiFePO4
Capacity	556.8 Wh
AC Output	500W (Rated), 1000W (Peak), 110 Volts, Pure Sine Wave
USB-A Output	2 ports, 18W Max each
Type-C Output	1 port, 15W
PD Type-C Output/Input	1 port, 100W Max
DC Input	100W Max (for Solar/Car charging)
Car Charger Output	1 port
LED Light	10W, High/Low/SOS/Flash modes
Dimensions (L x W x H)	24.4 x 29 x 18.8 cm (9.6 x 11.4 x 7.4 inches)
Weight	Approx. 13 lbs (5.9 kg)
Operating Temperature	0°C to 40°C (32°F to 104°F)
Recharge Cycles	3000+ cycles to 80% capacity

8. Warranty and Support

Warranty Information:

The G-POWER Portable Power Station S500 comes with a**Lifetime Warranty**. This warranty covers defects in materials and workmanship under normal use. Please retain your proof of purchase for warranty claims.

The warranty does not cover damage caused by misuse, abuse, unauthorized modification, accident, or natural disasters.

Customer Support:

For technical assistance, warranty claims, or any questions regarding your G-POWER Portable Power Station S500, please contact G-POWER customer support through the retailer where the product was purchased or refer to the official G-POWER website for contact details.

Ask a question about this manual

Ask about setup, troubleshooting, compatibility, parts, safety, or missing instructions. Manuals+ will review the question and use this page's manual context to help answer it.

Name

Anonymous

Email

you@example.com

After a successful submission, we securely hash the supplied account or form email before sending it to Microsoft Advertising for conversion attribution. Privacy details.

Question

Example: How do I reset this device or fix this error?

Details

Model number, symptoms, what you tried, or the section of the manual you are using.

Submit question