

GRECELL H2400

GRECELL H2400 Portable Power Station and 350W Solar Panel User Manual

Model: H2400

1. INTRODUCTION

Thank you for choosing the GRECELL H2400 Portable Power Station and 350W Foldable Solar Panel. This manual provides essential information for the safe and efficient operation, maintenance, and troubleshooting of your new power solution. Please read this manual thoroughly before use and retain it for future reference.

The GRECELL H2400 is a high-capacity portable power station designed to provide reliable power for various applications, including home emergencies, outdoor activities, camping, and RV use. It features a robust 1843.2Wh LiFePO4 battery, 2400W AC output, UPS functionality, and fast recharging capabilities. The accompanying 350W foldable solar panel offers an efficient and portable solution for solar recharging.

2. SAFETY INSTRUCTIONS

WARNING: Failure to follow these safety instructions may result in fire, electric shock, or other injury or damage.

- Do not disassemble, repair, or modify the unit.
- Do not place the unit near fire or expose it to direct heat.
- Do not store or use the unit in high temperatures or direct sunlight.
- Do not use or store the unit in a bathroom or in areas exposed to water or rain.
- Use only the provided accessories and chargers.
- Keep the unit away from children and pets.
- Do not use the unit if it is damaged or has been dropped.
- Ensure proper ventilation during use and charging to prevent overheating.
- Avoid contact with liquids. If liquid comes into contact with the unit, consult customer support.

- Dispose of the unit according to local regulations.



Image: Internal safety features of the GRECELL H2400 Power Station, illustrating protection against various electrical faults.



Convenient Carport Recharge

It also supports recharging via cigarette lighter, offering unparalleled convenience on the road.



12V/24V

Image: Comprehensive multi-safety protections integrated into the GRECELL H2400 Power Station.

3. PACKAGE CONTENTS

Please check that all the following items are included in your package:

- 1x GRECELL H2400 Portable Power Station
- 1x GRECELL 350W Foldable Solar Panel
- 1x Anderson Cable
- 1x AC Charger
- 1x Car Charger Cable
- 1x Cable Storage Bag
- 1x User Manual (this document)
- 2x 4-in-1 Charge Cable (XT60/30A Anderson/ DC 79*09mm/M16 Aviation Connector)

PACKAGE INCLUDED



Image: All items included in the GRECELL H2400 Portable Power Station and 350W Solar Panel package.

4. PRODUCT FEATURES

- **High Capacity & Power Output:** 1843.2Wh LiFePO4 battery with 2400W AC output (peak 4800W) to power a wide range of appliances.
- **Intelligent UPS Mode:** Provides uninterruptible power supply, switching within 0.1 seconds during power interruptions to protect sensitive devices.
- **Fast Recharging:** Fully recharges in 1.6-2 hours via AC adapter. Supports dual charging (AC + Solar) for even faster recharge in 1.8 hours.
- **Efficient Solar Panel:** 350W foldable solar panel with 23% conversion efficiency, monocrystalline silicon cells, and XT60/Anderson output for broad compatibility.
- **Durable & Waterproof Solar Panel:** Made with ETFE surface, IP65 water splash resistance, and a foldable design for portability.

- **Multi-Safety Protections:** Advanced Battery Management System (BMS) with protections against over-voltage, over-current, over-heating, short-circuit, over-charge, and over-load.
- **Informative LCD Display:** Shows real-time input/output wattage, battery level, and port status.
- **LED Light & SOS Mode:** Integrated LED light with Half Bright, Full Bright, Strobe, and SOS modes for emergency situations.
- **Quiet Cooling Fans:** Multiple fans ensure optimal temperature regulation with minimal noise.



Image: Upgraded Battery Management System with cooling fans for temperature safety.

5. SETUP

5.1. Initial Charge

Before first use, fully charge the GRECELL H2400 Power Station. Connect the provided AC charger to the AC input port on the power station and plug it into a wall outlet. The LCD display will indicate charging status. A full charge typically takes 1.6-2 hours.

SUPER FAST RECHARGE IN 2 HOURS

GRECELL H2400 AC Input

2 Hours (0-100%) ⚡

Other 2000Wh AC Input

4.5 Hours (0-100%)



Image: GRECELL H2400 Power Station undergoing AC ultra-fast recharge.

5.2. Solar Panel Setup

1. Unfold the GRECELL 350W solar panel.
2. Locate a sunny area free from obstructions.
3. Use the integrated kickstands to position the solar panel at an optimal angle towards the sun. Adjust the angle (30-60 degrees) throughout the day for maximum efficiency.
4. Connect the solar panel to the power station using the appropriate charging cable (e.g., XT60 or Anderson connector).

PORTABLE AND FOLDABLE



Image: Adjusting the solar panel bracket angle for optimal sunlight exposure.

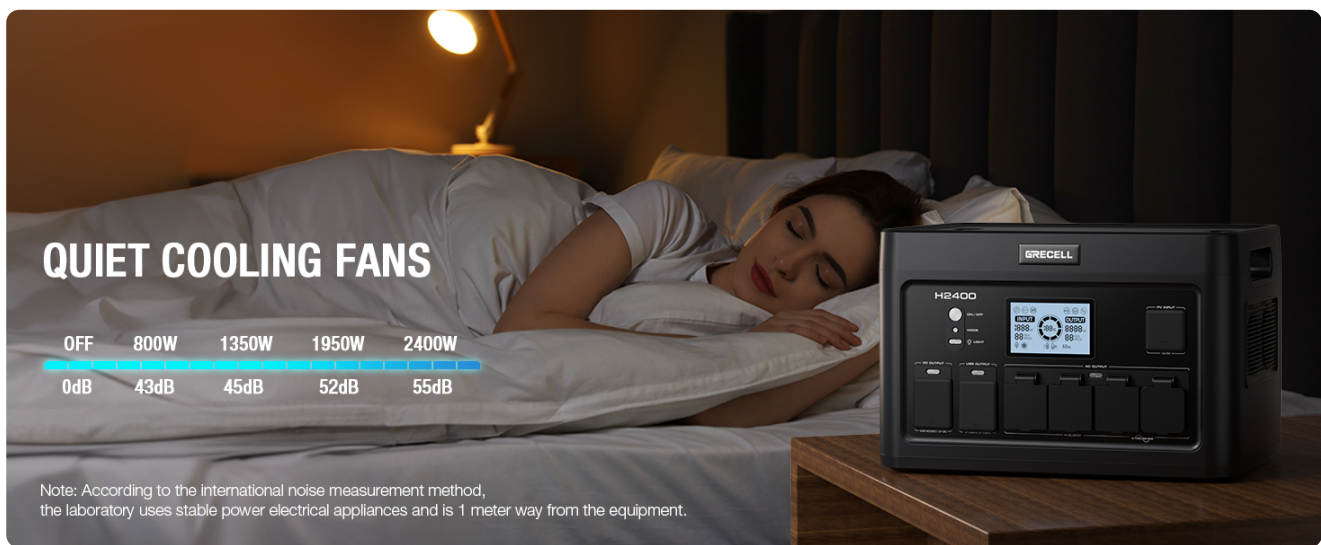


Image: Key features of the solar panel, including plug-and-play connectivity, ETFE material, flexibility, durability, and IP65 waterproofing.

6. OPERATING INSTRUCTIONS

6.1. Powering On/Off

Press and hold the main power button for a few seconds to turn the power station on or off. The LCD screen will illuminate upon activation.

6.2. Using AC Outlets

Press the AC power button to activate the AC outlets. Plug your devices into the 110V AC outlets. The LCD screen will display the AC output wattage. Ensure your devices do not exceed the 2400W continuous output limit.



Image: GRECELL H2400 Power Station powering various household appliances during outdoor use.

6.3. Using DC/USB Outlets

Press the DC power button to activate the DC and USB ports. Connect your devices to the appropriate USB-A, USB-C (PD100W), or 12V DC outlets. The LCD screen will show the DC/USB output wattage.



Image: Dual USB-C PD100W fast charging in action with the power station.

6.4. UPS Functionality

To use the UPS (Uninterruptible Power Supply) function, connect the power station to a wall outlet via the AC input, and then plug your sensitive devices (e.g., desktop PC, servers) into the AC outlets of the power station. In case of a power outage, the power station will automatically switch to battery power within 0.1 seconds, providing seamless power to your connected devices.

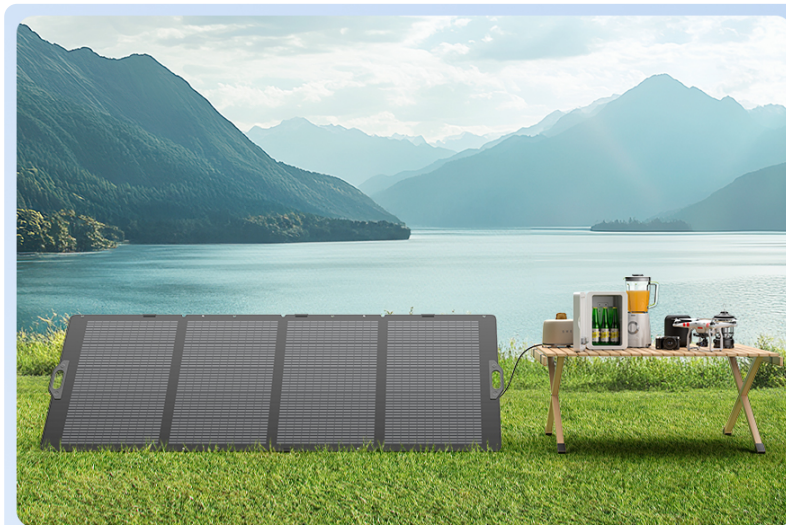


HOUSEHOLD UPS

No Fear of Power Cut, Be on Power at Any Time

- Double Protection For Your Essentials
- Switch Within 10ms When Home Power Off

Image: GRECELL H2400 in UPS mode, providing backup power to essential household items.



THE BEST PARTNER FOR CAMPING

You can take it anywhere you want!



Camping



RV



Boat

Image: UPS functionality diagram, ensuring continuous power during outages.

6.5. LED Light Operation

Press the LED light button to cycle through the different lighting modes: Half Bright, Full Bright, Strobe, and SOS. Press again to turn off the light.



Image: GRECELL H2400 LED light and SOS mode in use.

6.6. LCD Display Information

The LCD display provides real-time information:

- **Current Input:** Shows the power being drawn for charging.
- **Status of Each Port:** Indicates which output ports are active.
- **Current Output:** Displays the power being delivered to connected devices.
- **Battery Level Indicator:** Shows the remaining battery charge.
- **Display Icon:** Various icons for warnings or specific modes.

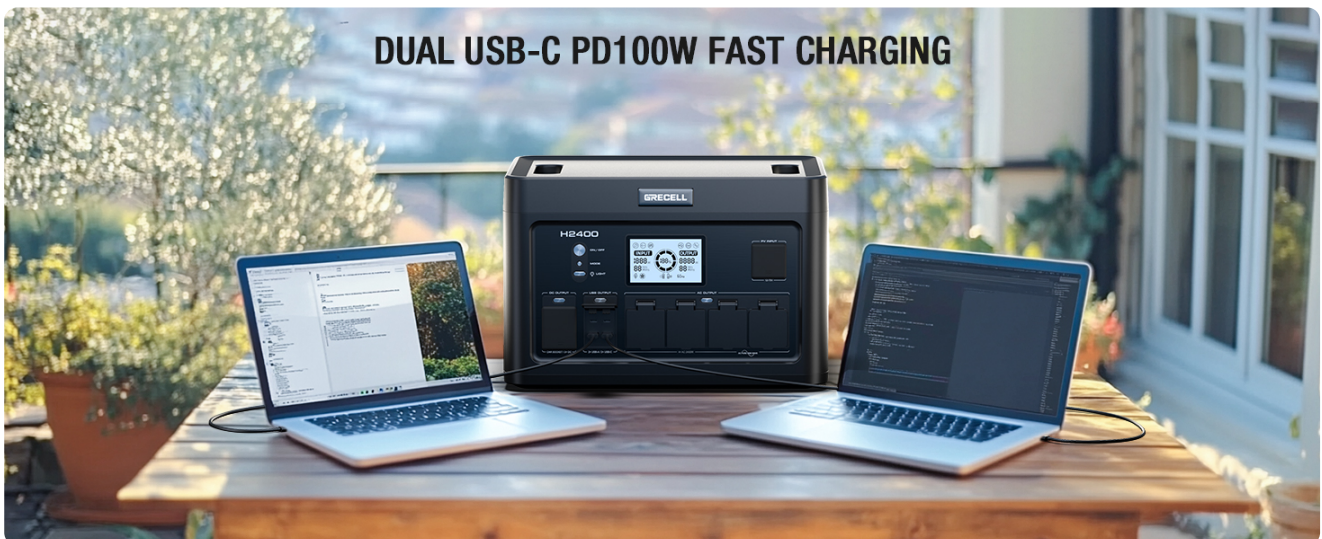


Image: Detailed view of the informative LCD display.

7. RECHARGING METHODS

7.1. AC Wall Outlet Charging

Connect the provided AC charging cable to the power station's AC input port and then to a standard wall outlet. The power station supports 1200W Max AC input, allowing a full charge in approximately 1.6-2 hours.

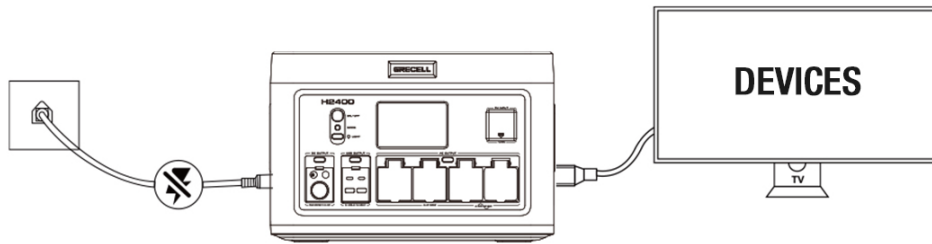


Image: AC ultra-fast recharging of the power station.

7.2. Solar Panel Charging

Connect the 350W foldable solar panel to the power station's solar input port using the appropriate cable. Position the solar panel in direct sunlight for optimal charging. The power station supports up to 800W solar input, allowing a full charge in about 3 hours with sufficient solar panels (e.g., two 350W panels or one 350W and another smaller panel).

23% HIGH SOLAR CONVERSION

Monocrystalline Silicon Cell - Providing High Conversion Efficiency



Cell Efficiency
UP TO 23%



Output
350W



Open Circuit
Voltage 41±5%V



Image: Solar panel demonstrating 23% high solar conversion efficiency.

7.3. Car Charging

Use the provided car charger cable to connect the power station to your vehicle's 12V/24V cigarette lighter port. This method is suitable for recharging while traveling, typically taking 6-14 hours for a full charge.

23% HIGH SOLAR CONVERSION

Monocrystalline Silicon Cell - Providing High Conversion Efficiency

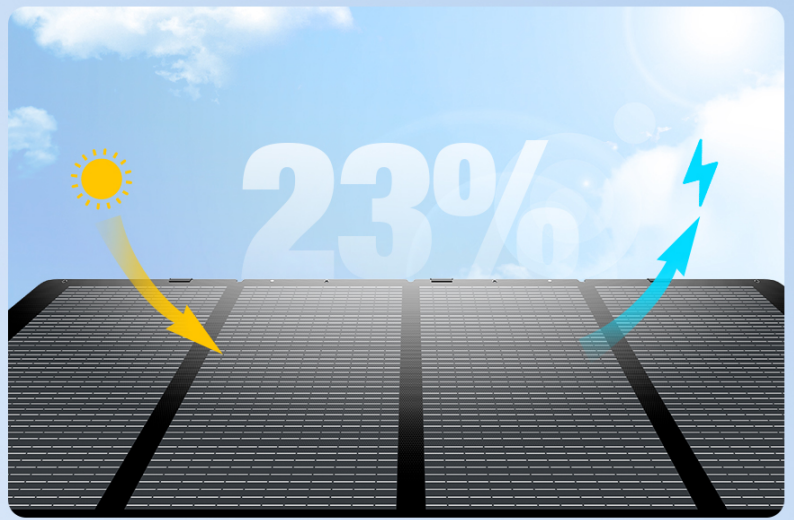


Image: Convenient car charging for the power station.

7.4. Dual Charging (AC + Solar)

For the fastest possible recharge, combine AC and solar charging. This method can fully charge the power station in as little as 1.8 hours.



Image: Super fast dual recharging using both AC and solar power.

8. MAINTENANCE

- **Storage:** Store the power station and solar panel in a cool, dry place away from direct sunlight and extreme temperatures.
- **Long-Term Storage:** If storing for extended periods, charge the power station to 50-80% every 3-6 months to prolong battery life.
- **Cleaning:** Use a dry, soft cloth to clean the exterior of the power station. For the solar panel, gently wipe the surface with a damp cloth to remove dust or debris. Do not use harsh chemicals or abrasive materials.
- **Ventilation:** Ensure the power station's ventilation ports are clear of dust and obstructions during use.

9. TROUBLESHOOTING

Problem	Possible Cause	Solution
Power station does not turn on.	Battery is depleted.	Charge the power station using the AC adapter.
AC outlets not working.	AC output not activated or overloaded.	Press the AC power button. Reduce the load if overloaded. Check device wattage.
Solar panel not charging.	Insufficient sunlight, incorrect connection, or dirty panel.	Ensure direct sunlight, clean the panel, check cable connections, and adjust angle.
Unit is overheating.	Poor ventilation or excessive load.	Ensure ventilation ports are clear. Reduce connected load. Allow unit to cool down.
UPS function not working.	Incorrect setup.	Ensure the power station is connected to a wall outlet and devices are plugged into the power station's AC outlets.

If the problem persists, please contact GRECELL customer support for assistance.

10. SPECIFICATIONS

10.1. GRECELL H2400 Portable Power Station

Feature	Detail
Model Name	H2400
Battery Type	LiFePO4
Capacity	1843.2Wh
AC Output	2400W (Pure Sine Wave, 4x 110V AC Outlets)
USB-C Output	2x PD100W
AC Input	1200W Max (Full charge in 1.6-2 hrs)
Solar Input	800W Max (Full charge in ~3 hrs with optimal solar)
Car Charging Input	12V/24V
UPS Function	Switch within 0.1s
Dimensions (L x W x H)	16.95" x 11.83" x 11.04"
Color	Grey

10.2. GRECELL 350W Foldable Solar Panel

Feature	Detail
Power Output	350W
Cell Type	Monocrystalline Silicon
Conversion Efficiency	Up to 23%
Output Voltage	37.4V
Output Connectors	XT60, Anderson
Material	ETFE, Oxford cloth
Waterproof Rating	IP65 (water splashes)
Special Features	Foldable, Portable, Adjustable Kickstand

11. WARRANTY AND SUPPORT

The GRECELL H2400 Portable Power Station and 350W Foldable Solar Panel come with a **24-month warranty** from the date of purchase. This warranty covers manufacturing defects and workmanship under normal use. For warranty claims, technical support, or any questions regarding your product, please contact GRECELL customer service through the following channels:

- **Website:** www.greccell.com
- **Email:** support@greccell.com
- **Amazon Store:** [Visit the GRECELL Store on Amazon](#)

Please have your purchase receipt and product model number (H2400) ready when contacting support.