

GRECELL T-500

GRECELL T-500 500W Portable Power Station User Manual

Brand: GRECELL | Model: T-500

1. SAFETY INSTRUCTIONS

To ensure safe operation and prolong the lifespan of your GRECELL T-500 Portable Power Station, please adhere to the following safety guidelines:

- Do not expose the unit to water, rain, or humid environments.
- Avoid extreme temperatures. Operate and store the unit within the recommended temperature ranges (14°F to 104°F for operating, -4°F to 113°F for storage).
- Ensure proper ventilation during use to prevent overheating. Do not block ventilation openings.
- Do not disassemble, repair, or modify the unit. Refer all servicing to qualified personnel.
- Keep the unit away from flammable materials, open flames, and direct sunlight.
- Keep out of reach of children and pets.
- Use only original or certified compatible accessories and charging cables.
- In case of fire, use a dry powder fire extinguisher.

2. PACKAGE CONTENTS

The GRECELL T-500 Portable Power Station package includes the following items:

- 1x GRECELL 519Wh Portable Power Station (T-500)
- 1x User Manual
- 1x 7909mm Solar Charging Cable
- 1x AC Charging Cable
- 1x Cable Storage Bag

PACKING LIST



Image: Package contents of the GRECELL T-500 Portable Power Station, including the main unit, various cables, and a storage bag.

The image above displays the portable power station, user manual, solar charging cable, AC charging cable, and a cable storage bag, which are all included in the product package.

3. PRODUCT OVERVIEW

The GRECELL T-500 is a 519Wh (140400mAh) portable power station designed to provide reliable power for various devices. It features pure sine wave AC outlets and multiple DC/USB ports, making it suitable for both home use and outdoor activities.



Image: Front view of the GRECELL T-500 Portable Power Station, showing the display, power buttons, and various output ports.

This image provides a clear view of the power station's front panel, highlighting the display, power and light buttons, DC, USB, and AC output sections, along with input ports for PV and DC charging.

Key Features:

- **High Capacity:** 519Wh (140400mAh) lithium battery for powering essential devices.
- **Multiple Outputs:** 2x 110V/500W pure sine wave AC outlets, 3x USB-A QC3.0 ports (18W max), 1x USB-C PD output (60W max), 2x DC ports (12V/5A), 1x Car Port (12V/10A), and 1x 10W wireless charger.
- **Advanced BMS Protection:** Built-in Battery Management System (BMS) for temperature control, overvoltage, overcurrent, and short circuit protection.
- **Portable Design:** Lightweight (14.1lbs) with a solid handle for easy transport.
- **Integrated LED Light:** Features light-strobe-SOS modes for emergencies and outdoor use.

POWER 10 DEVICES SIMULTANEOUSLY



DC 55*2.5 Output x 2
12V 5A



USB-A QC3.0 Output x 3
5V 3.0A, 9V 2A, 12V 1.5A/18W



USB-C Output x 1
PD 60W Max



DC Car Outlet Output x 1
12V 10A



AC Pure Sine Wave Output x2
110V~60Hz 500W



Wireless Charger x 1
9V 1.1 A/10W



Image: The GRECELL T-500 Portable Power Station simultaneously charging a drone, camera, smartphone, and laptop, demonstrating its multiple output capabilities.

This image illustrates the versatility of the power station, showing it connected to and powering up to 10 different devices at once, including DC 5.5*2.5 outputs, USB-A QC3.0, USB-C PD 60W, DC Car Outlet, AC Pure Sine Wave, and Wireless Charger.

IMPRESSIVE PASS-THROUGH CHARGEABILITY



Image: Diagram showing the internal Battery Management System (BMS) of the GRECELL T-500, highlighting its various protection features.

The diagram details the advanced BMS, which provides comprehensive protection against overvoltage, overcurrent, short circuit, overcharge, overload, and overheating, ensuring device and user safety.

4. SETUP

Initial Charging

Before first use, fully charge your GRECELL T-500 Portable Power Station. The unit can be charged via three methods:

- **Wall Outlet:** Fully charges in 6-7 hours using the provided AC charging cable.
- **Car Charger:** Fully charges in 7-8 hours using the provided 12V car charger cable.
- **Solar Panel (not included):** Fully charges in 6-9 hours with a compatible 100W solar panel in full sun.

519WH POWERFUL GENERATOR

Power Your Expectations

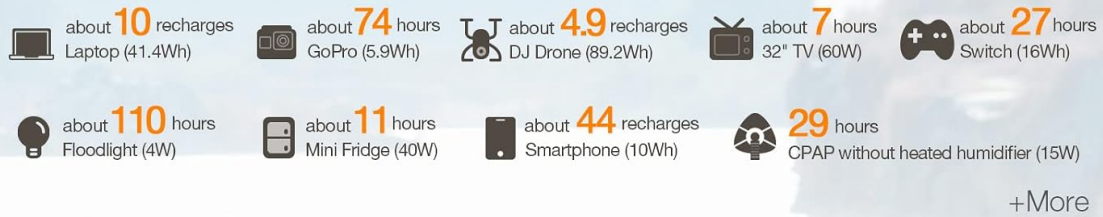


Image: Illustration of the three charging methods for the GRECELL T-500: via solar panel, car charger, and standard wall outlet, with estimated charging times.

This image visually explains the different ways to recharge your power station, including solar, car, and wall charging, along with their respective charging durations.

Connecting a Solar Panel

To charge your power station using a solar panel:

1. Connect the 7909mm Solar Charging Cable to the PV INPUT port on the power station.
2. Connect the other end of the solar charging cable to your compatible solar panel (12-26V).
3. Place the solar panel in direct sunlight for optimal charging.

Video: A user demonstrates connecting a solar panel to the GRECELL T-500 Portable Power Station for charging. The video highlights the ease of connecting the color-coded cables to the PV input ports.

This video shows the process of connecting a solar panel to the GRECELL T-500. It emphasizes the color-coded inputs (red and black) for easy and correct connection of the solar panel cables.

5. OPERATING INSTRUCTIONS

Turning On/Off

Press the 'POWER' button for 2 seconds to turn the unit on or off. The LCD display will illuminate, showing battery status and output information.

Using Outputs

Each output section (DC, USB, AC) has its own power button. Press the respective button to activate or deactivate the desired output ports. The LCD display will show the active outputs and power consumption.

Video: A user demonstrates the various output ports and power buttons on the GRECELL T-500 Portable Power Station, including DC, USB, and AC outputs, and how to activate them.

This video provides a detailed overview of the power station's interface, showing how to activate the DC, USB, and AC outputs using their dedicated buttons. It also demonstrates the wireless charging feature by placing a smartphone on top of the unit.

LED Light Modes

Press the 'LIGHT' button for 2 seconds to turn on the LED light. Tap the button to cycle through different modes: constant light, strobe, and SOS. Press again for 2 seconds to turn off.



Image: The GRECELL T-500 Portable Power Station demonstrating its built-in LED flashlight with constant light, strobe, and SOS modes for various situations.

This image illustrates the multiple LED light modes available on the power station, useful for outdoor activities or home emergencies.

6. PERFORMANCE & CAPACITY

The GRECELL T-500 is capable of powering a wide range of devices with its 519Wh capacity and 500W continuous output. It can handle devices such as phones, laptops, tablets, lights, fans, routers, and even small appliances like car refrigerators and CPAP machines.



Image: A chart showing the estimated run times and recharges for various devices when powered by the GRECELL T-500 Portable Power Station.

This chart provides estimated usage times for common devices, such as laptops (10 recharges), GoPro (74 recharges), 32" TV (7 hours), CPAP machine (29 hours), mini fridge (11 hours), and smartphones (44 recharges), based on the 519Wh capacity.

Pass-Through Charging

The GRECELL T-500 supports pass-through charging, allowing you to charge the power station while simultaneously powering other devices. This feature is convenient for continuous power supply during charging.

ADVANCED BMS PROTECTION



Image: The GRECELL T-500 Portable Power Station is shown charging via a solar panel while simultaneously powering a mini-fridge and a laptop, illustrating its pass-through charging capability.

This image demonstrates the power station's ability to charge itself (e.g., via solar panel) while simultaneously providing power to other devices, such as a mini-fridge and a laptop, making it highly efficient for extended use.

7. MAINTENANCE

Battery Care

- Recharge the unit every 3-6 months to maintain battery health, even if not in use.
- Avoid completely draining the battery regularly.
- Store the unit in a cool, dry place away from direct sunlight and corrosive materials.

Cleaning

- Use a dry, soft cloth to clean the exterior of the unit.
- Keep all ports free from dust and debris.

8. TROUBLESHOOTING

Unit Not Turning On

- Ensure the battery is charged. Connect to a power source and try again.
- Press and hold the 'POWER' button for 2 seconds.

Outputs Not Working

- Ensure the main unit is powered on.
- Press the specific output button (DC, USB, AC) to activate the desired ports.
- Check if the device you are trying to power exceeds the output limit (e.g., AC output is 500W).
- If an overload occurs, the unit may automatically shut down the output. Disconnect the device and restart the output.



Image: Visual representation of devices not supported by the GRECELL T-500 due to exceeding its 500W power limit, including electric grills, coffee makers, and kettles.

This image clearly indicates that devices requiring more than 500W, such as electric grills, coffee makers, kettles, air conditioners, hair dryers, and air fryers, are not supported by the GRECELL T-500.

9. SPECIFICATIONS

Feature	Detail
Brand	GRECELL
Model Name	T-500
Rated Capacity	519Wh (140400mAh)
AC Output	2x 110V/500W Pure Sine Wave
Peak Power	1000W
USB-A Output	3x QC3.0 (18W max)
USB-C Output	1x PD (60W max)
DC Output	2x 12V/5A
Car Port Output	1x 12V/10A
Wireless Charger	1x 10W

Charging Input (DC)	12-26V
Solar Charge Input	12-26V, Max 100W
Dimensions	11.57"L x 7.95"W x 7.95"H
Item Weight	14.11 lbs
Material	Metal, Plastic, Lithium, Copper

10. WARRANTY & SUPPORT

For warranty information, technical support, or any inquiries regarding your GRECELL T-500 Portable Power Station, please contact GRECELL customer service. Refer to the contact details provided in the packaging or on the official GRECELL website.