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> ALLWEI 500W Solar Generator and 100W Solar Panel User Manual

## ALLWEI SGR-PPS600-5

# ALLWEI 500W Solar Generator with 100W Solar Panel User Manual

Model: SGR-PPS600-5 | Brand: ALLWEI

## INTRODUCTION

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This manual provides essential information for the safe and efficient operation of your ALLWEI 500W Solar Generator and 100W Solar Panel. Please read this manual thoroughly before use and retain it for future reference. This solar generator kit is designed to provide reliable power for various applications, including RV camping, outdoor activities, emergency backup, and home use during power outages.

## SAFETY INFORMATION

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- Do not disassemble, repair, or modify the unit. Incorrect reassembly may cause fire or electric shock.
- Do not place the unit near fire or expose it to heat. Keep out of direct sunlight.
- Do not charge, use, or store the unit in a bathroom or in an area exposed to water or moisture.
- Use only the provided or approved accessories.
- Ensure proper ventilation during use and charging to prevent overheating.
- Keep out of reach of children and pets.
- In case of fire, use a dry powder fire extinguisher. Water may cause electric shock.

## PACKAGE CONTENTS

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Upon opening your ALLWEI 500W Solar Generator kit, please verify that all the following items are included:

- 1x ALLWEI 500W 512Wh Portable Power Station
- 1x ALLWEI 100W Solar Panel
- 1x AC Power Cord
- 1x Car Cigarette Cable
- 1x User Manual



Image: The complete ALLWEI 500W Solar Generator kit, featuring the portable power station and the foldable 100W solar panel, along with included cables.

## PRODUCT OVERVIEW

The ALLWEI 500W Portable Power Station (Model: SGR-PPS600-5) is a compact and powerful energy solution. It features a durable LiFePO4 battery with a 512Wh capacity, providing stable and long-lasting power. The unit is designed for ease of use with multiple output ports and a clear LCD display.

# POWER UP TO 11 DEVICES

500W | 512Wh | Peak 1000W



Image: Detailed diagram of the ALLWEI 500W Power Station's front panel, showing the LCD display, AC output ports, USB-C and USB-A ports, DC outputs, cigarette lighter port, AC input port, and control buttons.

The accompanying 100W Solar Panel is foldable and designed for portability, allowing for convenient solar recharging of the power station.

# LIGHT WEIGHT & PROTABLE

Easy to carry everywhere



Image: A person carrying the lightweight ALLWEI 500W Power Station and its foldable 100W solar panel, demonstrating its portability for outdoor use.

## SETUP

### Charging the Power Station

Before first use, fully charge the power station. The unit can be charged via AC wall outlet, car cigarette outlet, or solar panel.

1. **AC Wall Charging:** Connect the AC power cord to the AC Input Port on the power station and plug it into a wall outlet. The LCD display will show charging status.
2. **Car Charging:** Use the provided Car Cigarette Cable to connect the power station to your vehicle's 12V/24V cigarette lighter port.
3. **Solar Charging:** Connect the 100W solar panel to the DC Input Port (DC12V-24V) on the power station. Ensure the solar panel is placed in direct sunlight for optimal charging efficiency. The power station supports up to 120W solar input.

# ULTRA-FAST RECHARGE

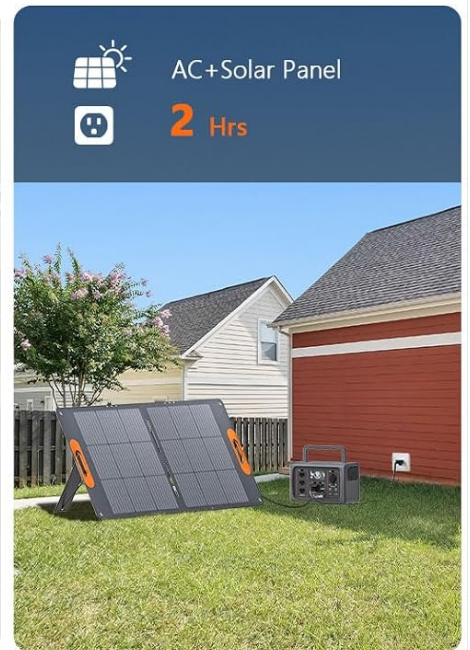


Image: Visual representation of the various charging methods for the ALLWEI Power Station, including AC wall charge, car socket, and solar panel, with estimated charging times.

## Connecting the Solar Panel

1. Unfold the ALLWEI 100W Solar Panel and position it to face direct sunlight.
2. Connect the solar panel's output cable to the DC Input Port on the ALLWEI Power Station.
3. The LCD display on the power station will indicate the incoming solar wattage and charging status.

# GO SOLAR. GO LONGER.

Be the solution, not the pollution



Max. **120W DC12V-24V** Solar Input



Image: The ALLWEI Power Station being charged by the 100W solar panel on a beach, illustrating the ease of solar power generation.

## OPERATING INSTRUCTIONS

### Turning On/Off

To turn on the power station, press and hold the main Power Button until the LCD screen illuminates. To turn off, press and hold the Power Button again until the screen turns off.

### Using AC Outlets

The power station features three AC output ports (500W rated, 1000W surge). Press the AC button to activate the AC outlets. Plug your devices into the AC ports. Ensure the total power consumption of your devices does not exceed 500W to prevent overload.

### Using DC/USB Ports

The power station includes two USB-C (PD100W, 27W), two USB-A QC3.0, two DC 5521 outputs, and a DC car cigarette

outlet. Press the DC button to activate these ports. Connect your compatible devices for fast charging.

### Using the LED Light

The unit is equipped with an LED light for illumination. Press the LED Button to cycle through different brightness levels or activate SOS mode.

### Uninterruptible Power Supply (UPS) Function

The ALLWEI 500W Power Station features a reliable UPS function. When connected to an AC wall outlet and simultaneously powering devices, it can deliver backup power within 10ms if the grid fails. This safeguards sensitive electronics like desktop PCs and file servers from data loss or damage during power outages.

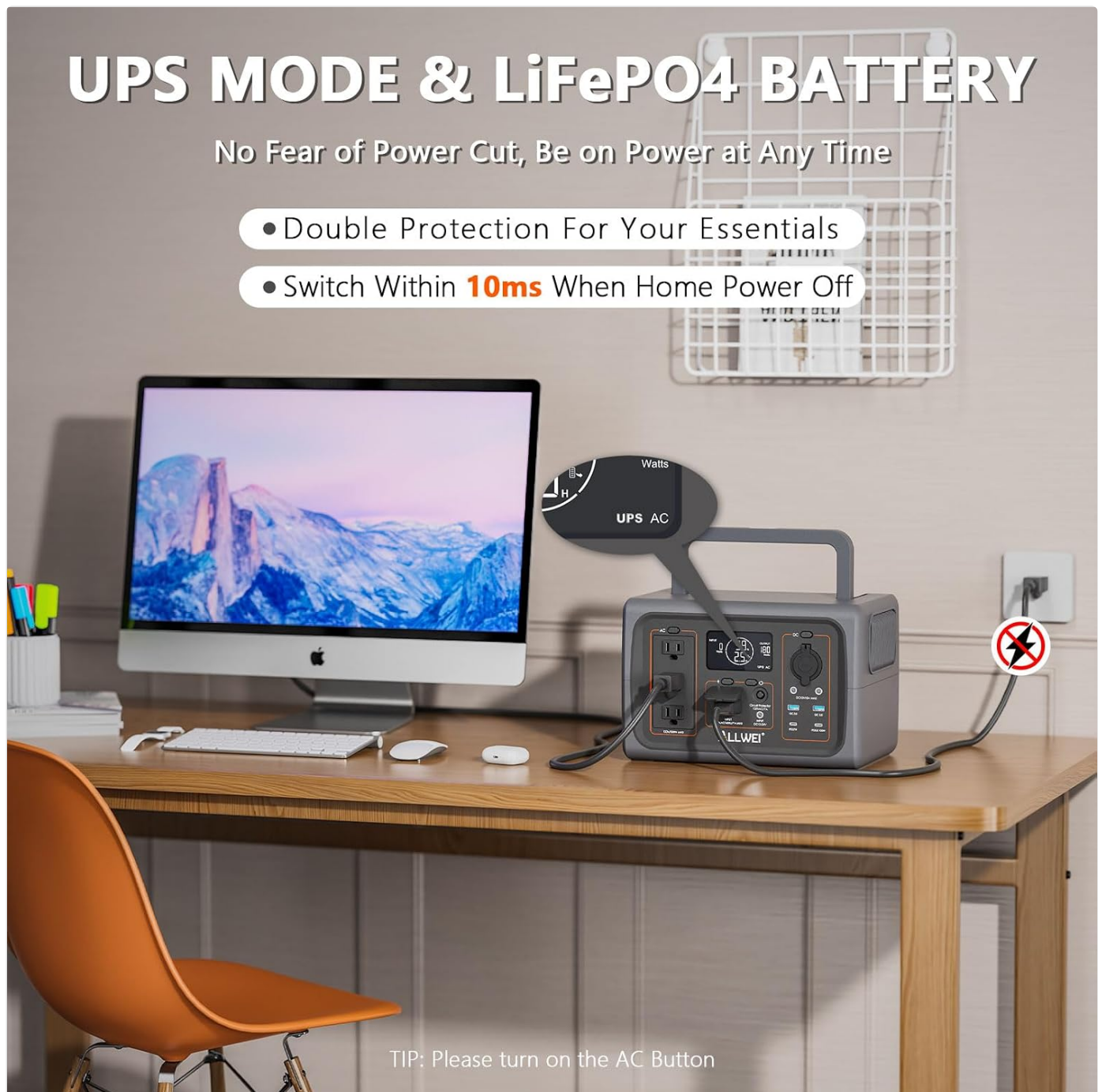


Image: The ALLWEI Power Station demonstrating its UPS mode, providing continuous power to a desktop computer during a simulated power outage.

### Typical Device Run Times

The 512Wh capacity allows for extended use of various devices:

- Laptop (40W): ~12 hours
- GoPro (6W): ~77 hours
- Drone (70W): ~7 hours
- TV (60W): ~8 hours
- Switch (16W): ~30 hours
- Mini Cooler (50W): ~10 hours
- Smartphone (10W): ~46 hours
- CPAP (15W): ~32 hours
- Floodlight (4W): ~115 hours
- Fan (30W): ~16 hours

# 512WH POWERFUL GENERATOR

Power Your Expectations



**12** Hrs  
Laptop(40W)



**77** Hrs  
GoPro(6W)



**7** Hrs  
Drone(70W)



**8** Hrs  
TV(60W)



**30** Hrs  
Switch(16W)



**10** Hrs  
Mini Cooler(50W)



**46** Hrs  
Smartphone(10W)



**32** Hrs  
CPAP(15W)



**115** Hrs  
Floodlight(4W)



**16** Hrs  
Fan(30W)



Image: Individuals utilizing the ALLWEI Power Station to power a laptop, smartphone, and other devices during an outdoor gathering, highlighting its versatility.

## RV/Van Travel



## Outdoor Camping



## CPAP



## Emergency Home Use



Image: Collage showing the ALLWEI Power Station being used in various scenarios: RV/van travel, outdoor camping, powering a CPAP machine, and as an emergency home backup.

## MAINTENANCE

### Battery Care

The power station uses a LiFePO4 battery, known for its longevity (2000+ cycles). To maximize battery lifespan:

- Avoid fully discharging the battery frequently.
- Store the unit in a cool, dry place away from direct sunlight and extreme temperatures.
- Recharge the unit every 3-6 months if not in regular use to maintain battery health.

# LIFEPO4 BATTERY

512Wh | 160000mAh

Lifecycles

2000+



\*After 2000+ cycles, the LFP battery remains around 80% of its original capacity and lasts 6-8 times longer than conventional ones.

Image: Illustration highlighting the LiFePO4 battery technology with over 2000 charge cycles, indicating its long-term durability.

## Cleaning and Storage

- Wipe the unit with a dry, soft cloth. Do not use abrasive cleaners or solvents.
- Ensure all ports are free of dust and debris.
- When storing for extended periods, ensure the unit is charged to about 50-80% and stored in a temperature-controlled environment.

## TROUBLESHOOTING

| Problem                | Possible Cause                         | Solution                                                              |
|------------------------|----------------------------------------|-----------------------------------------------------------------------|
| Unit not turning on    | Battery is completely discharged.      | Charge the unit using AC power.                                       |
| AC outlets not working | AC output not activated or overloaded. | Press the AC button to activate. Reduce connected load if overloaded. |

| Problem                               | Possible Cause                                                     | Solution                                                                |
|---------------------------------------|--------------------------------------------------------------------|-------------------------------------------------------------------------|
| Solar charging is slow or not working | Insufficient sunlight, panel not angled correctly, or dirty panel. | Ensure direct sunlight and proper angle. Clean the solar panel surface. |
| Unit overheating                      | Poor ventilation or excessive load.                                | Ensure clear airflow around the unit. Reduce connected load.            |

## SPECIFICATIONS

| Feature                | Detail                                            |
|------------------------|---------------------------------------------------|
| Model Name             | 500W Portable Power Station with 100W Solar Panel |
| Item Model Number      | SGR-PPS600-5                                      |
| Battery Type           | LiFePO4                                           |
| Capacity               | 512Wh                                             |
| AC Output              | 500W (1000W Surge), 120V (AC), 60Hz               |
| USB-C Output           | PD100W, 27W                                       |
| USB-A Output           | QC3.0                                             |
| DC Output              | DC 5521, DC Car Cigarette Outlet                  |
| Solar Input            | Max 120W (DC12V-24V)                              |
| AC Input               | 200W                                              |
| Dimensions (L x W x H) | 11.6" x 7.5" x 7.6"                               |
| Item Weight            | 13 lbs                                            |
| UPS Function           | 10ms switchover time                              |

## WARRANTY & SUPPORT

ALLWEI offers a 5-Year Premium Warranty for this product. For any assistance, technical support, or warranty claims, please contact ALLWEI customer service directly.

**Email:** [support@allweipower.com](mailto:support@allweipower.com)

A 30-Day No-Hassle Return policy is also available.

### 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

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