

ALLWEI SGR-PPS300-2

ALLWEI Portable Power Station 300W (Model SGR-PPS300-2) User Manual

Your guide to safe and efficient operation

1. INTRODUCTION

This manual provides essential instructions for the safe and effective use of your ALLWEI Portable Power Station 300W, Model SGR-PPS300-2. This device is a 280Wh solar generator designed to provide portable power for various applications, including outdoor activities, emergency power outages, and home backup. Please read this manual thoroughly before operating the unit and retain it for future reference.

2. PACKAGE CONTENTS

Upon unpacking, please verify that all items listed below are included and in good condition. If any items are missing or damaged, contact ALLWEI customer support.

- 1x ALLWEI 300W 280Wh Portable Power Station
- 1x AC Power Adapter
- 1x AC Power US Cord
- 1x Car Cable
- 1x User Manual

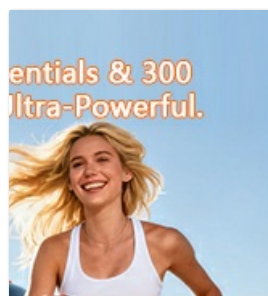


Figure 2.1: Package Contents of the ALLWEI Portable Power Station.

3. PRODUCT FEATURES

The ALLWEI Portable Power Station 300W is equipped with several features designed for versatility and safety:

- **High Capacity:** 280Wh lithium battery for extended power supply.
- **Multiple Output Ports:** Includes 2x AC outlets, 3x DC 5521 output (12V 3A), 2x USB-A QC3.0 fast charge, 1x PD 60W USB-C, and 1x DC car outlet.
- **Multiple Charging Options:** Supports AC wall charging, car charging, and solar panel charging (solar panel not included).
- **Compact and Portable:** Weighs 6.5 lbs with dimensions of 8.86 x 4.53 x 8.07 inches for easy transport.
- **Integrated Safety System:** Built-in Battery Management System (BMS) and MPPT controller provide protection against various electrical faults.
- **LED Lighting:** Features a 3-level LED light with an SOS mode for emergencies.

4. SETUP

4.1 Initial Charge

Before first use, fully charge the power station. Connect the AC power adapter to the input port and plug it into a wall outlet. The LCD screen will indicate charging status. A full charge typically takes 5.5-6.5 hours.

4.2 Powering On/Off

To power on the unit, press and hold the main power button for a few seconds until the LCD screen illuminates. To power off, press and hold the main power button again until the screen turns off.

5. OPERATING INSTRUCTIONS

5.1 Charging Methods

Your ALLWEI Portable Power Station can be recharged using three methods:

- **AC Wall Charging:** Connect the included AC adapter and cord to a standard wall outlet. Full charge in 5.5-6.5 hours.
- **Car Charging:** Use the included car cable to charge from your vehicle's 12V outlet. Full charge in 4.5-5.5 hours.
- **Solar Panel Charging:** Connect a compatible 100W solar panel (not included) to the DC input port. Full charge in 3-4 hours under full sunlight.



Figure 5.1: Various Charging Methods for the Power Station.

5.2 Powering Devices

The power station offers various output ports to power a wide range of devices:

- **AC Outlets:** Press the 'AC' button to activate the 110V AC outlets. Ideal for laptops, small appliances, and CPAP machines.

- **DC Outlets:** Press the 'DC' button to activate the 12V DC 5521 ports and the car outlet. Suitable for DC-powered devices.
- **USB Ports:** The USB-A QC3.0 and PD 60W USB-C ports are always active when the unit is on, providing fast charging for smartphones, tablets, and other USB devices.



Figure 5.2: Powering Various Devices with the ALLWEI Portable Power Station.

5.3 LED Light Modes

The power station includes a built-in LED light with multiple modes:

- Press the light button once for low brightness.
- Press again for medium brightness.
- Press a third time for high brightness.
- Press and hold for SOS mode, which flashes a distress signal.



Figure 5.3: LED Light Modes.

5.4 App Remote Control and AC Charging Mode

The power station may support app remote control and various AC charging modes (Quiet, Normal, Speed). Refer to the official ALLWEI app for detailed instructions on connecting and utilizing these features.

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Video 5.4: Demonstration of App Remote Control and AC Charging Modes. This video illustrates how to use the mobile application to control the power station and switch between different AC charging speeds.

6. SAFETY AND PROTECTION

The ALLWEI Portable Power Station is equipped with a multi-protect system to ensure safe operation and protect your devices. The built-in Battery Management System (BMS) and MPPT controller continuously monitor and manage the battery, offering protection against:

- Short-circuit
- Over-current
- Over-load
- Low-voltage

- Over-voltage
- Over-temperature
- Low-temperature

An icon on the LCD screen will flash to indicate a protection event. The unit also features a pure sine wave output for sensitive electronics.



Figure 6.1: Multi-Protect System Features.

7. MAINTENANCE

To ensure the longevity and optimal performance of your power station, follow these maintenance guidelines:

- **Storage:** Store the unit in a cool, dry place away from direct sunlight and extreme temperatures.
- **Recharge Frequency:** If storing for extended periods, recharge the unit every 3-6 months to maintain battery health.
- **Cleaning:** Use a dry, soft cloth to clean the exterior. Do not use abrasive cleaners or immerse the unit in water.
- **Ventilation:** Ensure the ventilation openings are clear of obstructions during use to prevent overheating.

8. TROUBLESHOOTING

If you encounter issues with your ALLWEI Portable Power Station, refer to the following common problems and solutions:

Problem	Possible Cause	Solution
Unit does not turn on	Battery is depleted; Power button not pressed correctly.	Charge the unit using an AC adapter or solar panel. Press and hold the power button firmly for 3 seconds.
AC output not working	AC output not activated; Device draws too much power; Overload protection triggered.	Press the 'AC' button to activate. Ensure device power consumption is within 300W. Disconnect device, turn off AC, then turn on again.
DC/USB output not working	DC output not activated (for DC ports); Device not compatible; Cable faulty.	Press the 'DC' button to activate (for DC ports). Try a different device or cable.
Unit not charging via solar panel	Solar panel not connected correctly; Insufficient sunlight; Panel is not 100W or compatible.	Ensure secure connection. Place panel in direct sunlight. Verify panel specifications.
LCD screen displays an error icon	Protection mechanism activated (e.g., over-temperature, overload).	Refer to the manual's safety section for specific icon meanings. Disconnect devices, allow unit to cool down, then restart.

If the problem persists after attempting these solutions, please contact ALLWEI customer support.

9. SPECIFICATIONS

Detailed technical specifications for the ALLWEI Portable Power Station 300W:

Feature	Specification
Model Name	SGR-PPS300-2
Battery Capacity	280Wh
AC Output	300W (Pure Sine Wave)
DC 5521 Output	3x 12V 3A
USB-A QC3.0 Output	2x Ports
USB-C PD Output	1x 60W Port
DC Car Outlet	1x Port
AC Input (Wall Charging)	5.5-6.5 hours for full charge
Car Charging Input	4.5-5.5 hours for full charge
Solar Charging Input	3-4 hours for full charge (with 100W solar panel)
Dimensions (LxWxH)	8.86 x 4.53 x 8.07 inches
Net Weight	6.5 lbs
Charge Cycle Life	1500 times
Material	Plastic
Color	Black

10. WARRANTY AND SUPPORT

ALLWEI provides a 2-year manufacturer's warranty for this product, covering defects in materials and workmanship under normal use. Please retain your proof of purchase for warranty claims.

For technical assistance, troubleshooting, or warranty inquiries, please contact ALLWEI customer support:

- **Email:** support@allweipower.com

For more information, you may also visit the official ALLWEI store on Amazon: [ALLWEI Store](#)