## ALLWEI SGR-PPS300-2

# ALLWEI Portable Power Station 300W User Manual

Model: SGR-PPS300-2

## 1. INTRODUCTION

Thank you for choosing the ALLWEI Portable Power Station 300W. This device is designed to provide reliable and portable power for various applications, including outdoor activities, emergency backup, and home use. With its 280Wh capacity and 300W rated output, it can power a wide range of electronic devices and small appliances. This manual provides essential information for safe operation, optimal performance, and proper maintenance of your power station.

Image: The ALLWEI Portable Power Station 300W, showcasing its compact design and various output ports.

## 2. SAFETY INSTRUCTIONS

Please read all safety instructions carefully before using the power station to prevent injury or damage to the unit. Keep this manual for future reference.

- Do not disassemble, repair, or modify the unit.

- Keep the unit away from fire or direct heat sources.

- Avoid exposure to water or high humidity.

- Do not use or store the unit in high temperatures or direct sunlight.

- Ensure proper ventilation during use to prevent overheating.

- Charge your devices within the specified 300 watts to avoid over-load protection shutdown.

- Keep out of reach of children and pets.

- Use only recommended accessories and charging methods.

- If the unit emits smoke, strange odors, or unusual noise, discontinue use immediately and contact support.

# BMS SYSTEM & MPPT CONTROLLER

PURE SINE WAVE

**Short Circuit Protection**

**Over Current Protection**

**Over-Load Protection**

**Over-Temperature Protection**

**Over-Voltage Protection**

**Low-Voltage Protection**

**High-Temperature Protection**

**Low-Temperature Protection**

Image: The power station features a Battery Management System (BMS) and MPPT Controller for multiple protections, including short circuit, over current, overload, over temperature, over voltage, low voltage, high temperature, and low temperature protection.

## 3. PACKAGE CONTENTS

Verify that all items are included in your package:

- 1x ALLWEI 300W/280Wh Portable Power Station
- 1x AC Power Adapter
- 1x AC Cable
- 1x DC Car Cable
- 1x User Manual
- (ALLWEI Solar Panel sold separately)

Image: A visual representation of all items included in the ALLWEI Portable Power Station package, including the power station, AC adapter, AC cable, DC car cable, and user manual.

## 4. PRODUCT OVERVIEW

The ALLWEI Portable Power Station features multiple output ports and an intuitive display for ease of use.

### 4.1. Ports and Features

- **AC Pure Sine Wave Outlets (2x):** 110V/120V for standard appliances.
- **USB-C PD 60W Output (1x):** For fast charging compatible devices.
- **USB-A Ports (2x):** Standard USB charging for various devices.
- **Car Cigarette Lighter (1x):** For car appliances.
- **DC Ports (3x):** For DC-powered devices.
- **Input Port:** For recharging the power station.
- **LED Light:** 3-level adjustable LED light with SOS mode.

## 4.2. Advanced LCD Display

The LCD display provides real-time information about the power station's status:

- Battery capacity percentage.

- Remaining charge/discharge time.

- Input power (watts).

- Output power (watts) for each section (AC, DC, USB).



Image: A close-up view of the power station's LCD display, showing battery level, input/output wattage, and estimated remaining time.

## 4.3. Dimensions and Portability

The power station is designed for portability, weighing approximately 6.5 lbs and measuring 8.86 x 4.53 x 8.07 inches.

Image: Diagram illustrating the compact dimensions of the ALLWEI Portable Power Station: 9.1 inches (length), 4.7 inches (width), and 6.3 inches (height).

# LIGHT WEIGHT & PORTABLE

NET WEIGHT

6.5 LBS

Image: A person carrying the lightweight ALLWEI Portable Power Station, demonstrating its ease of transport for outdoor activities.

## 5. SETUP

Before first use, it is recommended to fully charge the power station.

### 5.1. Initial Charging

Connect the provided AC power adapter to the input port of the power station and plug it into a wall outlet. The LCD display will indicate charging status. Allow 5.5-6.5 hours for a full charge.

## 6. OPERATING INSTRUCTIONS

### 6.1. Recharging the Power Station

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

- **AC Wall Charging:** Connect the AC adapter and cable to a standard wall outlet. Full charge in approximately 5.5-6.5 hours.

- **Car Charging:** Use the provided DC car cable to charge from your vehicle's 12V cigarette lighter port. Full charge in approximately 4.5-5.5 hours.
- **Solar Panel Charging:** Connect a compatible 100W solar panel (sold separately) to the input port. Full charge in approximately 3-4 hours in full sunlight, thanks to the built-in MPPT controller.

# 4 WAYS TO RECHARGE

**Wall Socket**
## 5.5-6.5 Hours

**100W Solar Charger**
## 3-4 Hours

**Car Charger**
## 5.5-6.5 Hours

**Generator**
## 12V~24V

Image: Visual guide demonstrating the four recharging methods: wall socket, 100W solar charger, car charger, and generator (12V~24V).

Image: The power station being recharged using a standard AC wall outlet.



Image: The power station connected to a solar panel for recharging in an outdoor setting.

Image: The power station being charged inside a car using the DC car cable.

## 6.2. Powering Devices

The power station can power up to 9 devices simultaneously. To use an output port, ensure the power station is sufficiently charged, then connect your device. The LCD screen will show the output wattage.

- **AC Outlets:** Press the AC power button to activate. Connect your 110V/120V devices.
- **USB Ports (USB-A, USB-C):** These ports are typically always active when the unit is on. Simply plug in your USB devices.
- **DC/Car Port:** Press the DC power button to activate. Connect your 12V DC devices.

*Note:* The total output power should not exceed 300 watts. Your device's run time can be estimated by: 280Wh x 85% / Your device's watts.

# POWER ANYTHING EVERYWHERE
## 280Wh 300W Pure Sine Wave

**Phone (10W)**
**26 Times**

**Laptop (42W)**
**7 Times**

**Light (20W)**
**13 Times**

**CPAP (30W)**
**9 Times**

**Drone (40W)**
**7 Times**

**Camera (16W)**
**16 Times**

**TV (70W)**
**4+ Hrs**

**Mini Fridge (45W)**
**6+ Hrs**

Image: The ALLWEI Portable Power Station powering various devices like phones, laptops, lights, and CPAP machines, illustrating its versatility for different power needs.

Your browser does not support the video tag.

Video: An official product video from ALLWEI US demonstrating the ALLWEI 300W Solar Generator with a 100W Solar Panel, showcasing its charging capabilities.

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Video: An official product video from ALLWEI US highlighting the ALLWEI 300W 280Wh Mini Portable Power Station for RV Camping, demonstrating its use in outdoor scenarios.

## 6.3. Using the LED Light

The power station includes a multi-mode LED light for illumination.

- **To turn on/off:** Press the light switch for 1 second.
- **To change modes:** Short press the light switch to cycle through 3 levels (Low, Medium, High) and SOS mode.

# MULTIPLE LED LIGHT MODES



**3-LEVEL(LOW,MEDIUM,HIGH)LED LIGHT**

SOS

**LIGHTING/SOS MODE**

Image: The power station displaying its multiple LED light modes, including a bright illumination and an SOS signal function.

Image: The ALLWEI Portable Power Station's LED light illuminating a dark room and a tent, demonstrating its practical use for various lighting needs.

## 7. MAINTENANCE

Proper maintenance ensures the longevity and performance of your power station.

- **Storage:** If the generator is not used for a long time, please charge it every three months to maintain battery health.
- **Cleaning:** Use a dry, soft cloth to clean the exterior of the unit. Do not use abrasive cleaners or solvents.
- **Battery Life Cycle:** The premium lithium-ion batteries support 1500 life cycles, meaning they can be charged and emptied over 1500 times before their capacity drops to 80%.

## 8. TROUBLESHOOTING

If you encounter issues with your power station, refer to the following common problems and solutions:

| Problem | Possible Cause | Solution |
|---|---|---|
| Unit turns off unexpectedly. | Over-load protection activated (device wattage exceeds 300W). | Reduce the total wattage of connected devices. Ensure devices are within the 300W limit. |
| Unit not charging. | Charging cable not properly connected; power adapter malfunction; input source issue. | Check all cable connections. Try a different wall outlet or charging method. Ensure solar panel is in direct sunlight. |
| Output ports not working. | Output function not activated; device not compatible; power station battery low. | Ensure AC/DC buttons are pressed to activate respective outputs. Check device compatibility and power station battery level. |
| LCD display not working. | Unit is off; internal error. | Ensure the unit is powered on. If the problem persists, contact customer support. |

## 9. SPECIFICATIONS

| Feature | Detail |
|---|---|
| Brand | ALLWEI |
| Model Name | Portable Power Station |
| Item Model Number | SGR-PPS300-2 |
| Wattage (Rated) | 300 watts |
| Output Wattage (Peak) | 600 Watts |
| Battery Capacity | 280Wh |
| Battery Type | Lithium Ion |
| Voltage | 120 Volts (AC) |
| Frequency | 60 Hz |
| Item Weight | 6.5 Pounds |
| Product Dimensions | 9"L x 4.7"W x 7.8"H |
| Material | PC(Polycarbonate), ABS |
| Color | Black |
| Runtime (Life Cycle) | 1500 cycles (to 80% capacity) |
| Included Components | Power Station, AC Power Adapter, AC Cable, DC Car Cable, User Manual |

## 10. WARRANTY AND SUPPORT

ALLWEI is committed to providing high-quality products and customer satisfaction.

- **Service Life:** The power station is designed to provide over 5 years of service, with its batteries supporting

1500+ charge cycles before capacity drops to 80%.

- For detailed warranty information or technical support, please refer to the official ALLWEI website or contact their customer service.

- You can also visit the ALLWEI Store on Amazon for more product information and support resources.

- A digital version of this user manual is available at: User Manual (PDF).