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› [ALLWEI](#) /

› [ALLWEI LiFePO4 Portable Power Station 2400W User Manual](#)

ALLWEI SGR-PPS2400-3

ALLWEI LiFePO4 Portable Power Station 2400W User Manual

MODEL: SGR-PPS2400-3

Brand: ALLWEI

PRODUCT OVERVIEW

The ALLWEI LiFePO4 Portable Power Station 2400W (Model SGR-PPS2400-3) is a versatile and robust power solution designed for various applications, including RV camping, outdoor activities, emergency home backup, and general portable power needs. This solar generator kit includes a 2400W power station with a 2048Wh LiFePO4 battery and a 400W solar panel, offering reliable and sustainable energy.



The ALLWEI LiFePO4 Portable Power Station 2400W paired with a 400W solar panel.

- **High Capacity & Power:** 2048Wh battery capacity with 2400W continuous output (4800W surge).
- **Fast Charging:** Achieves 0-80% charge in 1.5 hours via AC outlet.
- **Durable Battery:** LiFePO4 battery with 3500+ cycles, ensuring a 10-year lifespan.
- **Multiple Charging Options:** Supports AC, solar (up to 500W), and car charging.
- **Reliable UPS Function:** Provides emergency power in 10ms during outages.

- **Expandable Capacity:** Supports up to 4 add-on battery packs for a total of 10kWh.
- **Smart Control:** Remote control via ALLWEI Landbook APP (Wi-Fi/Bluetooth).

SETUP GUIDE

Initial Charging

Before first use, it is recommended to fully charge the ALLWEI Portable Power Station. Use the provided AC power cable to connect the power station to a standard wall outlet. The LCD display will show the charging progress. The unit can reach 0-80% charge in approximately 1.5 hours.

Connecting Solar Panels

To charge using solar power, connect the 400W solar panel to the power station using the provided conversion cable. Ensure the solar panel is placed in direct sunlight for optimal charging efficiency. The power station supports up to 500W solar input.

5 WAYS TO RECHARGE

Max. 1500W Input



Wall Socket

Q: **1.2** H N: **3.5** H S: **5.5** H



Wall Outlet+Solar

1.5-2 Hrs



Solar Panel

1*400W: **6-8** Hrs

2*400W: **3-4** Hrs



Car Socket

12V: **14-16** Hrs

24V: **7-8** Hrs



Generator



OPERATING INSTRUCTIONS

Turning On/Off

Press and hold the main ON/OFF button on the power station to turn the unit on or off. The LCD display will illuminate upon activation.

Using AC Outlets

The power station features 4 AC outlets (120V/60Hz/15A MAX). Press the 'AC' button to activate the AC output. Plug your devices into the outlets. The display will show the current power output.

FAST AC & SOLAR CHARGING

3500+ Lifecycles

| | | |
|---|---|--|
|  Wall Socket Q: 1.5-2 Hrs N: 4-5 Hrs S: 6-7 Hrs |  Wall Outlet+Solar 1.5-2 Hrs | |
|  Solar Panel 1*400W: 6-8 Hrs 2*400W: 3-4 Hrs |  Car Socket 12V: 14-16 Hrs 24V: 7-8 Hrs |  Generator |



The power station providing power to electric tools.

Using DC Outputs & USB Ports

The unit includes various DC outputs (12V/12A) and USB ports (USB-A QC3.0*2, USB-C PD 100W, USB-C PD 27W). Press the 'DC' or 'USB' buttons to activate the respective outputs. Connect your compatible devices for charging.

Smart App Control

Download the ALLWEI Landbook APP from Google Play or the Apple App Store. Connect your power station via Wi-Fi or Bluetooth to monitor battery status, control outputs, update firmware, and customize settings remotely.

The advertisement features a black ALLWEI power station with a digital display and various ports (USB, DC, AC, ECO) on a reflective surface. A hand holds a smartphone displaying the ALLWEI Landbook APP interface, which shows battery status (77%), remaining time (12:07:10 min), and controls for AC, DC, USB, and MIG outputs. Above the phone, icons for Bluetooth and APP Control are shown, along with the ALLWEI app logo. The background is a scenic landscape with a lake and mountains.

APP REMOTE CONTROL

Everything at your fingertips

Bluetooth APP Control

Download the **Landbook** APP

GET IT ON Google Play Download on the Apple Store

Control your power station remotely using the ALLWEI Landbook App.

Uninterruptible Power Supply (UPS) Function

The PPS2400-3 features a reliable UPS function, providing emergency power to your essentials in 10ms during a power outage. Connect critical devices to the power station's AC outlets while it's connected to grid power. In case of an outage, the power station will automatically switch to battery power.

UPS MODE & LiFePO4 BATTERY

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

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



The power station seamlessly switches to battery power during an outage.

CHARGING THE POWER STATION

The ALLWEI Portable Power Station offers multiple convenient charging methods:

- **AC Wall Outlet:** Fully charge in approximately 1.5 hours (Q Mode) or 4-5 hours (Normal Mode).
- **Solar Panel:** With a 400W solar panel, charge from 0-80% in 3-5 hours. Supports up to 500W solar input.
- **Car Cigarette Lighter:** Charge from your vehicle's 12V or 24V outlet (14-16 hours for 12V, 7-8 hours for 24V).

POWER YOUR ELECTRIC TOOLS

2048Wh | 2400W | 640000mAh | Peak 4800W



Overview of fast charging options and times.

High Solar Conversion Efficiency

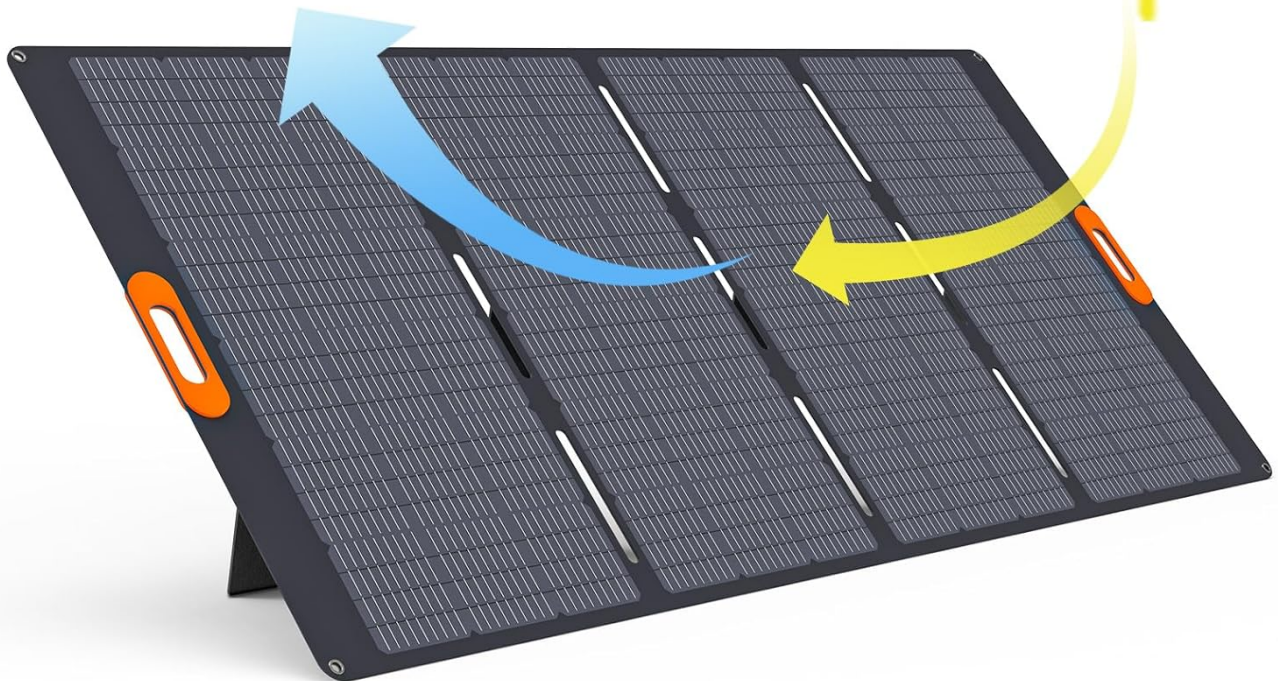
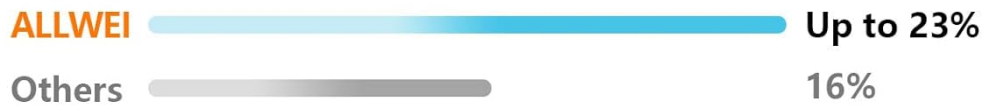
The included 400W solar panel boasts up to 23% conversion efficiency, allowing for rapid recharging of your power station using sunlight.

HIGH SOLAR CONVERSION EFFICIENCY

High Efficiency
Up to 23%



Conversion Rate



The ALLWEI solar panel offers high efficiency for faster charging.

MAINTENANCE

To ensure the longevity and optimal performance of your ALLWEI LiFePO4 Portable Power Station, follow these maintenance guidelines:

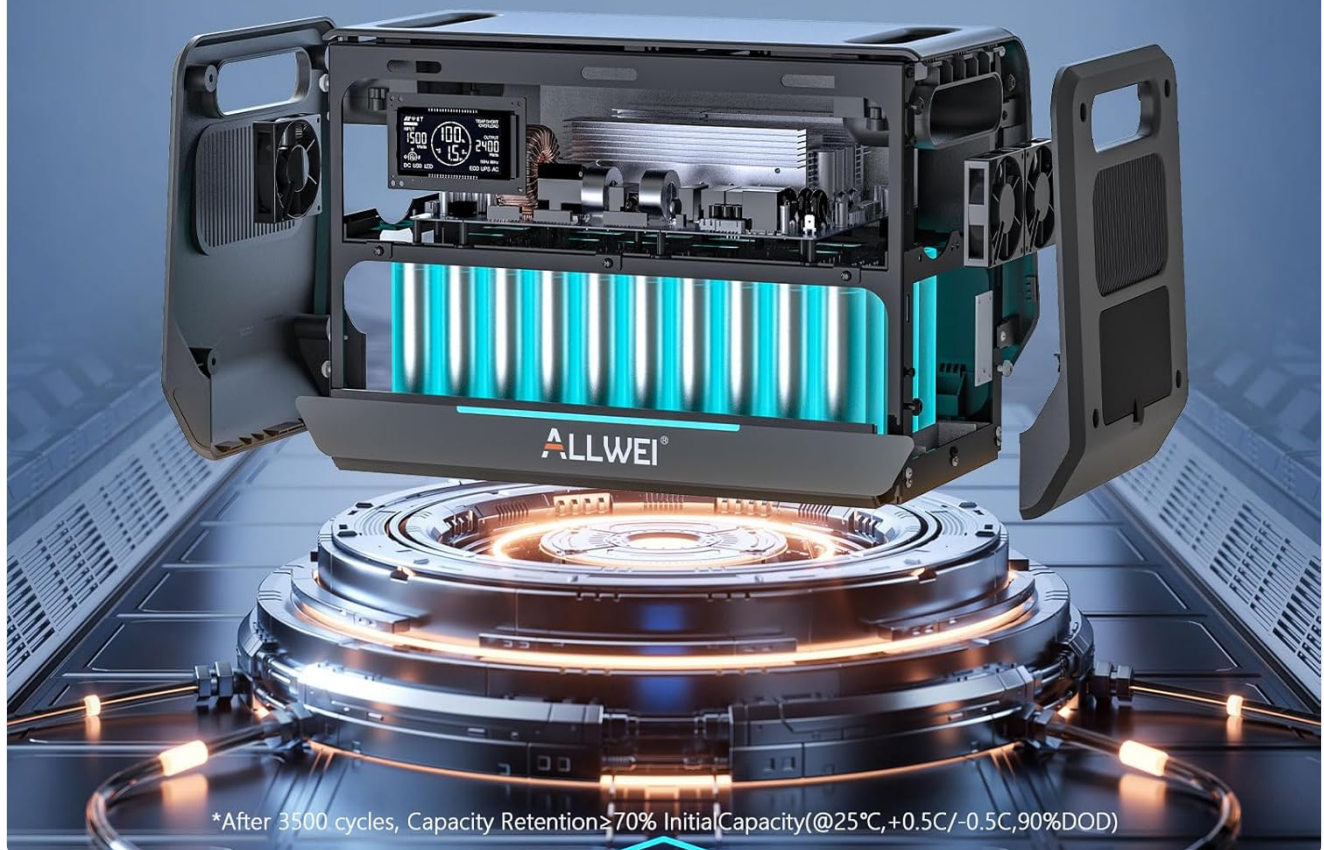
- **Regular Charging:** Even if not in use, charge the power station every 3-6 months to maintain battery health.
- **Storage:** Store the unit in a cool, dry place away from direct sunlight and extreme temperatures.
- **Cleaning:** Use a dry, soft cloth to clean the exterior. Do not use harsh chemicals or abrasives.
- **Battery Lifespan:** The LiFePO4 battery is designed for 3500+ cycles, maintaining over 70% initial capacity after 10 years of typical use.

LIFEPO4 BATTERY

2048Wh | 640000mAh

🔄 **3500+** Lifecycles

🔋 **10** Years Lifespan



*After 3500 cycles, Capacity Retention ≥ 70% Initial Capacity (@25°C, +0.5C/-0.5C, 90%DOD)

The durable LiFePO4 battery ensures a long product lifespan.

TROUBLESHOOTING

If you encounter any issues with your ALLWEI Portable Power Station, please refer to the following common troubleshooting tips:

- **Unit Not Turning On:** Ensure the battery is charged. If completely drained, it may take a few minutes of charging before the display activates.
- **No Output from Ports:** Check if the specific output (AC/DC/USB) is activated by pressing its respective button. Ensure the device you are trying to power is within the power station's wattage limits.
- **Charging Issues:** Verify all cables are securely connected. For solar charging, ensure panels are in direct sunlight and free from obstructions.
- **Overload Protection:** If an overload occurs, the unit may shut down. Disconnect the overloaded device, wait a few minutes, and restart the power station.

For persistent issues, please contact ALLWEI customer support or refer to the full user manual.

SPECIFICATIONS

| Feature | Specification |
|--------------------|--|
| Brand | ALLWEI |
| Model Name | SGR-PPS2400-3 |
| Wattage | 2400 watts (Surge 4800W) |
| Battery Type | LiFePO4 |
| Battery Capacity | 2048Wh |
| AC Output | 4 x 120V/60Hz/15A MAX |
| DC Output | 12V/12A |
| USB-A Output | 2 x QC3.0 |
| USB-C Output | 1 x PD 100W, 1 x PD 27W |
| AC Input | Max 1500W |
| Solar Input | Max 500W |
| Item Weight | 51LB (Power Station), 35.27LB (400W Solar Panel) |
| Product Dimensions | 18.31in x 10.24in x 11.61inch |
| Color | Black&Grey |

WHAT'S INCLUDED

Your ALLWEI LiFePO4 Portable Power Station 2400W package includes the following components:

- 1x 2400W LiFePO4 Portable Power Station
- 1x 400W Solar Panel
- 1x AC Power Cable
- 1x Car Cigarette Cable
- 1x Conversion Cable
- 2x User Manuals

<0.01s Automatic UPS

After a power outage, the UPS automatically starts within 10ms to ensure that your household necessities maintain a stable power supply. PPS2400 supports solar charging and AC input synchronous operation to ensure longer operating time for household essential devices.



2400W/2048Wh

LFP Battery

3500+ Cycles

UPS Function

APP Function

11 Power
Outputs

Expansion
Function Support

10-Year
Battery Life

All components included in the ALLWEI Portable Power Station kit.

WARRANTY & SUPPORT

ALLWEI provides comprehensive support for its products. The LiFePO4 battery is designed for a long lifespan of over 10 years with 3500+ charge cycles.

For detailed warranty information, troubleshooting, and customer service, please refer to the official user manual provided with your product or visit the ALLWEI website.

You can also access the User Manual PDF online: [ALLWEI User Manual \(PDF\)](#)