ECOGREAT PM3600PE

ECOGREAT PowerMax 3600PE Portable Power Station User Manual

Model: PM3600PE

1. Introduction

The ECOGREAT PowerMax 3600PE is a portable power station designed to provide reliable electricity for various applications. It features a 2016Wh LiFePO4 battery pack and a 3600W pure sine wave inverter, capable of powering essential home appliances, power tools, and medical devices. This manual provides instructions for the safe and efficient use of your PowerMax 3600PE.

2. Package Contents

Verify that all items are present in the package:

- PowerMax 3600PE Power Station
- User Manual
- AC Charging Cable
- Solar Charging Cable (MC4/Anderson input)
- Car Charging Cable
- App Manual

3. Product Features

The PowerMax 3600PE offers advanced features for versatile power delivery:

- **High Capacity & Power Output:** 2016Wh LiFePO4 battery with 3600W continuous pure sine wave AC output (7200W peak).
- **Durable Battery Technology:** Utilizes LiFePO4 cells for over 3500 charge cycles to 80% capacity, providing up to 10 years of reliable use.
- **Advanced Safety:** Integrated 10-protection Battery Management System (BMS) ensures maximum safety during operation and charging.
- **Multiple Output Ports:** Includes 4 AC outlets, 2 USB-C (100W PD), 4 USB-A (3 with 18W fast charging), 1 x 12V car output, 2 DC5521 ports, and 1 Anderson port (120W shared power).
- **Clear Display & LED Light:** Intuitive LCD display shows input/output power, remaining time, and error codes. Features a powerful integrated LED flashlight with SOS mode for emergencies.



Figure 3.1: Overview of the 14 multifunction ports on the PowerMax 3600PE.



Figure 3.2: The PowerMax 3600PE features LiFePO4 battery technology for extended lifespan.

4. Setup

Before first use, ensure the power station is fully charged. Unpack all components and place the PowerMax 3600PE on a stable, flat surface in a well-ventilated area. Avoid direct sunlight or extreme temperatures.

1. Inspect the unit for any visible damage.
2. Connect the appropriate charging cable (AC, solar, or car) to the power station.
3. Allow the unit to charge completely before initial use.

5. Charging Instructions

The PowerMax 3600PE supports multiple charging methods:

5.1 AC Charging

Use the provided AC charging cable to connect the power station to a standard wall outlet. The unit supports 1500W fast AC charging, allowing a full charge in approximately 90 minutes.



Figure 5.1: AC fast charging from 0% to 100% in 90 minutes.

5.2 Solar Charging

Connect compatible solar panels (12-60V, 20A Max, up to 1600W) using the provided solar charging cable. The power station can be fully recharged in 1.5-2 hours with adequate solar input.



Figure 5.2: Solar charging setup with the PowerMax 3600PE.

5.3 Car Charging

Use the car charging cable to connect the power station to your vehicle's 12V car outlet. This method is suitable for charging on the go.

5.4 Dual Charging (AC + Solar)

For the fastest charging, combine AC and solar inputs for a total power of up to 1600W.

6. Operating the Power Station

To operate the PowerMax 3600PE:

1. **Power On/Off:** Press and hold the main power button to turn the unit on or off.
2. **Activate Outputs:** Press the respective buttons to activate AC, DC, or USB outputs. The LCD display will show active outputs.

3. **Connect Devices:** Plug your devices into the appropriate ports. Ensure the total power consumption does not exceed 3600W.
4. **Monitor Display:** The LCD display provides real-time information on input/output power, remaining battery percentage, and estimated run/charge time.



Figure 6.1: The PowerMax 3600PE powering various household appliances.



Figure 6.2: The PowerMax 3600PE provides power for outdoor activities.

7. Smart App Control

The PowerMax 3600PE can be controlled and monitored via a dedicated mobile app (WiFi/Bluetooth). Download the app from your device's app store.

1. **Pairing:** Follow the in-app instructions to pair your power station via WiFi or Bluetooth.
2. **Monitoring:** View real-time battery status, input/output power, and remaining time.
3. **Settings:** Adjust various settings, including the "Always On" mode for AC output, which is useful for critical devices like medical refrigerators.



Figure 7.1: Managing the PowerMax 3600PE via the smart app.

8. Uninterruptible Power Supply (UPS) Function

The PowerMax 3600PE includes an Uninterruptible Power Supply (UPS) function. In the event of a power outage, the unit automatically switches to battery power within 10 milliseconds, protecting connected critical devices from interruption.

1. **Activation:** Connect the power station to an AC wall outlet and then connect your critical devices to the power station's AC outlets.
2. **Automatic Switchover:** If the grid power fails, the PowerMax 3600PE will seamlessly provide power from its internal battery.



Figure 8.1: The PowerMax 3600PE provides uninterrupted power with its EPS function.



Figure 8.2: Emergency power for critical devices like CPAP machines.

9. Maintenance

Proper maintenance ensures the longevity and performance of your PowerMax 3600PE:

- **Storage:** Store the power station in a cool, dry place away from direct sunlight and extreme temperatures.
- **Charging Frequency:** For optimal battery health, fully charge the unit at least once every three months, even if not in use. Avoid keeping the battery constantly at 100% for extended periods.
- **Cleaning:** Use a dry, soft cloth to clean the exterior of the unit. Do not use abrasive cleaners or immerse the unit in water.
- **Ventilation:** Ensure the ventilation openings are clear and unobstructed during operation to prevent overheating.

10. Troubleshooting

If you encounter issues with your PowerMax 3600PE, refer to the following common problems and solutions:

Problem	Possible Cause	Solution
Unit does not power on	Low battery; Power button not pressed long enough	Charge the unit; Press and hold the power button for 3-5 seconds
No output from ports	Output ports not activated; Overload protection triggered	Press the respective output button (AC/DC/USB); Reduce connected load and restart the unit
Slow charging	Insufficient input power; High ambient temperature	Ensure charger/solar panels meet specifications; Charge in a cooler environment
LCD display shows error code	Internal fault; Over-temperature/voltage	Refer to the app manual for specific error codes; Allow unit to cool down; Contact customer support if persistent

11. Technical Specifications

Specification	Detail
Model Name	PowerMax 3600PE
Brand	ECOGREAT
Battery Type	LiFePO4 (Lithium Iron Phosphate)
Battery Capacity	2016Wh
AC Output Power	3600W (Continuous), 7200W (Peak)
AC Output Voltage	230 Volts
Total AC Outlets	4
USB-C Output	2 x 100W PD
USB-A Output	4 (3 x 18W Fast Charging)
Car Output	1 x 12V
DC5521 Ports	2
Anderson Port	1 (120W shared power)
AC Charging Input	1500W
Solar Charging Input	1600W Max (12-60V, 20A Max)
Dual Charging (AC+Solar)	Up to 1600W combined

Specification	Detail
UPS Switchover Time	10 ms
Item Weight	24.8 Kilograms
Dimensions (L x W x H)	23L x 26W x 36H cm
Material	ABS + LiFePO4

12. Warranty and Support

The ECOGREAT PowerMax 3600PE comes with a **5-year warranty**. For any product-related inquiries, technical assistance, or warranty claims, please contact ECOGREAT customer service. They aim to respond within 12 hours. Additionally, a 30-day free return policy is available.
For further assistance, refer to the contact information provided in the app manual or on the official ECOGREAT website.

© 2026 ECOGREAT. All rights reserved.

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