

ExpertPower EXP100-GEL

ExpertPower 12Volt 100AH Rechargeable Gel Battery (Model EXP100-GEL) Instruction Manual

Brand: ExpertPower | Model: EXP100-GEL

1. PRODUCT OVERVIEW

The ExpertPower 12Volt 100AH Rechargeable Gel Battery, Model EXP100-GEL, is a deep cycle sealed battery designed for reliable power delivery across various applications. This battery offers excellent recovery after deep discharge and a long cycle life, making it suitable for frequent cyclic discharge use. Its robust construction ensures high performance in diverse temperature conditions and resistance to shocks and vibrations.



Figure 1: ExpertPower 12Volt 100AH Rechargeable Gel Battery (Model EXP100-GEL).

2. KEY FEATURES

- **Deep Cycle Gel Technology:** Offers excellent recovery after deep discharge and extended cycle life for frequent use.
- **Maintenance-Free Operation:** Factory activated and sealed, requiring no acid pack or water refilling.
- **Vibration and Shock Resistance:** Designed to withstand harsh conditions and can be mounted in any position.
- **Wide Operating Temperature Range:** Maintains high performance in both high and low temperatures.
- **Versatile Applications:** Ideal for solar panel power bank systems, RVs, trolling motors, mobility scooters, wheelchairs, and other off-grid or backup power needs.

12V 100AH SEALED LEAD ACID BATTERY

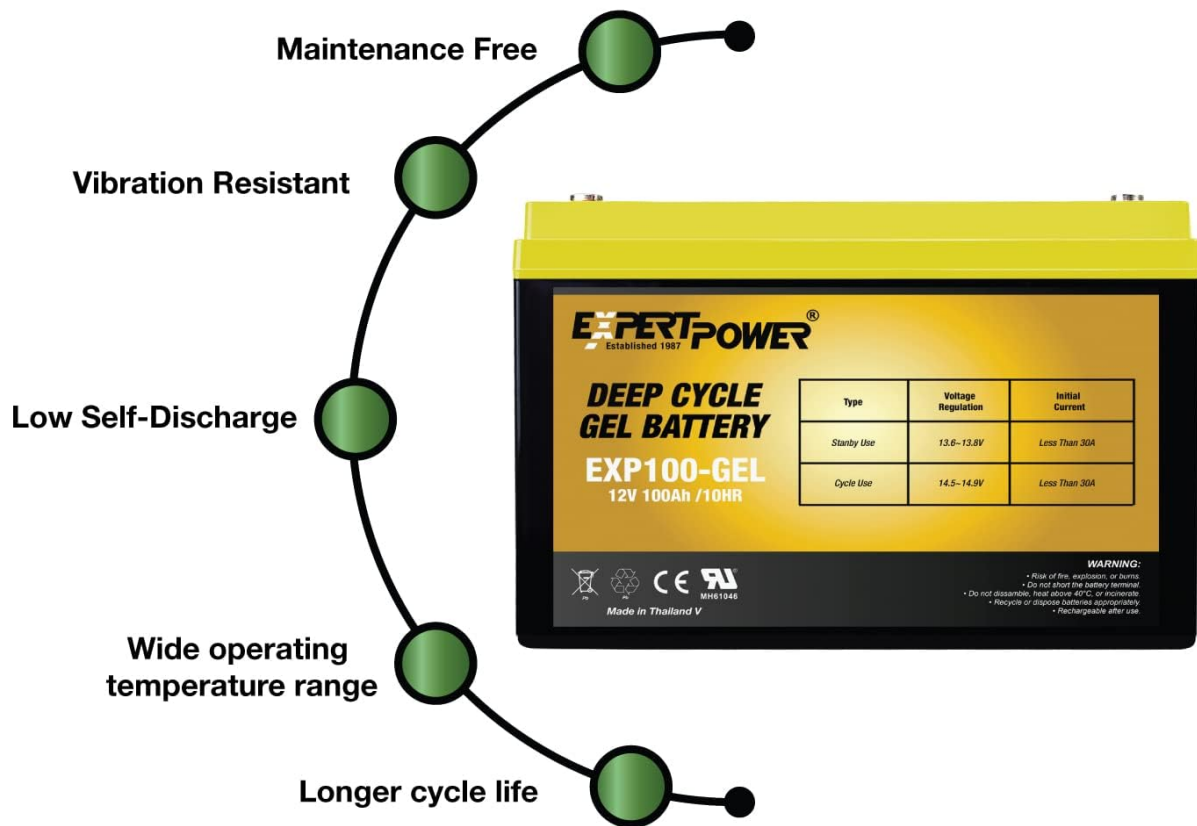


Figure 2: Visual representation of key features such as maintenance-free design and vibration resistance.

3. SETUP AND INSTALLATION

The ExpertPower Gel Battery is factory activated and requires no initial preparation. It can be mounted in any position, offering flexibility for installation. Ensure proper polarity when connecting the battery to your system to prevent damage.

3.1 Terminal Connections

The battery features robust terminals for secure connections. Use appropriate tools to ensure a tight and stable connection. The terminals are designed to accommodate standard battery cables.

SILVER PLATED COPPER TERMINAL



Figure 3: Detail of the silver-plated copper terminal for secure connections.

4. OPERATING INSTRUCTIONS

This gel battery is designed for deep cycle applications, providing consistent power over extended periods. It is suitable for both standby and cyclic use.

4.1 Voltage Regulation

- **Standby Use:** Maintain voltage between 13.6V and 13.8V. Initial current should be less than 9.9A.
- **Cycle Use:** Maintain voltage between 14.5V and 14.9V. Initial current should be less than 9.9A.

Adhering to these voltage ranges will optimize battery performance and longevity.

4.2 Discharge Performance

The battery exhibits excellent discharge performance and recovery capabilities, even after deep discharge. Its low self-discharge rate ensures that it holds charge longer when not in use compared to flooded batteries.

LOW SELF-DISCHARGE RATE



GEL Battery



Flooded Battery

The self-discharge of gel batteries is less than 1%/month

Figure 4: Illustrates the low self-discharge rate of the Gel battery compared to traditional flooded batteries.

5. MAINTENANCE

The ExpertPower Gel Battery is designed to be maintenance-free. No regular checks for acid levels or water refilling are required. Its sealed construction eliminates the need for such tasks, providing convenience and safety.

5.1 Cleaning

Keep the battery terminals clean and free from corrosion. Use a wire brush and a mixture of baking soda and water to clean any corrosion. Rinse with clean water and dry thoroughly.

5.2 Storage

When storing the battery for extended periods, ensure it is fully charged and stored in a cool, dry place. Avoid storing it in temperatures above 50°C (122°F) to preserve battery life.

6. SAFETY INFORMATION

WARNING: Risk of fire, explosion, or burns.

- Do not short the battery terminals.
- Do not disassemble, heat above 40°C (104°F), or incinerate the battery.
- The storage temperature should not exceed 50°C (122°F).

Always handle the battery with care and ensure proper ventilation during charging or discharge in enclosed spaces.

7. TROUBLESHOOTING

If you encounter issues with your ExpertPower Gel Battery, consider the following general troubleshooting steps:

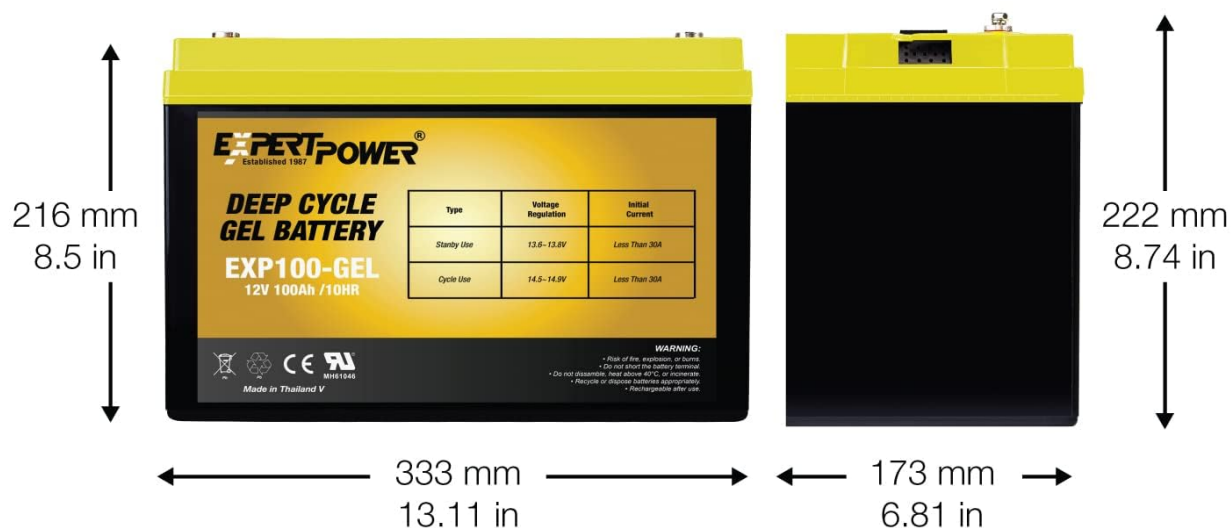
- **No Power Output:** Check all cable connections for tightness and proper polarity. Ensure the battery is adequately charged.
- **Reduced Performance:** Verify that the charging voltage and current are within the recommended specifications. Ensure the battery is not operating in extreme temperatures.
- **Swelling or Leakage:** Immediately discontinue use and contact customer support.

For persistent issues, please refer to the warranty and support section for assistance.

8. SPECIFICATIONS

Attribute	Value
Model Number	EXP100-GEL
Voltage	12V
Capacity	100AH/10HR
Battery Cell Composition	Lead Acid (Gel)
Product Dimensions (L x W x H)	13.11 x 6.81 x 8.5 inches
Weight	69 Pounds
Manufacturer	ExpertPower
Recommended Uses	Solar Panel Power Bank System, Solar VRLA 12V 24V 48V Off-grid Applications, Trolling Motor, Mobility Scooter Wheelchair, Electronics, Wheelchair, Scooter, Industrial and Medical Equipment, Golf Carts, Hunting, Lawn and Garden Tools, Portable Tools, Toys and Hobby, Emergency Lighting, Leisure, RV House, Security

COMPACT SIZE



Excellent deep discharge recovery capability

Figure 5: Detailed dimensions of the ExpertPower Gel Battery.

9. WARRANTY AND SUPPORT

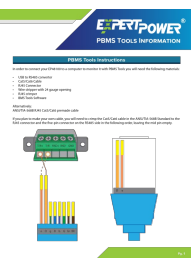
9.1 Warranty Information

This ExpertPower Gel Battery comes with a **1 Year Warranty** from the date of purchase. Please retain your proof of purchase for warranty claims.

9.2 Customer Support

For technical assistance, warranty claims, or any other inquiries, please contact ExpertPower customer support. Refer to the product packaging or the official ExpertPower website for the most current contact information.

Related Documents - EXP100-GEL

 <p>ExpertPower EP48100 48V 100Ah LiFePO4 Deep Cycle Battery</p>	<p>ExpertPower EP48100 48V 100Ah LiFePO4 Deep Cycle Battery Technical Specifications & User Guide</p> <p>Detailed specifications, features, operation, safety, and configuration guide for the ExpertPower EP48100 48V 100Ah LiFePO4 Deep Cycle battery. Learn about its BMS, charging, and installation.</p>
 <p>ExpertPower EPC125 12V 5A LiFePO4 Smart Battery Charger</p>	<p>EXPERTPOWER EPC125 12V 5A LiFePO4 Smart Battery Charger: User Guide & Safety Instructions</p> <p>Learn how to safely and effectively use the EXPERTPOWER EPC125 12V 5A LiFePO4 Smart Battery Charger. This guide provides essential safety instructions, operating procedures, specifications, and troubleshooting tips for optimal battery charging.</p>
 <p>ExpertPower 24V 20A LiFePO4 Smart Charger</p>	<p>ExpertPower 24V 20A LiFePO4 Smart Charger Manual and Safety Instructions</p> <p>Comprehensive guide to connecting, operating, and maintaining the ExpertPower 24V 20A LiFePO4 Smart Charger. Includes safety warnings, specifications, and troubleshooting tips.</p>
 <p>ExpertPower Firmware Update Instruction</p>	<p>ExpertPower 10KW and 6.5KW Inverter Firmware Update Instructions</p> <p>A comprehensive guide to updating the firmware on ExpertPower 10KW and 6.5KW inverters. Learn how to connect your PC, select the correct COM port, and initiate the update process using the ReflashTool.exe.</p>
 <p>ExpertPower PBMS Tools Connection and Monitoring Guide</p>	<p>EXPERTPOWER EP48100 PBMS Tools Connection and Monitoring Guide</p> <p>Instructions for connecting and monitoring the EXPERTPOWER EP48100 battery system using the PBMS Tools software, including hardware setup and software configuration.</p>
 <p>ExpertPower 12V Inverter Charger IVOCH2KW/IVOCH3KW</p>	<p>ExpertPower 12V Inverter Charger IVOCH2KW/IVOCH3KW User Manual</p> <p>Comprehensive user manual for the ExpertPower 12V Pure Sine Wave Inverter Charger (Models IVOCH2KW, IVOCH3KW), covering installation, operation, AC/DC modes, wiring, alarms, and troubleshooting.</p>