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## Power Portable 32650

# Power Portable 3.2 Volt 32650 LiFePO4 Battery (5000 mAh) User Manual

Model: 32650

## 1. INTRODUCTION AND SAFETY INFORMATION

Thank you for choosing the Power Portable 3.2 Volt 32650 LiFePO4 Battery. This manual provides essential information for the safe and effective use of your battery. Please read it thoroughly before use and retain it for future reference.

### Important Safety Warnings:

- **Do not short circuit:** Avoid connecting the positive and negative terminals directly. This can cause severe heat, fire, or explosion.
- **Use appropriate charger:** Only use chargers specifically designed for LiFePO4 batteries with a nominal voltage of 3.2V. Using an incorrect charger can damage the battery and pose a fire risk.
- **Do not overcharge or over-discharge:** Ensure your charging and discharging equipment has proper protection circuits to prevent exceeding the battery's voltage limits.
- **Avoid extreme temperatures:** Do not expose the battery to direct sunlight, heat sources, or temperatures below -20°C or above 60°C.
- **Handle with care:** Do not puncture, crush, or disassemble the battery. Physical damage can lead to internal short circuits and hazards.
- **Proper disposal:** Dispose of batteries according to local regulations. Do not dispose of in household waste or fire.
- **Keep out of reach of children.**



This image displays the Power Portable 3.2 Volt 32650 LiFePO4 battery. The battery is cylindrical and blue, with text indicating '+ IFR 32650 5000mAh 3.2V -' printed on its side, signifying its type, size, capacity, and voltage.

## 2. SETUP AND FIRST USE

### Initial Charging:

Before the first use, it is recommended to fully charge your Power Portable 3.2 Volt 32650 LiFePO4 battery. This ensures optimal performance and longevity.

1. Ensure you have a compatible charger designed specifically for 3.2V LiFePO4 batteries.
2. Connect the battery to the charger, observing correct polarity (positive to positive, negative to negative).
3. Allow the battery to charge until the charger indicates a full charge. Refer to your charger's manual for specific indicators.

### Compatibility:

This 3.2V LiFePO4 battery is ideal for applications requiring high energy density and long cycle life. Common applications include:

- RC Racing Cars
- Airsoft Guns
- RC Robots
- E-bikes
- Custom Battery Packs

## 3. OPERATING GUIDELINES

### Charging the Battery:

Always use a charger specifically designed for 3.2V LiFePO4 batteries. The maximum recommended charging current for this battery is **2.5 Amperes**. Charging at higher currents can reduce battery life and pose safety risks.

### Discharging the Battery:

The maximum recommended continuous discharging current for this battery is **15 Amperes**. Exceeding this limit can lead to overheating and damage to the battery. Ensure your device's power requirements are within this limit.

### Key Features:

- **No Memory Effect:** The battery can be charged or discharged at any time without affecting its overall capacity.
- **Long Storage Life:** Maintains charge well over extended periods when stored correctly.
- **Light Weight and High Energy Density:** Provides significant power relative to its size and weight.
- **Up to 2000 Charge Cycles:** Designed for a long operational lifespan under proper usage conditions.

## 4. MAINTENANCE AND STORAGE

## Storage:

For optimal long-term storage, store the battery in a cool, dry place, ideally at a temperature between 0°C and 25°C (32°F and 77°F). Avoid storing the battery fully charged or fully discharged for extended periods. A charge level of approximately 50% is recommended for long-term storage.

## Care:

- Keep the battery terminals clean and free from dirt or corrosion.
- Avoid dropping or subjecting the battery to strong impacts.
- Do not expose the battery to water or other liquids. If it gets wet, dry it thoroughly before use.
- Regularly inspect the battery for any signs of damage, swelling, or leakage. Discontinue use immediately if any issues are observed.

## 5. TROUBLESHOOTING

If you encounter issues with your Power Portable 3.2 Volt 32650 LiFePO4 Battery, please refer to the following common troubleshooting steps:

Problem	Possible Cause	Solution
Battery not charging	Incorrect charger; loose connection; faulty charger; battery deeply discharged.	Ensure charger is compatible with 3.2V LiFePO4. Check all connections. Try a different charger. If deeply discharged, some smart chargers may have a recovery mode.
Battery not holding charge	Battery age/wear; improper charging/discharging cycles; internal damage.	Ensure proper charging and discharging practices are followed. If the battery is old or visibly damaged, it may need replacement.
Battery overheating during use/charge	Overcurrent discharge; faulty charger; internal short circuit; high ambient temperature.	<b>Immediately discontinue use/charging.</b> Check if the load current exceeds 15A. Ensure charger is functioning correctly. If overheating persists, the battery may be damaged and should be safely disposed of.
Reduced capacity/runtime	Battery degradation over time; improper charging/discharging; extreme operating temperatures.	This is normal over many cycles. Ensure you are not over-discharging. Operate within recommended temperature ranges.

If these steps do not resolve your issue, please contact Power Portable customer support for further assistance.

## 6. PRODUCT SPECIFICATIONS

Detailed technical specifications for the Power Portable 3.2 Volt 32650 LiFePO4 Battery:

- **Nominal Voltage:** 3.2V
- **Size:** 32650
- **Capacity:** 5000 mAh
- **Chemistry:** Lithium Phosphate (LiFePO4)

- **Max Charging Current:** 2.5 Amp
- **Max Discharging Current:** 15 Amp
- **Dimensions:**
  - Length: 67 mm (2.66")
  - Diameter: 32 mm (1.26")
- **Weight:** 137 g (4.8 Oz)
- **Charge Cycles:** Up to 2000

## 7. WARRANTY AND SUPPORT

### Warranty Information:

For specific warranty terms and conditions, please refer to the official Power Portable website or the documentation provided at the time of purchase. Warranty coverage typically addresses manufacturing defects under normal use.

### Customer Support:

If you have any questions, require technical assistance, or need to report an issue with your Power Portable battery, please contact our customer support team. Contact information can typically be found on the official Power Portable website or on your purchase receipt.

Manufacturer: Power Portable

