

[Manuals.plus](#) /

› [OVONIC](#) /

› OVONIC 6S Lipo Battery 2200mAh 22.2V 150C XT60 User Manual

OVONIC O-150C-2200-6S1P-XT60

OVONIC 6S Lipo Battery 2200mAh 22.2V 150C with XT60 Plug User Manual

Model: O-150C-2200-6S1P-XT60

1. INTRODUCTION

This manual provides essential information for the safe and effective use of your OVONIC 6S 2200mAh 22.2V 150C LiPo battery with an XT60 connector. This battery is designed for various RC applications, including RC trucks, truggies, buggies, tanks, and racing hobby vehicles. Please read this manual thoroughly before operating the battery to ensure proper handling, charging, and storage practices.

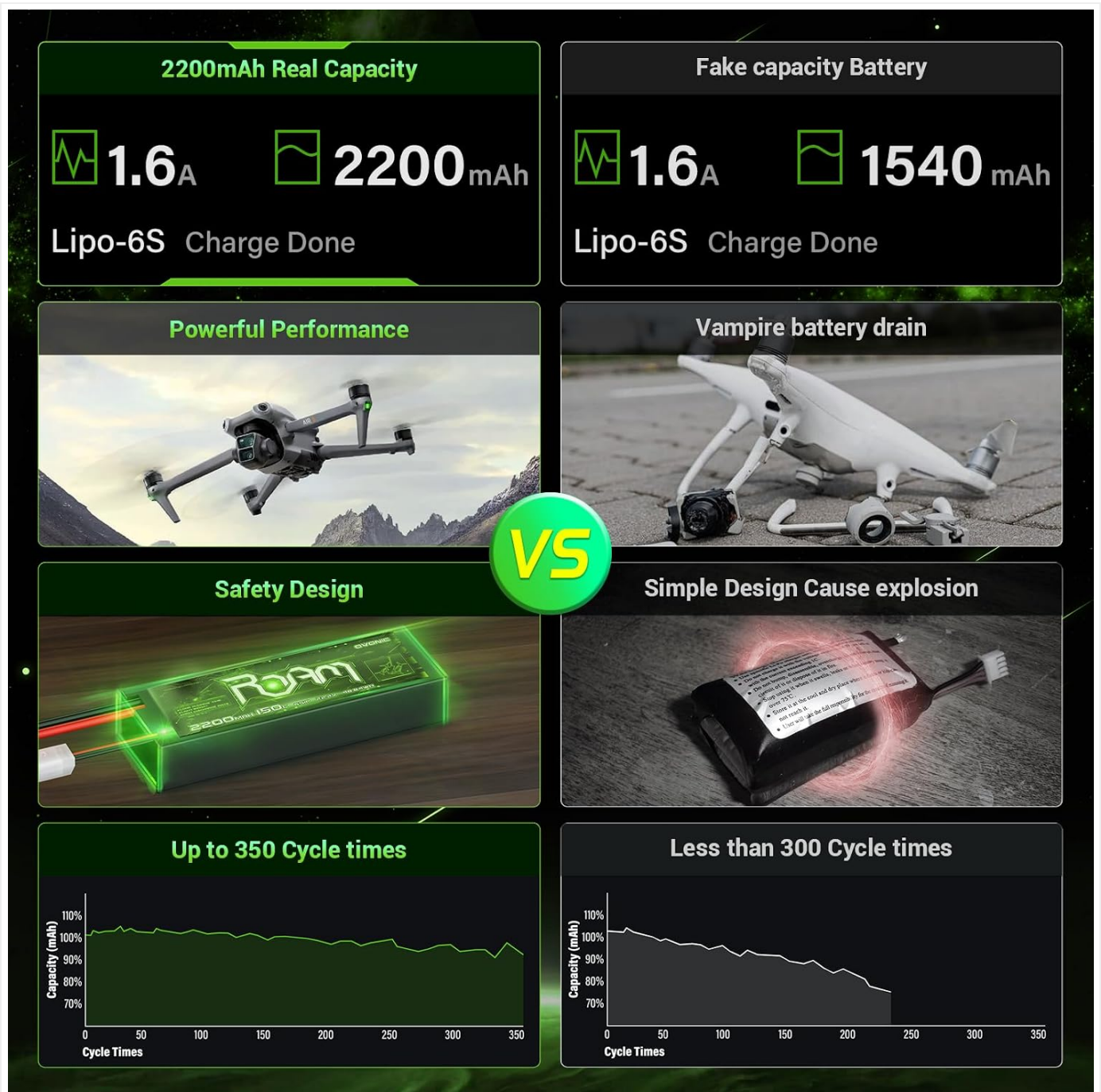


Image 1.1: OVONIC 6S 2200mAh LiPo Battery with XT60 connector, shown in an RC drone application.

2. SAFETY PRECAUTIONS

Lithium Polymer (LiPo) batteries are powerful and can be dangerous if not handled correctly. Failure to follow these safety guidelines may result in fire, personal injury, or property damage.

- **Charging:** Always use a LiPo compatible charger. Never charge unattended. Do not overcharge or over-discharge the battery. Charging should be done on a non-flammable surface, away from combustible materials.
- **Discharging:** Do not discharge the battery below 3.0V per cell (18.0V for a 6S battery). Over-discharging can permanently damage the battery and pose a fire risk during subsequent charging.
- **Physical Damage:** Do not puncture, drop, or expose the battery to impact. If the battery is damaged, swollen, or shows any signs of leakage, discontinue use immediately and dispose of it safely.
- **Temperature:** Do not expose the battery to extreme temperatures (above 60°C / 140°F or below 0°C / 32°F). Avoid direct sunlight and hot environments.

- **Storage:** Store batteries at room temperature (15-25°C / 59-77°F) and at a storage voltage of approximately 3.8V per cell (22.8V for a 6S battery).
- **Disposal:** Dispose of LiPo batteries according to local regulations. Never dispose of them in regular trash. Fully discharge the battery before disposal.
- **Children:** Keep batteries out of reach of children and pets.

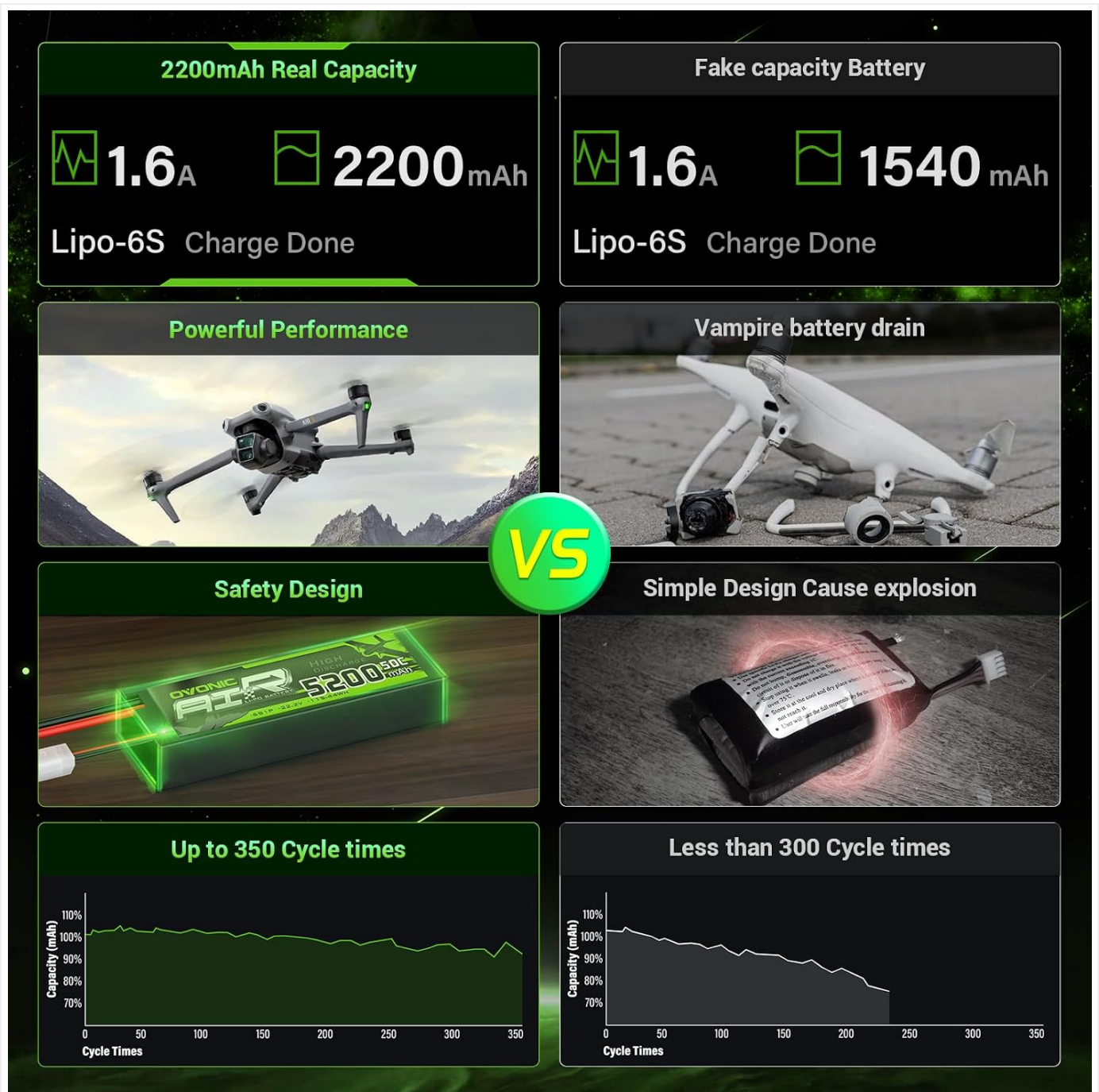


Image 2.1: Visual comparison highlighting the safety design and consistent performance of OVONIC batteries versus generic alternatives, which may exhibit issues like vampire drain or simple designs leading to potential hazards.

3. PACKAGE CONTENTS

Upon opening your package, please verify that all items listed below are present and in good condition:

- 2x OVONIC 6S LiPo Battery (2200mAh 22.2V 150C with XT60 Plug)
- 2x Brand Stickers
- 1x User Manual (this document)



Image 3.1: Contents of the OVONIC 6S LiPo battery package, including two batteries, brand stickers, and the user manual.

4. SETUP

1. **Initial Inspection:** Carefully inspect the battery for any signs of damage, swelling, or loose connections upon receipt. Do not use if any damage is observed.
2. **First Charge:** Before initial use, it is recommended to fully charge the battery using a compatible LiPo charger. Refer to the 'Charging' section for detailed instructions.
3. **Compatibility Check:** Ensure the battery's voltage (22.2V), capacity (2200mAh), C-rating (150C), and XT60 connector type are compatible with your RC vehicle and charger.

5. OPERATING

To operate your OVONIC LiPo battery safely and effectively:

- **Connection:** Connect the XT60 plug of the battery securely to your RC vehicle's ESC (Electronic Speed Controller).

Ensure the connection is firm to prevent power interruptions.

- **Monitoring:** During operation, monitor the battery voltage. Avoid discharging below 3.0V per cell to prevent irreversible damage. Many ESCs have a low-voltage cutoff feature; ensure it is set correctly for LiPo batteries.
- **Temperature:** If the battery becomes excessively hot during use, discontinue operation and allow it to cool down before further use or charging.
- **Post-Use:** After use, disconnect the battery from the RC vehicle. If the battery is not at storage voltage, charge or discharge it to approximately 3.8V per cell for storage.

6. CHARGING

Proper charging is crucial for the longevity and safety of your LiPo battery:

- **Compatible Charger:** Always use a charger specifically designed for Lithium Polymer batteries. OVONIC recommends using official OVONIC Mate1 and X1 chargers for optimal protection and performance.
- **Balance Charging:** Always use the balance charging mode. Connect both the main XT60 connector and the balance lead to your charger. Balance charging ensures all cells within the battery pack are charged to the same voltage, preventing cell imbalance.
- **Charge Rate:** Do not exceed the recommended charge rate, typically 1C (1 times the battery capacity). For a 2200mAh battery, a 1C charge rate is 2.2 Amps. While the battery has a 150C discharge rating, the charge rate is usually much lower.
- **Charging Environment:** Charge on a non-flammable surface, away from flammable materials. Consider using a LiPo charging bag for added safety.
- **Never Leave Unattended:** Do not leave a charging LiPo battery unattended.

7. MAINTENANCE

Regular maintenance helps extend the life and performance of your OVONIC LiPo battery:

- **Avoid Over-Discharge:** Never discharge the battery below 3.0V per cell. This is the most common cause of LiPo battery damage.
- **Avoid Overcharge:** Ensure your charger stops charging once the battery reaches 4.2V per cell. Overcharging can lead to swelling and fire.
- **Temperature Management:** Operate and store the battery within recommended temperature ranges. Excessive heat or cold can degrade battery performance and lifespan.
- **Physical Care:** Protect the battery from physical impact. Regularly inspect the battery casing and connectors for any damage.
- **Cycle Life:** With proper care, the battery is designed for 350+ charge/discharge cycles. Consistent adherence to charging and storage guidelines will maximize this lifespan.

8. STORAGE

Proper storage is essential for maintaining battery health during periods of non-use:

- **Storage Voltage:** For long-term storage, charge or discharge the battery to a storage voltage of approximately 3.8V per cell (22.8V for a 6S battery). Most modern LiPo chargers have a dedicated 'Storage' mode.
- **Temperature:** Store batteries in a cool, dry place, ideally at room temperature (15-25°C / 59-77°F).
- **Environment:** Store away from direct sunlight, heat sources, and flammable materials. A fire-resistant LiPo bag or

container is recommended.

- **Regular Check:** If storing for extended periods, periodically check the battery voltage.

9. TROUBLESHOOTING

If you encounter issues with your OVONIC LiPo battery, consider the following:

- **Battery Not Charging:**
 - Ensure both the main XT60 connector and the balance lead are securely connected to the charger.
 - Verify that the charger settings are correct for a 6S LiPo battery.
 - Check for any visible damage to the battery or connectors.
- **Reduced Run Time/Performance:**
 - This can indicate an aging battery or one that has been over-discharged.
 - Ensure the battery is fully balance charged before each use.
 - Check for high internal resistance, which can be displayed by some advanced chargers.
- **Battery Swelling:**
 - **Immediately discontinue use.** Swelling is a sign of internal damage and a potential fire hazard.
 - Safely discharge the battery to 0V and dispose of it according to local regulations.

If problems persist, please contact OVONIC customer support.

10. SPECIFICATIONS

Feature	Specification
Model Name	O-150C-2200-6S1P-XT60
Battery Type	Lithium Polymer (LiPo)
Voltage	22.2V (6S)
Capacity	2200mAh
Discharge Rate (C-rating)	150C
Connector Type	XT60
Dimensions (L x W x H)	4.3 x 1.3 x 1.8 inches (approx. 109.2 x 33 x 45.7 mm)
Weight	0.85 lbs (approx. 385g)
Cycle Life	350+ times (with proper care)
Cell Composition	LiCoO2 (Lithium Cobalt Oxide)
Energy Density	128Wh/L
Micro Internal Resistance	< 5mΩ

The Stacking Process Extends
Cycle Life to **350+** Times



High Energy Density: **128Wh/L**

Micro Internal Resistance: **< 5mΩ**

Image 10.1: Illustration of the battery's internal stacking process, highlighting its high energy density (128Wh/L) and low micro internal resistance (< 5mΩ), contributing to an extended cycle life of over 350 times.

11. WARRANTY AND SUPPORT

OVONIC is committed to providing high-quality products. If you encounter any problems or have questions regarding your OVONIC 6S LiPo battery, please contact our customer support directly. We aim to respond to all inquiries within 24 hours. Please retain your proof of purchase for any warranty claims.

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