

TATTU TATTU Pro 22000mAh 44.4V 12S

TATTU Pro 22000mAh 44.4V 12S Lipo Smart Battery Pack Instruction Manual

1. INTRODUCTION AND OVERVIEW

This manual provides essential information for the safe and effective use of your TATTU Pro 22000mAh 44.4V 25C 12S Lipo Smart Battery Pack with AS150U-F Plug. Please read this manual thoroughly before operating the battery to ensure proper handling and to prevent damage or injury.

The TATTU Pro series batteries are designed for high-performance applications, featuring advanced smart battery technology. Key features include:

- **Stable Automatic Stacking Technology:** Enables high single-cell capacities of 22000mAh.
- **Strict Cell Matching Process:** Ensures precise matching of single cell capacity, voltage, resistance, and discharge curve.
- **Extended Cycle Life:** Offers longer cycle life compared to standard LiPo technology.
- **Premium Materials:** Utilizes superior Japan and Korea Lithium Polymer raw materials.
- **Smart Battery Features:** Includes communication protocol, communication protection, fuel gauge, self-inspection, using time log, current detection, ultra-low power consumption, and abnormal log.



Figure 1: Front view of the TATTU Pro 22000mAh 12S Lipo Smart Battery Pack.

2. SAFETY INFORMATION

Lithium Polymer (LiPo) batteries are powerful and require careful handling. Failure to follow safety instructions can result in fire, personal injury, and property damage. Always observe the following precautions:

- **Charging:** Use only a compatible LiPo balance charger. Never charge unattended. Do not overcharge or discharge beyond recommended limits.
- **Temperature:** Do not expose to extreme temperatures (above 60°C / 140°F or below 0°C / 32°F). Avoid direct sunlight.
- **Physical Damage:** Do not puncture, drop, short-circuit, or disassemble the battery. Discontinue use if the battery is damaged or swollen.
- **Storage:** Store in a fireproof container or bag, away from flammable materials, and out of reach of children.
- **Disposal:** Dispose of LiPo batteries according to local regulations. Never dispose of in regular trash.

3. SETUP

3.1 Unpacking and Inspection

Upon receiving your TATTU Pro battery, carefully inspect it for any signs of damage during transit. Check the casing, connectors, and cables. If any damage is observed, do not use the battery and contact customer support immediately.

3.2 Initial Charge

For optimal performance and longevity, it is recommended to fully charge the battery before its first use. Use a compatible 12S LiPo balance charger with an AS150U-F connector. Ensure the charger settings match the battery's specifications (44.4V, 12S, 22000mAh).



Figure 2: Top view of the battery, highlighting the AS150U-F connector and smart ports.

3.3 Connecting to Device

Connect the AS150U-F discharge plug of the battery to your compatible device (e.g., drone, RC vehicle).

Ensure a secure connection. The smart battery features allow for communication with compatible devices to monitor battery status.

4. OPERATING INSTRUCTIONS

4.1 Charging the Battery

Always use a dedicated LiPo balance charger. Connect the main AS150U-F plug and the balance lead to the charger. Set the charger to the correct cell count (12S) and voltage (44.4V). The charging current should not exceed 1C (22A for this 22000mAh battery) unless specified otherwise by the manufacturer. Monitor the charging process and never leave a charging battery unattended.

4.2 Discharging and Usage

The TATTU Pro battery is designed for a 25C continuous discharge rate, with a maximum burst rate of 50C. Ensure your application's current draw is within these limits. Monitor the battery voltage during use. Do not discharge the battery below 3.7V per cell (44.4V total for 12S) under load, or 3.0V per cell (36V total for 12S) at rest, to prevent irreversible damage.

The integrated smart features provide real-time data such as fuel gauge, current detection, and usage logs, which can be accessed via compatible smart battery systems.

5. MAINTENANCE AND STORAGE

5.1 Proper Storage

For long-term storage, charge the battery to a storage voltage of 3.8V-3.9V per cell (approximately 45.6V-46.8V for 12S). Store the battery in a cool, dry place (ideally between 5°C and 20°C / 41°F and 68°F) away from direct sunlight, heat sources, and flammable materials. Use a LiPo-safe bag or container.

5.2 General Care

Regularly inspect the battery for any signs of swelling, damage, or loose connections. Keep the connectors clean and free from debris. Avoid dropping or subjecting the battery to heavy impacts. If the battery becomes wet, dry it thoroughly before attempting to use or charge it.



Figure 3: Side view of the battery, showing warning labels and robust casing.

6. TROUBLESHOOTING

- **Battery Not Charging:** Ensure the charger is properly connected and functioning. Verify charger settings match battery specifications. Check for any visible damage to the battery or connectors.
- **Reduced Performance/Short Run Time:** This could indicate an aging battery, improper charging, or over-discharge. Ensure proper charging and storage practices.
- **Battery Swelling:** Immediately discontinue use and safely dispose of the battery. Swelling indicates internal damage and a significant safety risk.
- **Smart Features Not Responding:** Ensure the battery is properly connected to a compatible device or smart charger. Refer to your device's manual for troubleshooting smart battery communication.

If you encounter issues not covered here, or if troubleshooting steps do not resolve the problem, please contact TATTU customer support.

7. SPECIFICATIONS

Specification	Value
Brand	TATTU
Minimum Capacity	22000mAh
Configuration	44.4V / 12S1P / 12 cells
Discharge Rate	25C
Max Burst Discharge Rate	50C
Net Weight ($\pm 20g$)	6300g
Dimensions	117 x 174 x 238mm (4.61 x 6.85 x 9.37 inches)
Discharge Plug	AS150U-F
Battery Cell Composition	Lithium Polymer
Reusability	Rechargeable



Figure 4: TATTU Pro battery shown with its original packaging.

8. WARRANTY AND SUPPORT

TATTU provides local after-sales service, with a service center located in Dublin, CA. For any warranty claims, technical support, or inquiries regarding your TATTU Pro battery, please contact the manufacturer directly. Keep your proof of purchase for warranty validation.

While extended protection plans may be available from third-party providers, these are separate from the manufacturer's standard warranty. Always refer to the specific terms and conditions provided by TATTU for warranty coverage.