

Dumfume BS95346-au

Dumfume 12.8V 100Ah LiFePO4 Lithium Battery User Manual

Model: BS95346-au

1. INTRODUCTION

This manual provides essential information for the safe and efficient use of your Dumfume 12.8V 100Ah LiFePO4 Lithium Battery. Please read this manual thoroughly before installation and operation to ensure optimal performance and longevity of your battery. This battery is designed for various applications including RVs, motorhomes, campers, solar systems, and off-grid energy storage.

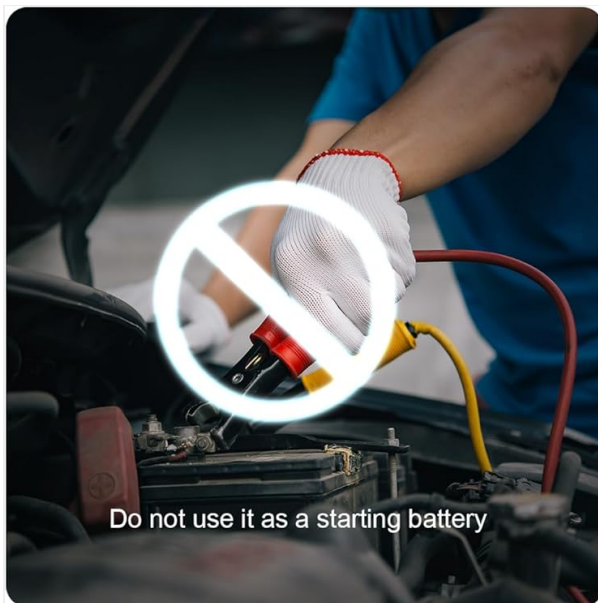


The Dumfume 12.8V 100Ah LiFePO4 Lithium Battery, featuring a black casing with red branding, a built-in carrying strap, and M8 terminal posts for secure connections.

2. SAFETY INFORMATION

Adhering to safety guidelines is paramount when handling and operating lithium batteries. Failure to follow these instructions can result in damage to the battery, property, or personal injury.

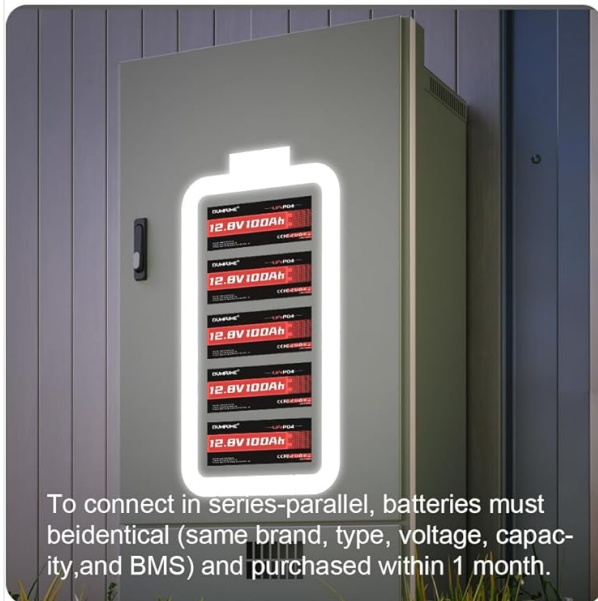
- **Do Not Use as a Starting Battery:** This LiFePO4 battery is not designed for engine starting applications.
- **Not for Golf Carts:** Avoid using this battery in golf cart applications.
- **Avoid Incineration and Immersion:** Never incinerate the battery or immerse it in water.
- **Series and Parallel Connections:** When connecting batteries in series or parallel, ensure all batteries are identical (same brand, type, voltage, capacity, and BMS) and were purchased within a 1-month period to prevent imbalances and potential damage. The battery supports up to 4 series and 4 parallel connections (4S4P).
- **BMS Protection:** The integrated 100A Battery Management System (BMS) provides comprehensive protection against overcharging, over-discharging, short circuits, overheating, and overcurrent.



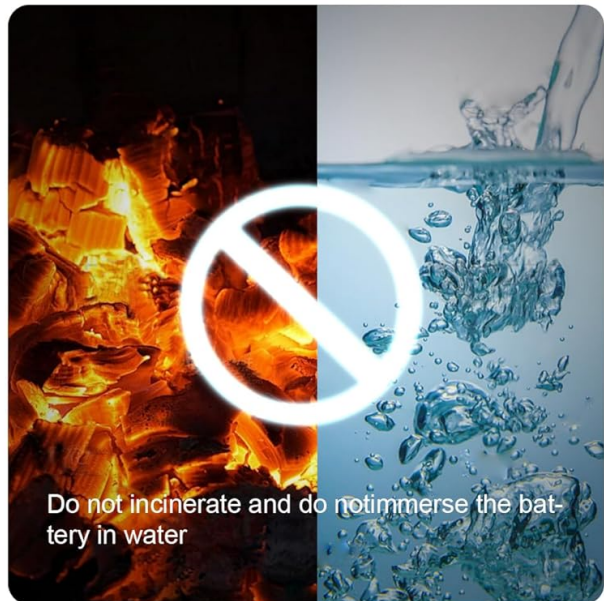
Do not use it as a starting battery



Do not use it for golf carts



To connect in series-parallel, batteries must be identical (same brand, type, voltage, capacity, and BMS) and purchased within 1 month.



Do not incinerate and do not immerse the battery in water

Important safety warnings: Do not use the battery as a starting battery, for golf carts, incinerate it, or immerse it in water. For series-parallel connections, batteries must be identical (same brand, type, voltage, capacity, and BMS) and purchased within 1 month.

3. WHAT'S IN THE BOX

Upon unpacking your Dumfume 12.8V 100Ah LiFePO4 Lithium Battery, please verify that all components are present:

- 1 x Dumfume 12.8V 100Ah LiFePO4 Battery
- 2 x M8 Terminal Bolts
- 2 x Insulating Caps for Terminal Bolts
- 1 x Product Manual



The package includes one 12V 100Ah LiFePO4 battery, two M8 terminal bolts, and two insulating caps for the bolts, along with a product manual.

4. PRODUCT FEATURES AND SPECIFICATIONS

The Dumfume 12.8V 100Ah LiFePO4 Lithium Battery offers advanced features for reliable power storage:

- **Compact and Powerful:** With 1.28kWh energy capacity and increased energy density, it's ideal for space-saving applications.
- **Lead-Acid Replacement:** A direct drop-in replacement for traditional lead-acid batteries, requiring no additional wiring for a seamless upgrade.
- **Lightweight Design:** Weighing only 21.6 lbs, it is significantly lighter than comparable lead-acid batteries, offering higher energy density.
- **Long Cycle Life:** Equipped with top-tier lithium iron phosphate battery cells, supporting up to 4000 cycles at 100% Depth of Discharge (DOD), 6000 cycles at 80% DOD, and 15000 cycles at 60% DOD.
- **Durable Casing:** The ABS plastic casing provides dustproof and weather-resistant properties, suitable for various installation environments (note: not waterproof).

PERFECT REPLACEMENT FOR LEAD ACID



A comparison chart demonstrating the advantages of the Dumfume LiFePO4 battery over a 12V 100Ah lead-acid battery, including higher capacity (1280Wh vs 600Wh), lighter weight (22.04 lbs vs 63.93 lbs), longer lifespan (<10 years vs 1-3 years), more life cycles (4000-15000 vs 200-500), and the presence of a built-in BMS.

Technical Specifications

Brand	Dumfume
Model Number	BS95346-au
Item Weight	22 pounds
Size	12.8V 100Ah
Terminal Type	M8
Energy Capacity	1280Wh
BMS	Built-in 100A BMS
Cycle Life	4000+ cycles (100% DOD), 6000+ cycles (80% DOD), 15000+ cycles (60% DOD)
Casing Material	ABS Plastic

DIMENSIONS

Product Size

L12.8*W6.5*H8.46in



The physical dimensions of the battery are 12.8 inches (length) x 6.5 inches (width) x 8.46 inches (height). It uses M8 terminal specifications.

5. SETUP AND INSTALLATION

Proper installation is crucial for the performance and safety of your battery. Ensure all connections are secure and correctly polarized.

Connecting the Battery

1. **Prepare Terminals:** Ensure the M8 terminal bolts are clean and free of corrosion.
2. **Connect Cables:** Connect your system's positive cable to the battery's positive (+) terminal and the negative cable to the battery's negative (-) terminal. Use the provided M8 terminal bolts and insulating caps.
3. **Secure Connections:** Tighten all connections firmly to prevent loose contacts, which can cause overheating and damage.
4. **Series/Parallel Configuration:** If connecting multiple batteries, refer to the safety information regarding identical batteries and purchase timeframe. Ensure proper wiring for series (voltage increase) or parallel (capacity increase) configurations.

Environmental Considerations

Install the battery in a well-ventilated area. While the ABS casing is dustproof and weather-resistant, avoid direct exposure to extreme moisture or submersion in water. The battery is designed to operate effectively in a wide temperature range for discharge, from -4°F to 158°F.

6. OPERATING INSTRUCTIONS

The Dumfume LiFePO4 battery is designed for efficient energy storage and delivery across various applications.

General Usage

This battery is suitable for powering RVs, motorhomes, campers, solar energy systems, and other off-grid setups. It provides a stable 12.8V output for your devices.



Examples of suitable applications for the battery, including solar panels, camping, monitoring systems, street lights, backup power supply, and RVs/motorhomes.

Charging

Use a compatible LiFePO4 charger. The built-in BMS will manage the charging process, protecting against

overcharge. Ensure your charging source (solar controller, DC-DC charger, etc.) is configured for LiFePO4 batteries.



The Dumfume LiFePO4 battery is designed for excellent discharge performance even at -4°F, adapting to extreme temperatures.

7. MAINTENANCE

To maximize the lifespan and performance of your Dumfume LiFePO4 battery, follow these maintenance guidelines:

- **Regular Charging/Discharging:** If the battery is not in regular use, charge and discharge it once every 6 months to prevent damage from disuse and maintain cell balance.
- **Terminal Inspection:** Periodically check terminal connections for tightness and cleanliness. Loose connections can lead to resistance and heat buildup.
- **Storage:** Store the battery in a cool, dry place, away from direct sunlight and extreme temperatures. Ensure the battery is partially charged (around 50%) for long-term storage.
- **Casing Care:** The ABS casing is durable but should be kept clean. Avoid using harsh chemicals for cleaning.

8. TROUBLESHOOTING

If you encounter issues with your Dumfume LiFePO4 battery, consider the following common troubleshooting steps:

- **No Power Output:** Check all cable connections for tightness and correct polarity. Verify that the battery's voltage is within the operational range. The BMS may have activated a protection mode (e.g., over-discharge, over-current).
- **Battery Not Charging:** Ensure your charger is compatible with LiFePO4 batteries and is functioning correctly. Check charging cable connections. The BMS may have activated overcharge or low-temperature protection (charging cut-off below freezing).
- **Unusual Behavior:** If the battery exhibits unusual heat, swelling, or odors, immediately disconnect it from all loads and charging sources and contact support.

For complex issues or if troubleshooting steps do not resolve the problem, please contact Dumfume customer support.



An illustration highlighting the internal Battery Management System (BMS) and its protective functions against low/high temperature, overcharge, over-discharge, over-current, and short circuits. The battery has a capacity of 100Ah, 1280Wh energy, and 1280W max load power.

9. WARRANTY AND SUPPORT

Dumfume is committed to providing reliable products and excellent customer service.

Warranty Information




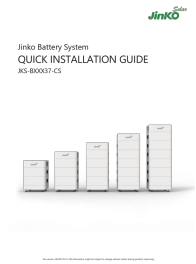
The Dumfume 12.8V 100Ah LiFePO4 battery is designed for a long operational life, offering 10-90% battery life over its extensive cycle count. Specific warranty terms and conditions are typically provided with your purchase documentation. Please retain your proof of purchase for warranty claims.

Customer Support

The Dumfume Support Team is available 24/7 to assist with any questions or concerns you may have regarding your battery. For support, please visit the official Dumfume store or contact us through the platform where you made your purchase.

For more information, visit the [Dumfume Store](#).

Related Documents - BS95346-au

	<p>Selectronic SP PRO Series 2i Inverter Charger Manual: Installation, Operation, and Service</p> <p>Comprehensive manual for the Selectronic SP PRO Series 2i Sine Wave Interactive Inverter Charger, covering installation, operation, service, and troubleshooting for solar hybrid and off-grid power systems.</p>
	<p>Selectronic SP PRO Series 2i Inverter Charger Manual</p> <p>Comprehensive manual for the Selectronic SP PRO Series 2i Sine Wave Interactive Inverter Charger, covering installation, operation, service, and specifications for solar hybrid and off-grid power systems.</p>
	<p>Sharp Split Type Room Air Conditioner Operation Manual</p> <p>This operation manual provides essential guidance for the proper use and maintenance of Sharp split type room air conditioners, covering operation, safety, parts, remote control, and troubleshooting.</p>
	<p>Aurora Smart Lamp Technical Specifications and Setup Guide</p> <p>Detailed technical specifications, setup instructions, maintenance, and compliance information for Aurora Smart Lamps, including models AU-A1GSZ9B/27, AU-A1GSZ9E/27, AU-A1GSZ9CXB, AU-A1GSZ9CXE, AU-A1GSZ9RGBWB, AU-A1GSZ9RGBWE, and AU-A1CE14ZCX6.</p>
	<p>Jinko Battery System JKS-BXXX37-CS Quick Installation Guide</p> <p>A quick installation guide for the Jinko Battery System, model JKS-BXXX37-CS, detailing setup procedures, environmental requirements, packing contents, system structure, expansion methods, and inverter compatibility. This guide is intended for skilled personnel.</p>
	<p>Deye SUN Series Inverter 10-Year Limited Warranty - Australia & New Zealand</p> <p>This document outlines the 10-year limited warranty for Deye SUN Series inverters installed in Australia and New Zealand, covering hybrid and PV on-grid inverters, as well as monitoring devices and output control equipment.</p>