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› DATOUBOSS 12V 300Ah LiFePO4 Battery Instruction Manual

DATOUBOSS 1*12V300AH

DATOUBOSS 12V 300Ah LiFePO4 Battery Instruction Manual

1. INTRODUCTION

This manual provides essential information for the safe and efficient operation of your DATOUBOSS 12V 300Ah LiFePO4 battery. Please read these instructions carefully before installation and use to ensure optimal performance and longevity of your battery.

The DATOUBOSS 12.8V 300Ah LiFePO4 battery is a high-performance, lightweight, and durable energy storage solution, ideal for various applications including RVs, solar systems, and marine use. It features an integrated 200A Battery Management System (BMS) for enhanced safety and reliability.

2. PRODUCT FEATURES

- **Lightweight and Portable:** Weighing only 27.7kg, it is approximately 1/3 the weight of traditional lead-acid batteries, making it easy to transport and install.
- **Exceptional Performance:** Utilizes high-quality LiFePO4 cells, offering 3840Wh energy density, an extremely long lifespan, rapid charge/discharge capabilities, and 100% depth of discharge.
- **Integrated 200A BMS Protection:** The advanced Battery Management System protects against high temperatures, overvoltage, overcharge, over-discharge, overcurrent, and short circuits. It also includes an automatic balancing function to maintain cell voltage equilibrium.
- **Expandable Battery Pack:** Supports up to 4 batteries in series and 4 in parallel, allowing for flexible expansion up to 61.44KWh (51.2V 1200Ah) to meet diverse power requirements.
- **Long Lifespan:** Provides 4,000 to 15,000 deep cycles, offering a lifespan of over 10 years, significantly longer than lead-acid batteries.
- **Wide Application:** Suitable for RVs, caravans, boats, electric scooters, golf carts, emergency power, and off-grid solar energy systems.

3. WHAT'S IN THE BOX

Upon unpacking, please verify that all components are present and undamaged:

- 1 x DATOUBOSS 12V 300Ah LiFePO4 Battery
- 1 x User Manual
- 2 x Insulating Sleeves
- 2 x M8 Long Terminal Bolts

Image: Package contents showing the DATOUBOSS 12.8V 300Ah LiFePO4 battery, user manual, insulating sleeves, and M8 terminal bolts.

4. SAFETY WARNINGS

Failure to follow these safety instructions may result in serious injury, property damage, or voiding the warranty.

- Do not reverse the positive and negative poles of the battery.
- Do not hit or throw objects at the battery, and do not step on it.
- Do not use metal to connect the positive and negative terminals of the battery directly.
- Do not weld the battery directly and do not pierce the battery with nails or other sharp objects.
- Do not immerse the battery in seawater or water.
- Do not use as a car starter battery, trip starter battery, or engine starter battery.
- Do not use the battery at high temperatures, otherwise it may overheat, catch fire, or become defective, which will shorten its service life.



Image: DATOUBOSS LiFePO4 battery showing warning labels and specifications.

5. INSTALLATION AND CONNECTION

5.1 General Guidelines

- Ensure the battery is placed in a well-ventilated area, away from direct sunlight, heat sources, and flammable materials.
- Use appropriate M8 terminal bolts and ensure connections are tight to prevent resistance and overheating.
- Always connect the positive (+) terminal to positive and the negative (-) terminal to negative.
- Wear appropriate personal protective equipment (PPE) such as gloves and eye protection during installation.

5.2 Series and Parallel Connection

The DATOUBOSS 12V 300Ah LiFePO4 battery supports both series and parallel connections to achieve higher voltage or capacity. Always ensure all batteries are of the same model and state of charge before connecting.

Your browser does not support the video tag.

Video: Demonstration of connecting DATOUBOSS LiFePO4 batteries in series and parallel configurations.

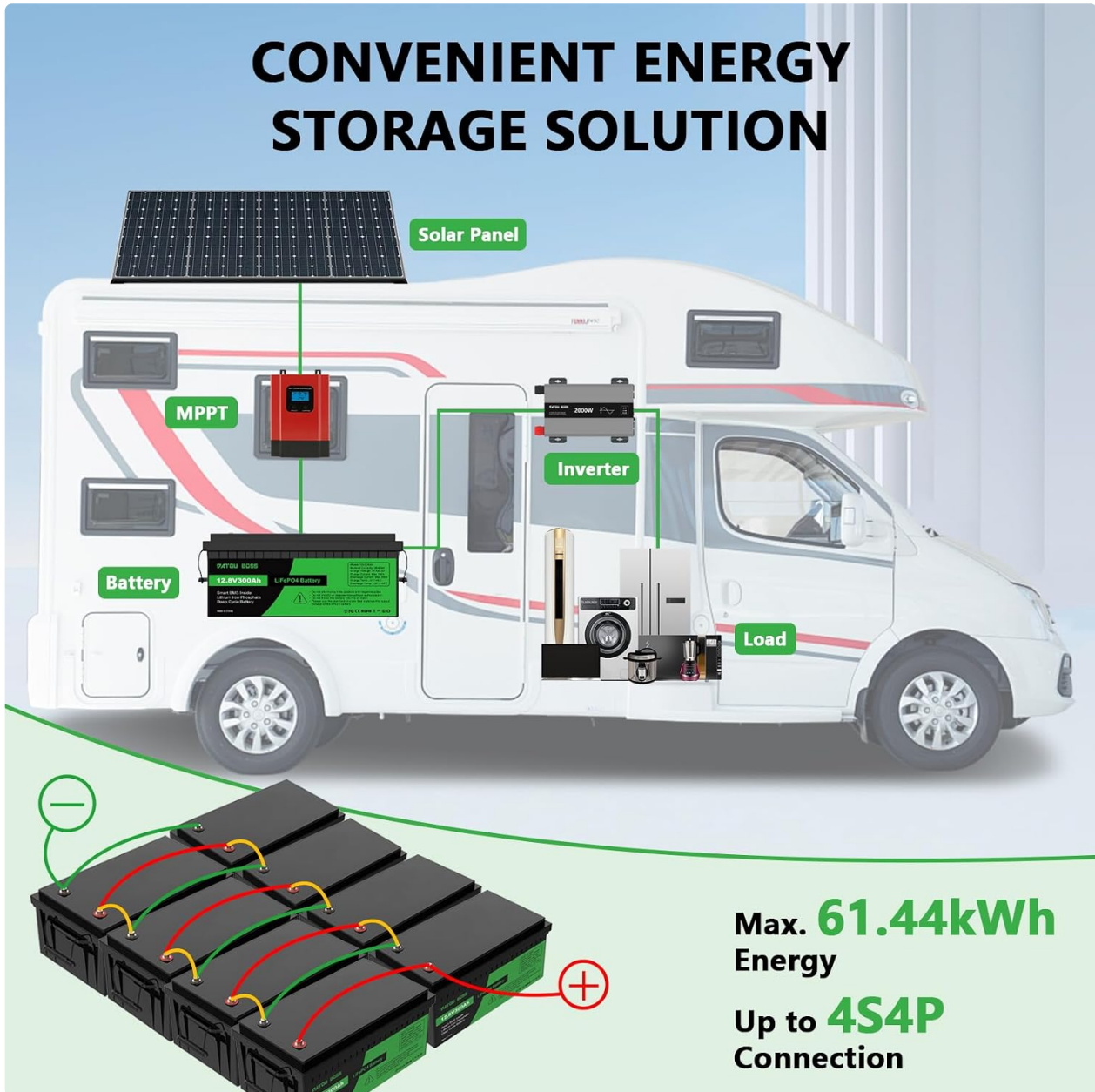


Image: Diagram showing a solar energy system setup with series and parallel battery connections.

5.3 Charging Methods

The battery can be charged using various methods. Ensure the charger matches the output voltage of the lithium battery.

3 WAY TO CHARGE

Never worry about running out of power.

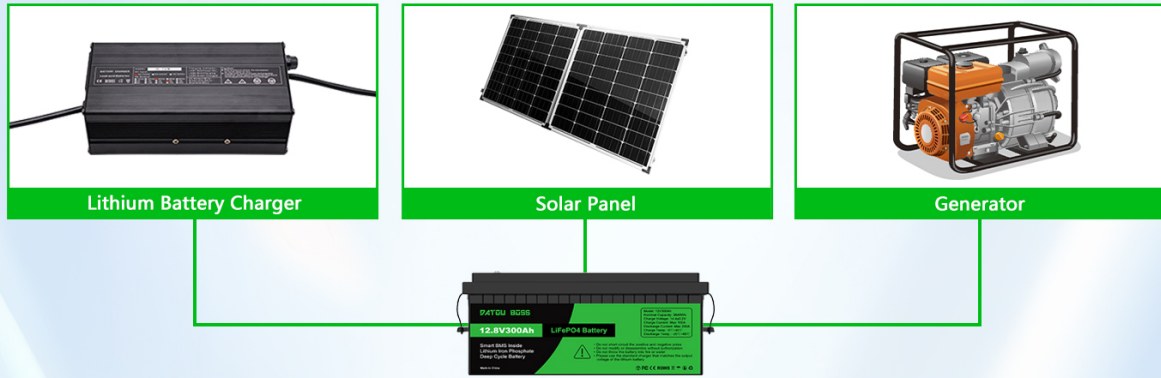


Image: Three common charging methods for the LiFePO4 battery: dedicated charger, solar panel, and generator.

6. OPERATING INSTRUCTIONS

The DATOUBOSS LiFePO4 battery is designed for ease of use. Connect it to your inverter or load using appropriate cables and terminals. The integrated BMS manages charging and discharging parameters to protect the battery.

- **Charging Voltage:** $14.4 \pm 0.2V$
- **Max Charge Current:** 100A
- **Max Discharge Current:** 200A
- **Charge Temperature:** $0^{\circ}C$ to $45^{\circ}C$
- **Discharge Temperature:** $-20^{\circ}C$ to $65^{\circ}C$

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Video: Demonstration of the DATOUBOSS LiFePO4 battery powering various appliances via an inverter, including charging a phone, boiling water, and running a fan.

7. APPLICATIONS

The DATOUBOSS 12V 300Ah LiFePO4 battery is versatile and suitable for a wide range of applications:

- Recreational Vehicles (RVs) and Caravans
- Marine applications (boats, yachts)
- Off-grid solar energy systems
- Home energy storage
- Electric scooters and golf carts
- Emergency power backup

Wide Application



Image: Examples of wide applications for the DATOUBOSS LiFePO4 battery.

8. SPECIFICATIONS

Specification	Value
Brand	DATOUBOSS
Model Number	1*12V300AH
Battery Type	Lithium Iron Phosphate (LiFePO4)
Nominal Voltage	12.8 Volts (DC)
Capacity	300 Ampere-hours (Ah)
Usable Energy	3840 Wh
Max Continuous Discharge Current	200A
Max Charge Current	100A

BMS	Integrated 200A BMS
Cycle Life	4,000 - 15,000 cycles
Dimensions (L x W x H)	49 x 26 x 22 cm
Weight	27.7 Kilograms
Operating Temperature (Charge)	0°C to 45°C
Operating Temperature (Discharge)	-20°C to 65°C
Waterproof & Dustproof Rating	IP65



Image: Detailed specifications and dimensions of the DATOUBOSS LiFePO4 battery.

9. MAINTENANCE

To ensure the longevity and optimal performance of your DATOUBOSS LiFePO4 battery, follow these maintenance guidelines:

- **Regular Inspection:** Periodically check the battery terminals for corrosion or loose connections. Clean terminals if necessary.
- **Storage:** If storing the battery for an extended period, ensure it is charged to approximately 50-70% of its capacity. Store in a cool, dry place, away from direct sunlight and extreme temperatures.
- **Avoid Deep Discharge:** While the battery supports 100% depth of discharge, avoiding frequent deep discharges can further extend its lifespan.
- **Charging:** Always use a charger specifically designed for LiFePO4 batteries to prevent damage and ensure proper charging.

10. TROUBLESHOOTING

The DATOUBOSS LiFePO4 battery is equipped with an advanced BMS to prevent most common issues. If you encounter any problems, consider the following general troubleshooting steps:

- **No Power Output:** Check all cable connections to ensure they are secure. Verify that the battery is adequately charged. The BMS may have activated a protection mode (e.g., over-discharge).
- **Charging Issues:** Ensure your charger is compatible with LiFePO4 batteries and is functioning correctly. Check the charging temperature is within the specified range (0°C to 45°C).
- **Overheating:** If the battery feels excessively hot, disconnect it immediately and allow it to cool down. Ensure proper ventilation around the battery.

For persistent issues or complex problems, please contact DATOUBOSS customer support.

11. WARRANTY AND SUPPORT

DATOUBOSS is committed to providing high-quality products and excellent customer service.

- **Warranty:** This product comes with a 5-year manufacturer's warranty. Please retain your proof of purchase for warranty claims.
- **Customer Support:** For any questions, technical assistance, or warranty inquiries, please contact our customer service team. We offer professional technical support and aim to provide quick feedback within 24 hours.
- **Mission:** DATOUBOSS is dedicated to providing accessible, sustainable, and clean energy solutions, protecting the environment, and offering reliable power for homes and businesses.

You can find more information and contact details on the official DATOUBOSS store: [DATOUBOSS Store](#)