

EconomiPower 48V 100AH Lithium LiFePO4 Battery

EconomiPower 48V 100AH LiFePO4 Battery User Manual

Model: B0DSL2YQYR

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1. SETUP AND INSTALLATION

This section provides instructions for the initial setup and connection of your EconomiPower 48V 100AH LiFePO4 Battery.

1.1 Parallel Battery Connection

For increased capacity, multiple batteries can be connected in parallel. Ensure all batteries are of the same voltage and capacity. Use the provided communication cable (RJ45) to connect the batteries for balanced voltage and parameter monitoring.

Your browser does not support the video tag.

Video: Instructions on how to connect multiple EconomiPower 51.2V 100Ah LiFePO4 batteries in parallel using a common RJ45 communication cable for balanced operation and monitoring.

Step-by-step:

1. Ensure both batteries are switched OFF.
2. Connect the yellow communication cable (RJ45) from the "Battery" port of the first battery to the "Battery" port of the second battery.
3. Connect the positive terminals of both batteries together using appropriate cables.
4. Connect the negative terminals of both batteries together using appropriate cables.
5. Set the ADS button on the first battery to position 1.
6. Power on both batteries.
7. Verify balanced voltage and other battery parameters on the built-in screen.



Image: Two EconomiPower 51.2V 100Ah LiFePO4 batteries connected in parallel, showing the communication cable and power connections. The LCD screens display battery parameters.

1.2 Inverter Connection

Connect the battery system to your inverter for power conversion and distribution.

Your browser does not support the video tag.

Video: Demonstrates how to connect the 48V 100Ah lithium battery to an inverter, including power and communication cable connections.

Step-by-step:

1. Ensure the battery and inverter are switched OFF.
2. Connect the battery positive cable to the inverter's positive terminal.
3. Connect the battery negative cable to the inverter's negative terminal.
4. Connect the communication cable from the battery's communication port (e.g., RS485A or CAN) to the corresponding communication port on the inverter.
5. Connect the loaded power strip via the load output of the inverter.

- Power on the battery, then the inverter.
- Verify that the inverter can read the battery parameters for monitoring.

Monitoring The Battery Via LCD Touch Screen

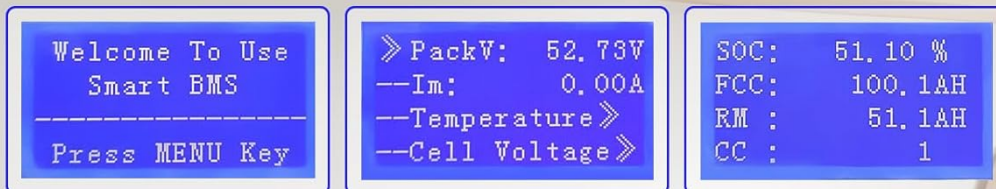


Image: A 51.2V 100Ah LiFePO4 battery connected to an inverter, which is then powering a kettle via a power strip, demonstrating 5KW energy output for daily use.

2. OPERATING INSTRUCTIONS

Understand how to monitor and utilize your EconomiPower LiFePO4 battery effectively.

2.1 Monitoring via Built-in LCD Screen

The battery features a built-in LCD screen for real-time monitoring of essential data. Use the MENU, UP, DOWN, ENTER, and ESC buttons to navigate the display.

5.12KWh Energy & Long-lasting for Daily Need



Mini Fridge(150W)

34 H



Microwave(800W)

6.4 H



TV(200W)

25.6 H



air-con(1000W)

5 H



Phone(80W)

60 H

Image: The built-in LCD screen of the EconomiPower battery showing real-time data such as pack voltage, current, temperature, and individual cell voltages. This allows for easy monitoring of the battery's state.

Key parameters displayed:

- **SOC (State of Charge):** Percentage of remaining battery capacity.
- **Voltage:** Overall battery pack voltage.
- **Temperature:** Internal battery temperature.
- **Current:** Charge or discharge current.
- **Cell Voltage:** Individual cell voltages for detailed health monitoring.

2.2 Power Output and Appliance Usage

The 5.12KWh capacity provides ample energy for various home appliances and off-grid applications. The battery supports a 5KW power output.

Max 15PCS in Parallel



Warmly Remind: The battery parallel connection require the corect ADS code for communication.Please refer to user manual.

Image: An EconomiPower 51.2V 100Ah LiFePO4 battery shown in an RV setting, illustrating its capability to power common appliances like a TV (200W for 25.6H), air conditioner (1000W for 5H), microwave (800W for 6.4H), coffee maker (800W for 6.4H), and refrigerator (65W for 78.8H).

Your browser does not support the video tag.

Video: Demonstrates the 5.12kWh energy capacity of the battery for powering various home appliances.

2.3 Charging Methods

The EconomiPower battery can be charged using multiple methods:



Image: Illustrates three charging methods for the 48V 100Ah lithium battery: AC outlet (2 hours with 58.6V charger), 1200W solar panels (5 hours), and a generator (2 hours).

- **AC Outlet:** Connect to a standard AC outlet using a compatible 58.6V charger for approximately 2 hours.
- **Solar Panels:** Utilize 1200W solar panels for charging in approximately 5 hours.
- **Generator:** A generator can charge the battery in approximately 2 hours.

3. MAINTENANCE

Proper maintenance ensures the longevity and optimal performance of your LiFePO₄ battery.

- **Regular Inspection:** Periodically check all cable connections for tightness and corrosion. Ensure the battery housing is free from damage.
- **Cleanliness:** Keep the battery and its terminals clean and free of dust and debris. Use a dry cloth for cleaning.
- **Temperature Control:** Operate and store the battery within the recommended temperature range to maximize lifespan. Avoid extreme heat or cold.
- **Charge Level:** For long-term storage, maintain the battery at approximately 50% State of Charge (SOC). Avoid storing at 0% or 100% SOC for extended periods.
- **Firmware Updates:** Check the manufacturer's website for any available firmware updates for the BMS (Battery Management System) to ensure optimal performance and safety features.

4. TROUBLESHOOTING

This section addresses common issues you might encounter with your EconomiPower LiFePO₄ battery.

Issue: Battery not charging.

Possible Solutions:

- Check all charging cable connections to ensure they are secure.
- Verify the charger output voltage and current match the battery's requirements.

- Inspect the charger for any damage or malfunction.
- Check the battery's ON/OFF switch.
- Monitor the LCD screen for any error codes or warnings.

Issue: Battery not discharging (no power output).

Possible Solutions:

- Ensure the battery is switched ON.
- Check the inverter connections and status.
- Verify the load is not exceeding the battery's or inverter's maximum output.
- Check the battery's SOC on the LCD screen; it might be too low.
- Look for any fault indicators on the battery's BMS or inverter.

Issue: Communication error with inverter.

Possible Solutions:

- Ensure the communication cable (RJ45) is securely connected at both the battery and inverter ends.
- Verify the communication protocol settings on both the battery (ADS button) and the inverter are compatible.
- Restart both the battery and the inverter.

If issues persist, refer to the detailed troubleshooting guide in the full product manual or contact customer support.

5. PRODUCT SPECIFICATIONS

Feature	Detail
Brand	EconomiPower
Model	48V 100AH Lithium LiFePO4 Battery
Battery Cell Composition	Lithium Polymer (LiFePO4)
Battery Capacity	100 Amp Hours (5.12 kWh)
Nominal Voltage	48V (51.2V)
BMS	Built-in 100A BMS with Overcharge, Over-discharge, Over-current, Short Circuit, and Over-temperature Protection
Communication	CAN & RS485 Ports, Built-in Screen
Life Cycle	8000+ cycles
Dimensions (L x W x H)	18.9 x 17.4 x 5.18 inches (3U Rack Design)
Weight	93 Pounds
Parallel Expansion	Supports up to 15 batteries in parallel (76.8KWh total capacity)

Best Battery for Home Use 5120Wh Usable energy



Image: An exploded view of the EconomiPower 48V 100Ah LiFePO₄ battery, showcasing its 16 Grade A prismatic cells and the Smart 100A BMS circuit board, which provides protection against over-temperature, overcharge, over-discharge, overcurrent, and short circuits.

6. WARRANTY AND SUPPORT

Warranty: The EconomiPower 48V 100AH LiFePO₄ Battery comes with a 5-year warranty, as specified by the manufacturer.

Customer Support: For technical assistance, troubleshooting beyond this manual, or warranty claims, please contact EconomiPower customer support. You can find contact information on the official EconomiPower website or through your purchase platform.

Visit the official [EconomiPower Store](#) for more information and support resources.

