

Power Pack LiFePO4 1S 3V 45000mAh 1S3P 3C with BMS LFP Battery

SKU / Model: Not specified

PRODUCT OVERVIEW

Specification Details Product Name Power Pack LiFePO4 1S 45000mAh Battery Pack Battery Chemistry Lithium Iron Phosphate (LiFePO4 / LFP) Nominal Voltage 3.2V Typical Maximum Charging Voltage 3.6V Rated Capacity 45000mAh / 45Ah Battery Configuration 1S3P Number of Cells 3 Assumed Cell Capacity 15000mAh per cell Nominal Energy 144Wh Specified Discharge Rate 3C Theoretical 3C Discharge Current 135A BMS Included; current rating to be confirmed Charging Method CC/CV using a compatible LiFePO4 charger Dimensions To be confirmed based on cell format and enclosure Weight To be confirmed based on cell format and enclosure Connector Type To be confirmed Cable Length Customizable, subject to requirements Battery Type Rechargeable Brand Lion Battery

TECHNICAL SPECIFICATIONS

Nominal Voltage: 3V
Capacity: 45000mAh
Energy: 144Wh
Chemistry: LFP
Maximum / BMS Current: 135A
Charging Voltage: 3.6V
Product Category: 1 Cell 3V LiFePo4 (LFP) Battery Pack (3.2V- 3.7V)

PRODUCT DESCRIPTION

Power Pack LiFePO4 1S 3V 45000mAh 1S3P 3C with BMS LFP Battery Pack The Power Pack LiFePO4 1S 3V 45000mAh 1S3P 3C with BMS is a rechargeable Lithium Iron Phosphate (LFP) battery pack designed for compatible low-voltage electronic equipment, industrial devices, and custom power applications. It features a 1S3P configuration, with three 15000mAh cells connected in parallel to provide a total capacity of 45000mAh (45Ah). With a nominal voltage of 3.2V and approximately 144Wh of energy, this battery pack offers high capacity in a single-series configuration. The included Battery Management System (BMS) helps manage battery operation and provides protection according to the selected BMS model. Lion Battery offers lithium battery packs for custom applications, with connector, cable, and packaging options subject to confirmation. Key Features Battery Chemistry: LiFePO4 (Lithium Iron Phosphate) Nominal Voltage: 3.2V Capacity: 45000mAh (45Ah) Configuration: 1S3P Cell Arrangement: 3 cells connected in parallel, assuming 15000mAh cells Energy Capacity: Approximately 144Wh Specified Discharge Rate: 3C Theoretical 3C Discharge Current: 135A BMS: Included; current rating to be confirmed Rechargeable Design: Suitable for compatible low-voltage equipment Customization: Connector and cable options subject to requirements Battery Configuration The 1S3P configuration means three cells are connected in parallel. This increases the total capacity while maintaining the nominal voltage of a single LiFePO4 cell. Configuration

LION BATTERY

PRODUCT DATASHEET

Detail Value Series Connection 1S Parallel Connection 3P Total Cell Count 3 Capacity per Cell 15000mAh (assumed) Total Pack Capacity 45000mAh / 45Ah Nominal Voltage 3.2V Typical Maximum Charging Voltage 3.6V Total Energy 144Wh 3C Discharge Configuration The theoretical discharge current at 3C is calculated as follows: $45\text{Ah} \times 3\text{C} = 135\text{A}$ Parameter Value Battery Capacity 45Ah Specified Discharge Rate 3C Theoretical Discharge Current 135A Nominal Voltage 3.2V Theoretical Power at 3.2V and 135A 432W Important: The calculated 135A is not a guarantee of continuous output. Actual safe discharge current depends on the cells' discharge ratings, BMS current limit, wiring, connectors, and thermal conditions. Confirm that every component supports the required current before use. BMS Protection This battery pack includes a Battery Management System (BMS). Depending on the selected model, protection functions may include: Overcharge protection Over-discharge protection Overcurrent protection Short-circuit protection Battery voltage monitoring Note: Confirm the BMS current rating and exact protection features before connecting high-current equipment. Charging Requirements Use a charger designed specifically for LiFePO4 battery chemistry. The typical maximum charging voltage for this 1S pack is 3.6V. Do not use a standard 4.2V single-cell lithium-ion/NMC charger. Confirm the recommended charging current with the supplier. Check connector polarity before connecting the charger or load. Applications This 3.2V 45Ah LiFePO4 battery pack may be suitable for compatible applications such as: Low-voltage electronic equipment Industrial monitoring systems Embedded electronic devices Custom portable power projects Backup power for compatible equipment Battery-powered prototypes and DIY projects Specialized equipment requiring a single-series LiFePO4 battery Compatibility note: Verify the equipment's operating voltage and peak current requirements before selecting this battery pack. Advantages Rechargeable LiFePO4 battery chemistry High 45Ah capacity in a 1S configuration Approximately 144Wh nominal energy BMS included Suitable for compatible 3.2V nominal applications Custom connector and cable options can be discussed Designed for specialized low-voltage power applications Package Includes 1 ×Power Pack LiFePO4 1S3P 45000mAh battery pack 1 ×BMS Output wires and connector according to the confirmed configuration