

Power Pack LiFePO4 12S 36V 60000mAh 12S9P 3C Discharge LFP Batt

SKU / Model: Not specified

PRODUCT OVERVIEW

Specification Details Product Name Power Pack LiFePO4 12S 36V 60000mAh 12S9P 3C Discharge LFP Battery Pack Battery Chemistry LiFePO4 (Lithium Iron Phosphate) Battery Type Rechargeable LFP Battery Configuration 12S9P Number of Cells 108 Cells Cell/Parallel Group Capacity Approx. 6.67Ah per cell/group for 60Ah total Nominal Cell Voltage 3.2V Nominal Pack Voltage 38.4V Maximum Charge Voltage 43.2V Pack Capacity 60Ah / 60000mAh Energy Capacity Approx. 2304Wh Discharge Rating 3C Theoretical 3C Current Up to 180A BMS 12S LiFePO4 BMS; current rating according to application Dimensions Approx. 150 ×360 ×70 mm* Weight Approx. 7.0 7.6 kg* Connector 5mm DC Jack / 2-Pin JST / Custom option Wire Length Approx. 5cm Wire Customized length available

TECHNICAL SPECIFICATIONS

Nominal Voltage: 36V
Capacity: 60000mAh
Energy: 2304Wh
Chemistry: LFP
Maximum / BMS Current: 180A
Charging Voltage: 43.2V
Product Category: 12 Cell 36 LiFePo4 (LFP) Battery Pack (38.4V-43.8V)

PRODUCT DESCRIPTION

Power Pack LiFePO4 12S 36V 60000mAh 12S9P 3C Discharge LFP Battery Pack The Power Pack LiFePO4 12S 36V 60000mAh 12S9P 3C Discharge LFP Battery Pack is a high-capacity rechargeable lithium iron phosphate battery designed for applications requiring high energy storage, reliable performance, and long cycle life. This battery pack uses a 12S9P configuration and is designed for a nominal voltage class of 36V. LiFePO4 chemistry provides excellent thermal stability, safety, and long service life compared with many conventional lithium-ion chemistries. With a 60Ah capacity and 3C discharge specification, the pack provides approximately 2.304kWh of nominal energy and a theoretical 3C current of up to 180A, subject to the actual cell, BMS, wiring, connector, and thermal design. Configuration note: A 12S9P pack rated at exactly 60Ah requires approximately 6.67Ah per cell in each parallel group. If 6000mAh cells are used, a 12S9P configuration would instead provide approximately 54Ah. Please confirm the actual cell capacity before manufacturing. Key Features LiFePO4 / LFP rechargeable battery chemistry 12S9P battery configuration 36V-class nominal battery pack 60Ah specified capacity Approximately 2304Wh nominal energy 3C discharge-rated configuration Theoretical 3C current: up to 180A High thermal and chemical stability Long cycle-life chemistry Suitable for custom battery pack applications Custom connector, wire length and enclosure options available Suitable for EV, solar, backup and industrial applications 12S9P

LION BATTERY

PRODUCT DATASHEET

Battery Configuration The pack consists of: 12 cells/groups connected in series (12S) 9 cells connected in parallel in each group (9P) Total cell count: $12 \times 9 = 108$ cells Nominal voltage: $12 \times 3.2V = 38.4V$ Maximum charging voltage: $12 \times 3.6V = 43.2V$ For a 60Ah pack: 60Ah $\div 9P = 6.67Ah$ per cell Therefore, the actual cell capacity should be selected accordingly.

3C Discharge Configuration A 60Ah battery with a 3C discharge specification has a theoretical maximum discharge current of: $60Ah \times 3C = 180A$ The actual usable continuous current depends on the selected LFP cells, BMS rating, nickel/busbar design, cables, connectors, temperature and cooling. BMS Protection A suitable 12S LiFePO4 BMS can provide protection against: Overcharge Over-discharge Over-current Short circuit Cell imbalance Excessive temperature Low-temperature charging, where supported Individual cell voltage monitoring The BMS current rating should be selected according to the actual load requirements rather than only the theoretical 3C cell rating. Connector & Wire Standard connector options available 5mm DC Jack / 2-Pin JST option Approx. 5cm standard wire length Custom wire length available High-current terminals/connectors can be provided for high-power applications Applications This 36V-class LiFePO4 battery pack can be customized for: Electric vehicles E-bike and electric scooter systems Industrial equipment Robotics and automation Solar energy storage UPS and backup power Portable power systems DC power systems AGV/AMR applications Custom OEM battery packs Prototype and engineering projects Advantages High energy storage capacity Excellent thermal stability Long service life Low maintenance Rechargeable design Suitable for high-current applications Flexible custom pack configuration LiFePO4 chemistry offers strong safety characteristics Suitable for OEM and bulk battery requirements Package Includes 1 $\times$ 12S LiFePO4 Battery Pack 12S LiFePO4 BMS Output wires/connectors as selected Insulation and pack protection materials