

Power Pack LiFePO4 12S 36V 18000mAh 12S3P 3C Discharge LFP Batt

SKU / Model: Not specified

PRODUCT OVERVIEW

Specification Details Product Name Power Pack LiFePO4 12S 36V 18000mAh 12S3P 3C Discharge LFP Battery Pack Battery Chemistry LiFePO4 (Lithium Iron Phosphate) Cell Type LFP Configuration 12S3P Number of Cells 36 Cells Nominal Cell Voltage 3.2V Nominal Pack Voltage 38.4V Commercial Voltage Class 36V Maximum Charge Voltage 43.2V Pack Capacity 18000mAh / 18Ah Cell Capacity 6000mAh Energy Capacity Approx. 691.2Wh Cell Discharge Rating 3C Theoretical 3C Current 54A BMS 12S LiFePO4 BMS, as required Battery Type Rechargeable Dimensions / Weight Approx. 150 ×120 ×70 mm / 2.5 2.8 kg\* Connector Customised according to application Wire Length Customised Wire Suitable gauge according to load requirement

TECHNICAL SPECIFICATIONS

|                                                                       |
|-----------------------------------------------------------------------|
| Nominal Voltage: 36V                                                  |
| Capacity: 18000mAh                                                    |
| Energy: 691.2Wh                                                       |
| Chemistry: LFP                                                        |
| Maximum / BMS Current: 54A                                            |
| Charging Voltage: 43.2V                                               |
| Product Category: 12 Cell 36 LiFePo4 (LFP) Battery Pack (38.4V-43.8V) |

PRODUCT DESCRIPTION

Power Pack LiFePO4 12S 36V 18000mAh 12S3P 3C Discharge LFP Battery Pack The Power Pack LiFePO4 12S 36V 18000mAh 12S3P 3C Discharge LFP Battery Pack is a rechargeable lithium iron phosphate battery designed for 36V-class applications requiring dependable energy storage and high discharge capability. This battery uses a 12S3P configuration, with 12 cells/groups connected in series and 3 cells in parallel per group. Using 6000mAh LFP cells, the pack provides 18Ah capacity, 38.4V nominal voltage, and approximately 691.2Wh energy capacity. With a 3C discharge rating, the theoretical cell-based discharge current is 54A. Key Features Battery Chemistry: LiFePO4 / LFP Configuration: 12S3P Commercial Voltage Class: 36V Nominal Voltage: 38.4V Capacity: 18000mAh / 18Ah Maximum Charge Voltage: 43.2V Cell Capacity: 6000mAh Total Cells: 36 Discharge Rating: 3C Theoretical 3C Current: 54A Rechargeable LFP battery technology Suitable for custom, industrial and OEM battery applications 12S3P Battery Configuration The battery is built in a 12S3P configuration: 12 cells/groups in series 3 cells in parallel per series group Individual cell capacity: 6Ah Total cells: 12 ×3 = 36 cells Nominal cell voltage: 3.2V Pack nominal voltage: 12 ×3.2V = 38.4V Pack capacity: 6Ah ×3 = 18Ah Energy: 38.4V ×18Ah = 691.2Wh 3C Discharge Capability With an 18Ah pack capacity and 3C-rated cells: 18Ah ×3C = 54A theoretical current The actual continuous output depends on the selected cells, BMS rating, wiring, connectors, temperature and thermal management. BMS Protection A suitable 12S LiFePO4 BMS can provide:

## PRODUCT DATASHEET

Overcharge protection Over-discharge protection Over-current protection Short-circuit protection Cell balancing Cell voltage monitoring Temperature protection when supported The BMS current rating should be selected according to the actual continuous and peak load requirements. Connector & Wire The connector and cable can be customised according to the application. Possible connector options include: XT30 XT60 XT90 DC connectors JST connectors Custom power terminals The cable gauge should be selected according to the required current and cable length. Applications 36V-Class Power Systems Electric Mobility Equipment Robotics Small EV Systems Industrial Equipment Portable Power Systems DC Backup Power Custom Battery Projects OEM/ODM Battery Packs DIY LiFePO4 Applications Advantages LiFePO4 chemistry for stable and reliable operation 12S3P configuration 18Ah capacity Approx. 691.2Wh energy capacity 3C discharge-rated cell configuration 38.4V nominal voltage Rechargeable battery design Custom BMS and connector options Suitable for OEM and custom battery applications Package Includes 1 ×12S3P LiFePO4 Battery Pack 36 ×LFP cells 12S LiFePO4 BMS, as configured Cell interconnections Insulation/protection materials Output wires and connector as specified Important Charging Information This 12S LiFePO4 battery requires a compatible charger with a maximum charging voltage of 43.2V. Use a dedicated 12S LiFePO4 43.2V charger. Do not use a 12S NMC 50.4V charger with this LFP battery.