

Power Pack 11.1V 8000mAh 3S4P 1C BMS 10A Lithium-Ion Rechargeable

SKU / Model: Not specified

PRODUCT OVERVIEW

Specification Details Product Name Power Pack 11.1V 8000mAh Lithium-Ion Battery Pack Battery Chemistry NMC Lithium-Ion Cell Type 18650 Configuration 3S4P Total Number of Cells 12 Cells Dimensions / Weight Approx. 44 ×81 ×135 mm / Approx. 0.56kg Cell Capacity 2000mAh Nominal Cell Voltage 3.7V Nominal Pack Voltage 11.1V Maximum Charge Voltage 12.6V Pack Capacity 8000mAh (8Ah) Energy Capacity Approx. 88.8Wh Cell Discharge Rating 1C Theoretical 1C Current 8A BMS 3S 10A Battery Type Rechargeable Charging Method CC/CV Recommended Charger 12.6V Li-Ion Charger Connector 5mm DC Jack / 2-Pin JST 54mm Wire Length 5cm Wire Customised Length Available Application Robotics, RC, Electronics, Portable Equipment & Custom Projects

TECHNICAL SPECIFICATIONS

Nominal Voltage: 11.1V
Capacity: 8000mAh
Energy: 88.8Wh
Chemistry: Lithium-Ion
Maximum / BMS Current: 10A
Charging Voltage: 12.6V
Product Category: 3 CELL LI-ON BATTERY PACK (11.1V-12.6V)

PRODUCT DESCRIPTION

Power Pack 11.1V 8000mAh 3S4P 1C BMS 10A Lithium-Ion Rechargeable NMC Battery Pack The Power Pack 11.1V 8000mAh 3S4P 1C BMS 10A Lithium-Ion Rechargeable NMC Battery Pack is a compact and reliable rechargeable battery solution designed for robotics, RC vehicles, portable electronics, industrial equipment, backup power, LED systems, CCTV equipment, and custom electronic applications. This battery pack uses NMC lithium-ion 18650 cells arranged in a 3S4P configuration, providing 11.1V nominal voltage and 8000mAh (8Ah) capacity. The pack is equipped with a 3S 10A BMS to provide protection during charging and discharging. With approximately 88.8Wh of energy capacity, this battery pack is suitable for equipment requiring a higher-capacity 11.1V rechargeable power source. 3S4P Battery Configuration The battery pack uses 12 individual 18650 cells arranged in a 3S4P configuration. 3 cells/groups connected in series 4 cells connected in parallel in each group Total cells: 3 ×4 = 12 cells Cell capacity: 2000mAh Pack capacity: 4 ×2000mAh = 8000mAh Nominal voltage: 3 ×3.7V = 11.1V Maximum charging voltage: 3 ×4.2V = 12.6V Nominal energy: 11.1V ×8Ah = 88.8Wh The 3S4P configuration provides higher capacity than a 3S3P 6000mAh battery while maintaining the same 11.1V nominal voltage. 10A BMS Protection The battery pack is equipped with a 3S 10A BMS designed to help protect the battery during normal charging and discharging. Depending on the BMS design, protection functions may include: Overcharge protection Over-discharge protection Over-current protection Short-circuit protection Cell voltage

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PRODUCT DATASHEET

monitoring Battery protection during charging and discharging The 10A BMS rating should not be interpreted as the same as the cell's 1C rating. The actual safe operating current depends on the cells, BMS, wiring, connectors and application. 1C Discharge Rating The battery uses cells specified at approximately 1C discharge. For an 8Ah battery: $8\text{Ah} \times 1\text{C} = 8\text{A}$ theoretical current The BMS is rated at 10A, but the battery should be operated within the limits of the complete pack design and cell manufacturer's specifications. 12.6V

Charging This is a 3S NMC lithium-ion battery pack, therefore the maximum charging voltage is 12.6V. Nominal Voltage: 11.1V Maximum Charge Voltage: 12.6V Use a suitable 12.6V CC/CV lithium-ion charger. The charger current should be selected according to the battery cells, BMS and required charging time. Compact Battery Design The 3S4P configuration provides 8Ah capacity in a relatively compact battery pack. The pack can be supplied with different connectors, wire lengths and physical dimensions according to the application. The standard configuration includes a 5mm DC jack / 2-pin JST 54mm connector arrangement and approximately 5cm wire length, with customized wiring available. Suitable Applications This 11.1V 8000mAh battery pack can be used in: RC Vehicles Robotics CCTV Equipment LED Lighting Systems Portable Electronics Industrial Instruments GPS & Tracking Equipment Communication Equipment Backup Power Applications DIY Electronics Projects Custom Electronic Equipment Portable Machines

Key Features 11.1V nominal voltage 8000mAh / 8Ah capacity 3S4P configuration NMC lithium-ion chemistry 12 $\times$ 18650 cells 3S 10A BMS Approximately 88.8Wh energy Rechargeable battery design Compact battery-pack construction 12.6V maximum charging voltage 5mm DC Jack / 2-Pin JST option Customized wire length available Suitable for OEM and custom applications

Why Choose This Battery Pack? The Power Pack 11.1V 8000mAh provides a useful balance between voltage, capacity and compact size. Compared with an 11.1V 6000mAh battery, the 8000mAh version provides approximately 33% higher capacity, allowing more stored energy for applications that require longer operating time. The battery can also be customized according to the customer's requirements for dimensions, connector, wire length, BMS rating and cell configuration. Custom Battery Pack Manufacturing LionBattery can manufacture custom lithium-ion battery packs according to your equipment requirements. Customization options include: Battery voltage Battery capacity Cell configuration Battery dimensions BMS current rating Connector type Wire gauge Wire length Charging connector Discharge connector Battery enclosure Pack shape and layout