

Power Pack 7.4V 4000mAh 2S2P 1C BMS 2A Lithium-Ion Rechargeable

SKU / Model: Not specified

PRODUCT OVERVIEW

Specification Details Product Name Power Pack 7.4V 4000mAh Lithium-Ion Battery Pack Battery Chemistry NMC Lithium-Ion Cell Type 18650 Configuration 2S2P Dimensions / Weight Approx. 34 ×43 ×135 mm / Approx. 200g* Cell Capacity 2000mAh Number of Cells 4 Nominal Cell Voltage 3.7V Nominal Pack Voltage 7.4V Maximum Charge Voltage 8.4V Pack Capacity 4000mAh (4Ah) Energy Capacity Approx. 29.6Wh Cell Discharge Rating 1C Theoretical 1C Current 4A BMS 2S 2A Battery Type Rechargeable Connector 5mm DC Jack / 2-Pin JST 54mm Wire Length 5cm Wire Customised Length Available

TECHNICAL SPECIFICATIONS

Nominal Voltage: 7.4V
Capacity: 4000mAh
Energy: 29.6Wh
Chemistry: Lithium-Ion
Maximum / BMS Current: 2A
Charging Voltage: 8.4V
Product Category: 2 CELL LI-ON BATTERY PACK (7.4V-8.4V)

PRODUCT DESCRIPTION

Power Pack 7.4V 4000mAh 2S2P 1C BMS 2A Lithium-Ion Rechargeable NMC Battery Pack The Power Pack 7.4V 4000mAh 2S2P 1C BMS 2A Lithium-Ion Rechargeable NMC Battery Pack is a compact and reliable rechargeable battery solution designed for applications requiring a 7.4V nominal power supply with good capacity and runtime. This battery pack uses 18650 NMC lithium-ion cells arranged in a 2S2P configuration, consisting of 2 cells connected in series and 2 cells connected in parallel in each group. The pack provides 4000mAh (4Ah) capacity and approximately 29.6Wh of energy. An integrated 2S 2A BMS helps protect the battery during charging and discharging by providing protection against overcharge, over-discharge, over-current and short-circuit conditions. Key Features Battery Chemistry: NMC Lithium-Ion Cell Type: 18650 Configuration: 2S2P Nominal Voltage: 7.4V Maximum Charge Voltage: 8.4V Capacity: 4000mAh / 4Ah Energy Capacity: Approx. 29.6Wh Total Cells: 4 Cell Capacity: 2000mAh Cell Discharge Rating: 1C Theoretical 1C Current: 4A BMS: 2S 2A Rechargeable lithium-ion battery Compact battery design Suitable for portable and electronic applications Custom wire and connector options available 2S2P Battery Configuration The battery pack consists of 4 ×18650 NMC lithium-ion cells arranged in a 2S2P configuration. 2S: 2 cell groups connected in series 2P: 2 cells connected in parallel per group Total Cells: 2 ×2 = 4 cells Cell Capacity: 2000mAh Pack Capacity: 2 ×2000mAh = 4000mAh (4Ah) Nominal Voltage: 2 ×3.7V = 7.4V Maximum Charge Voltage: 2 ×4.2V = 8.4V Energy Capacity: 7.4V ×4Ah = 29.6Wh 1C Lithium-Ion Configuration The pack capacity is 4Ah and the cell discharge rating is 1C.

LION BATTERY

PRODUCT DATASHEET

Theoretical 1C Current = 4Ah $\times$ 1C = 4A The 2A BMS rating is the BMS current specification and should not automatically be considered the cell's continuous discharge capability. Actual usable current depends on the BMS, cells, wiring, connectors, interconnections and thermal conditions. BMS Protection The integrated 2S 2A BMS helps protect the battery against: Overcharge Over-discharge Over-current Short circuit Abnormal cell voltage conditions Connector & Wire Standard configuration: Connector: 5mm DC Jack / 2-Pin JST JST Cable Length: 54mm Standard Wire Length: 5cm Custom Wire Length: Available Custom connectors and wire lengths can be supplied according to application requirements. Applications This 7.4V 4Ah battery pack is suitable for: Portable electronic equipment Robotics CCTV and security equipment LED lighting IoT devices Portable instruments DIY electronics Small backup power systems Monitoring equipment Custom OEM equipment Portable power applications Advantages 4000mAh / 4Ah capacity 2S2P configuration Approx. 29.6Wh energy capacity 7.4V nominal voltage 8.4V maximum charging voltage Integrated 2S 2A BMS Rechargeable NMC lithium-ion technology Compact and practical design Custom connector and wire options available Suitable for OEM and customized applications Package Includes 1 $\times$ 7.4V 4000mAh 2S2P NMC Lithium-Ion Battery Pack 1 $\times$ 2S 2A BMS 5mm DC Jack / 2-Pin JST connector 5cm standard wire