

Power Pack 11.1V 18000mAh 3S9P 1C BMS 20A Lithium-Ion Rechargeable

SKU / Model: Not specified

PRODUCT OVERVIEW

Specification Details Product Name Power Pack 11.1V 18000mAh Lithium-Ion Battery Pack  
Battery Chemistry NMC Lithium-Ion Cell Type 18650 Configuration 3S9P Dimensions / Weight  
Approx. 44 ×180 ×135 mm / 1.27 kg Cell Capacity 2000mAh Number of Cells 27 Nominal Cell  
Voltage 3.7V Nominal Pack Voltage 11.1V Maximum Charge Voltage 12.6V Pack Capacity 18000mAh  
(18Ah) Energy Capacity Approx. 199.8Wh Cell Discharge Rating 1C Theoretical 1C Current 18A  
BMS 3S 20A Battery Type Rechargeable Connector 5mm DC Jack / 2-Pin JST 54mm Wire Length 5cm  
Wire Customised Length Available

TECHNICAL SPECIFICATIONS

|                                                           |
|-----------------------------------------------------------|
| Nominal Voltage: 11.1V                                    |
| Capacity: 18000mAh                                        |
| Energy: 199.8Wh                                           |
| Chemistry: Lithium-Ion                                    |
| Maximum / BMS Current: 20A                                |
| Charging Voltage: 12.6V                                   |
| Product Category: 3 CELL LI-ON BATTERY PACK (11.1V-12.6V) |

PRODUCT DESCRIPTION

Power Pack 11.1V 18000mAh 3S9P 1C BMS 20A Lithium-Ion Rechargeable NMC Battery Pack The  
Power Pack 11.1V 18000mAh 3S9P 1C BMS 20A Lithium-Ion Rechargeable NMC Battery Pack is a  
high-capacity rechargeable battery solution designed for applications that require reliable  
11.1V power with extended operating time. Built using 18650 NMC lithium-ion cells, this  
battery pack provides a large 18Ah capacity in a 3S9P configuration. The battery pack  
consists of 27 individual 18650 cells, arranged as 3 cells in series and 9 cells in  
parallel. This configuration provides a nominal voltage of 11.1V and a maximum charging  
voltage of 12.6V, with an energy capacity of approximately 199.8Wh. A 3S 20A BMS (Battery  
Management System) is integrated into the pack to provide essential battery protection and  
monitoring. The BMS helps protect against overcharge, over-discharge, over-current and  
short-circuit conditions. With its high capacity and rechargeable design, this battery pack  
is suitable for portable electronics, robotics, CCTV systems, lighting equipment, backup  
power, IoT devices, industrial equipment and custom OEM applications. Key Features Battery  
Chemistry: NMC Lithium-Ion Cell Type: 18650 Configuration: 3S9P Nominal Voltage: 11.1V  
Maximum Charge Voltage: 12.6V Capacity: 18000mAh / 18Ah Energy Capacity: Approx. 199.8Wh  
Total Cells: 27 Cell Capacity: 2000mAh Cell Discharge Rating: 1C Theoretical 1C Current: 18A  
BMS: 3S 20A Rechargeable lithium-ion battery High-capacity design for longer runtime  
Suitable for custom applications Custom wire length and connector options available 3S9P  
Battery Configuration The battery pack uses a 3S9P configuration consisting of 27 ×18650

# LION BATTERY

## PRODUCT DATASHEET

NMC cells. 3S: Three cell groups connected in series 9P: Nine cells connected in parallel in each group Total Cells:  $3 \times 9 = 27$  cells Cell Capacity: 2000mAh Parallel Group Capacity:  $9 \times 2000\text{mAh} = 18000\text{mAh}$  Nominal Pack Voltage:  $3 \times 3.7\text{V} = 11.1\text{V}$  Maximum Charge Voltage:  $3 \times 4.2\text{V} = 12.6\text{V}$  Pack Energy:  $11.1\text{V} \times 18\text{Ah} = 199.8\text{Wh}$  1C Lithium-Ion Configuration The battery pack has a capacity of 18Ah and the cells are rated at 1C. Theoretical 1C Current:  $18\text{Ah} \times 1\text{C} = 18\text{A}$  The 20A BMS rating should not be considered the same as the cell's continuous discharge capability. Actual safe operating current depends on the cells, BMS, nickel strip/interconnections, wiring, connectors and thermal management. BMS Protection The integrated 3S 20A BMS helps protect the battery pack from common operating faults, including: Overcharge protection Over-discharge protection Over-current protection Short-circuit protection Cell voltage monitoring Battery safety management The BMS helps improve the safety and reliability of the battery during charging and discharging. Connector & Wire The standard battery pack can be supplied with: 5mm DC Jack 2-Pin JST connector JST Cable Length: 54mm Standard Wire Length: 5cm Custom Wire Length: Available Connector and cable specifications can be customized according to the customer's equipment and application requirements. Applications The 11.1V 18Ah battery pack is suitable for a wide range of applications, including: Portable electronic equipment Robotics CCTV and security systems LED lighting systems IoT equipment Portable instruments Industrial electronics Backup power systems Monitoring equipment Communication equipment DIY electronics projects Custom OEM equipment Portable power applications Advantages 18Ah high-capacity battery pack 3S9P configuration provides increased capacity Approx. 199.8Wh energy Rechargeable NMC lithium-ion technology Integrated 3S 20A BMS 11.1V nominal voltage 12.6V maximum charging voltage Suitable for longer-runtime applications Custom connectors and wire lengths available Suitable for OEM and customized battery requirements Package Includes 1  $\times$  11.1V 18000mAh 3S9P NMC Lithium-Ion Battery Pack 1  $\times$  3S 20A BMS 5mm DC Jack / 2-Pin JST connector 5cm standard wire