

BAK 6S 22.2V 45000mAh (45Ah) Lithium-Ion Battery Pack | 6S9P 3C Ultra High Capacity

SKU / Model: Not specified

PRODUCT OVERVIEW

Specification Details Product Type Rechargeable Lithium-Ion Battery Pack Brand BAK Battery Chemistry NMC Lithium-Ion Cell Type 21700 Cylindrical Lithium-Ion Cell Capacity 3.7V 5000mAh Cell Discharge Rating 3C Configuration 6S9P Total Number of Cells 54 Nominal Voltage 22.2V Maximum Charge Voltage 25.2V Nominal Capacity 45Ah Capacity 45,000mAh Nominal Energy Approx. 999Wh / 0.999kWh Charging Method CC/CV Recommended Charger 25.2V Lithium-Ion Charger BMS Dimension/weight JBD HARDWARE BMS 81*203*145mm / 3.78kg Protection Overcharge, Over-discharge, Over-current, Short Circuit & Temperature Protection* Output Connector Customizable Wire Customizable according to current requirement Pack Construction Spot-Welded Battery Pack Application Industrial, Robotics, Mobility & High-Power Applications

TECHNICAL SPECIFICATIONS

Nominal Voltage: 22.2V
Capacity: 45000mAh
Energy: 999Wh
Chemistry: Lithium-Ion
Charging Voltage: 25.2V
Product Category: 6 Cell 24V Li-Ion Battery Pack (22.2V~25.2V)

PRODUCT DESCRIPTION

BAK 6S 22.2V 45000mAh (45Ah) Lithium-Ion Battery Pack | 6S9P 3C Ultra High Capacity Rechargeable Battery The BAK 6S 22.2V 45000mAh (45Ah) 6S9P 3C Ultra High Capacity Lithium-Ion Battery Pack is a high-capacity NMC Lithium-Ion rechargeable battery pack designed for applications requiring a compact 22.2V-class power source with high energy capacity and strong discharge performance. This battery pack uses BAK 3.7V 5000mAh 21700 lithium-ion cells arranged in a 6S9P configuration, providing 22.2V nominal voltage, 45Ah capacity, and approximately 999Wh (0.999kWh) nominal energy. The 3C-rated cell configuration makes this pack suitable for high-power applications. Actual continuous and peak discharge current depends on the selected BMS, cell specifications, interconnections, wiring, connectors, and thermal management. Key Features Brand: BAK Battery Chemistry: NMC Lithium-Ion Configuration: 6S9P Nominal Voltage: 22.2V Maximum Charging Voltage: 25.2V Capacity: 45Ah / 45,000mAh Cell Capacity: 5000mAh Cell Size: 21700 Cell Rating: 3C Total Cells: 54 cells Nominal Energy: Approx. 999Wh / 0.999kWh Ultra-high-capacity rechargeable battery Suitable for high-power applications Custom BMS options available Custom wires and connectors available Suitable for OEM and customized battery requirements 6S9P Battery Configuration The battery pack consists of 6 series groups, with 9 cells connected in parallel in each group. 6S ×9P = 54 cells Using 3.7V 5000mAh cells: Total cells: 6 ×9 = 54

LION BATTERY

PRODUCT DATASHEET

cells Nominal voltage: $6 \times 3.7V = 22.2V$ Maximum charging voltage: $6 \times 4.2V = 25.2V$ Parallel capacity: $9 \times 5Ah = 45Ah$ Nominal energy: $22.2V \times 45Ah = 999Wh$ Total energy: Approximately 0.999kWh 3C Lithium-Ion Configuration The cells are specified as 3C-rated. The complete battery pack's actual safe discharge capability is determined by the BMS and overall pack design rather than the cell C-rating alone. The final current capability depends on: BMS continuous and peak current rating Cell discharge specifications Nickel/copper interconnection design Wire gauge Connector rating Thermal management Operating temperature BMS Protection A suitable 6S NMC BMS can provide: Overcharge protection Over-discharge protection Over-current protection Short-circuit protection Over-temperature protection Cell voltage monitoring Cell balancing Charging and discharging control A Smart BMS can also be selected with Bluetooth, UART, RS485 or other communication options depending on the application. Applications The 22.2V 45Ah lithium-ion battery pack is suitable for: Robotics AGV/AMR systems Electric mobility equipment Industrial equipment Portable power systems Motorized equipment Backup power applications Custom electronic equipment High-capacity DC power applications OEM battery systems Advantages 45Ah ultra-high capacity Approximately 999Wh nominal energy 6S9P configuration 3C-rated cell configuration BAK 21700 lithium-ion cells High-energy rechargeable battery solution Custom BMS options Custom connectors and wiring Suitable for OEM and bulk requirements Package Includes 1 $\times$ BAK 6S9P 22.2V 45Ah Lithium-Ion Battery Pack BMS as specified/configured Output wires and connector as specified Battery insulation and protective packaging Important Charging Information For this 6S NMC battery pack, use a compatible 25.2V CC/CV Lithium-Ion battery charger. Do not use a charger designed for a different battery voltage or chemistry.