

BAK 10S 36V 50000mAh (50Ah) 10S10P 3C Lithium-Ion Rechargeable Battery Pack

SKU / Model: Not specified

PRODUCT OVERVIEW

Specification Details Cell Brand BAK Battery Chemistry Lithium-Ion / NMC Cell Type 21700 Configuration 10S10P Total Cells 100 Nominal Voltage 36V Maximum Charge Voltage 42V Capacity 50000mAh (50Ah) Cell Capacity 5000mAh Nominal Energy Approx. 1800Wh (1.8kWh) Cell Discharge Rating Up to 3C* BMS JBD HARDWARE BMS BMS Type 10S NMC Connector Custom / As Required Dimension/weight 125*225*145mm / 7kg Applications E-Bike, EV, Scooter, ESS & Industrial

TECHNICAL SPECIFICATIONS

Nominal Voltage: 36V
Capacity: 50000mAh
Energy: 1800Wh
Chemistry: Lithium-Ion
Charging Voltage: 42V
Product Category: 10 Cell 36V Li-Ion Battery Pack (36V~42V)

PRODUCT DESCRIPTION

BAK 10S 36V 50000mAh (50Ah) 10S10P 3C Lithium-Ion Rechargeable Battery Pack The BAK 10S 36V 50000mAh (50Ah) 10S10P 3C Lithium-Ion Rechargeable Battery Pack is a high-capacity NMC Lithium-Ion battery pack designed for e-bikes, electric scooters, electric vehicles, energy storage systems, robotics, and industrial applications. Built in a 10S10P configuration, the battery contains 10 cells/groups connected in series and 10 cells connected in parallel in each group. When assembled using 5000mAh BAK 21700 cells, the pack provides 36V nominal voltage and 50Ah capacity, delivering approximately 1.8kWh of nominal energy. Key Features BAK Lithium-Ion Cells NMC Lithium-Ion Chemistry 10S10P Configuration 36V Nominal Voltage 50000mAh / 50Ah Capacity 100 Cells in 10S10P configuration 3C Cell Rating Approximately 1.8kWh Nominal Energy Rechargeable Battery Pack High-Capacity Design Suitable for Long-Range Applications BMS Protection Available Custom Connector & Enclosure Options Suitable for OEM Battery Manufacturing 10S10P Battery Configuration The battery pack uses: 10 Series ×10 Parallel = 100 Cells Each parallel group: 10 ×5000mAh = 50000mAh (50Ah) Nominal Voltage 10 ×3.6V = 36V Maximum Charging Voltage 10 ×4.2V = 42V Nominal Energy 36V ×50Ah = 1,800Wh Therefore, the pack has approximately 1.8kWh nominal energy capacity. 3C High-Performance Configuration The selected BAK cells are specified for a 3C discharge capability. The 10P arrangement increases the overall current capability of the cell group. However, the complete battery pack should not be rated solely from the cell C-rating. The usable continuous and peak current must be determined based on the BMS, cell model, nickel/busbar construction, wiring, connectors, temperature and application requirements. BMS Protection A suitable 10S NMC BMS can provide protection against: Overcharge Over-discharge Over-current Short circuit Cell voltage imbalance Excessive temperature Abnormal charging conditions The

PRODUCT DATASHEET

BMS current rating should be selected according to the motor/controller and actual load requirements. Applications The BAK 10S 36V 50Ah Lithium-Ion Battery Pack is suitable for: 36V E-Bikes Electric Scooters Electric Bicycles Electric Tricycles Electric Motorcycles EV Applications Delivery Vehicles Robotics AGV Systems Solar Energy Storage ESS Battery Systems Portable Power Systems Industrial Equipment Custom Battery Packs Advantages 50Ah high-capacity battery 10S10P configuration 100-cell configuration Approximately 1.8kWh nominal energy Suitable for long-range applications High-capacity NMC lithium-ion design 36V-class battery system Multiple BMS options Custom wiring and connectors available Suitable for OEM and bulk battery manufacturing Package Includes 1 ×BAK 10S 36V 50000mAh (50Ah) 10S10P 3C Lithium-Ion Rechargeable Battery Pack