

BAK 10S 36V 45000mAh (45Ah) 10S9P 3C Lithium-Ion Rechargeable Ba

SKU / Model: Not specified

PRODUCT OVERVIEW

Specification Details Cell Brand BAK Battery Chemistry Lithium-Ion / NMC Cell Type 21700
Configuration 10S9P Total Cells 90 Nominal Voltage 36V Maximum Charge Voltage 42V Capacity
45000mAh (45Ah) Cell Capacity 5000mAh Nominal Energy Approx. 1620Wh (1.62kWh) Cell Discharge
Rating Up to 3C* BMS JBD HARDWARE BMS BMS Type 10S NMC Connector Custom / As Required
Dimension/weight 125*203*145mm / 6.3kg Applications E-Bike, EV, Scooter, ESS & Industrial

TECHNICAL SPECIFICATIONS

Nominal Voltage: 36V
Capacity: 45000mAh
Energy: 1620Wh
Chemistry: Lithium-Ion
Charging Voltage: 42V
Product Category: 10 Cell 36V Li-Ion Battery Pack (36V~42V)

PRODUCT DESCRIPTION

BAK 10S 36V 45000mAh (45Ah) 10S9P 3C Lithium-Ion Rechargeable Battery Pack The BAK 10S 36V
45000mAh (45Ah) 10S9P 3C Lithium-Ion Rechargeable Battery Pack is a high-capacity NMC
Lithium-Ion battery pack designed for e-bikes, electric scooters, EVs, energy storage
systems, robotics, and other high-power applications. The battery uses a 10S9P
configuration, with 10 series groups and 9 cells connected in parallel in each group. When
assembled using 5000mAh BAK 21700 cells, it provides approximately 45Ah capacity and 36V
nominal voltage. Key Features BAK Lithium-Ion Cells NMC Lithium-Ion Chemistry 10S9P
Configuration 36V-Class Battery Pack 45000mAh / 45Ah Capacity 3C Cell Discharge Rating 90
Cells in 10S9P configuration Approximately 1.62kWh Nominal Energy Rechargeable Battery Pack
High Energy Capacity Suitable for Long-Range Applications BMS Protection Available Custom
Connector & Enclosure Options Suitable for OEM & Custom Battery Manufacturing 0S9P Battery
Configuration The pack consists of: 10 Series ×9 Parallel = 90 Cells Each parallel group: 9
×5000mAh = 45000mAh (45Ah) Voltage 10 ×3.6V = 36V nominal Maximum Charging Voltage 10 ×
4.2V = 42V Nominal Energy 36V ×45Ah = 1,620Wh So, the battery provides approximately
1.62kWh of nominal energy. 3C Lithium-Ion Cell Configuration The 3C rating indicates the
discharge capability of the selected cells. With 9 cells in parallel, the parallel
arrangement can provide substantially higher current capability than a single cell. However,
the complete battery pack's actual current rating should be determined by the BMS, cell
specification, nickel/busbar design, wiring, connectors, thermal management, and controller
requirements. BMS Protection A suitable 10S NMC BMS can be installed with this battery pack
to provide: Overcharge Protection Over-Discharge Protection Over-Current Protection
Short-Circuit Protection Cell Voltage Monitoring Cell Balancing Temperature Monitoring*

PRODUCT DATASHEET

Charging & Discharging Protection *Temperature protection depends on the selected BMS. The BMS current rating should be selected according to the application's continuous and peak current requirements. Applications The BAK 10S 36V 45Ah 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 Energy Storage Systems Portable Power Systems Industrial Equipment Custom OEM Battery Packs Advantages High 45Ah capacity 10S9P configuration 90-cell battery design Approximately 1.62kWh energy High energy density 36V-class battery system Suitable for long-range applications BAK lithium-ion cell configuration BMS options available Custom connector and enclosure options Suitable for OEM and bulk battery manufacturing Package Includes 1 ×BAK 10S 36V 45000mAh (45Ah) 10S9P 3C Lithium-Ion Rechargeable Battery Pack