

DMEGC 10S 36V 54000mAh (54Ah) 10S12P 3C Lithium-Ion Rechargeable

SKU / Model: Not specified

PRODUCT OVERVIEW

Specification Details Cell Brand DMEGC Battery Chemistry Lithium-Ion / NMC Cell Type 21700 Configuration 10S12P Total Cells 120 Nominal Voltage 36V Maximum Charge Voltage 42V Capacity 54000mAh (54Ah) Cell Capacity 4500mAh Nominal Energy Approx. 1944Wh (1.944kWh) Cell Rating 3C* BMS JBD HARDWARE BMS BMS Type 10S NMC Connector Custom / As Required Dimension/weight 125*269*145mm / 8.4kg Applications E-Bike, EV, Scooter, ESS & Industrial

TECHNICAL SPECIFICATIONS

Nominal Voltage: 36V
Capacity: 54000mAh
Energy: 1944Wh
Chemistry: Lithium-Ion
Charging Voltage: 42V
Product Category: 10 Cell 36V Li-Ion Battery Pack (36V~42V)

PRODUCT DESCRIPTION

DMEGC 10S 36V 54000mAh (54Ah) 10S12P 3C Lithium-Ion Rechargeable Battery Pack The DMEGC 10S 36V 54000mAh (54Ah) 10S12P 3C Lithium-Ion Rechargeable Battery Pack is a high-capacity NMC Lithium-Ion battery pack designed for applications requiring extended runtime, reliable power delivery, and high energy storage capacity. Built in a 10S12P configuration, the battery contains 120 cells, arranged as 10 series groups with 12 cells connected in parallel in each group. Using 4500mAh DMEGC cells, the pack provides 36V nominal voltage and 54Ah capacity, delivering approximately 1.944kWh of nominal energy. This battery pack is suitable for e-bikes, electric scooters, electric vehicles, robotics, energy storage systems, solar applications, industrial equipment, and custom OEM battery applications. Key Features DMEGC Lithium-Ion Cells NMC Lithium-Ion Chemistry 10S12P Configuration 36V Nominal Voltage 54000mAh / 54Ah Capacity 120 Cells in 10S12P configuration 3C Cell Configuration Approximately 1.944kWh Nominal Energy Rechargeable Battery Pack High-Capacity Design Suitable for Long-Range Applications BMS Protection Available Custom Connector & Enclosure Options Suitable for OEM & Custom Battery Manufacturing 10S12P Battery Configuration The battery pack consists of: 10 Series ×12 Parallel = 120 Cells Each parallel group: 12 × 4500mAh = 54000mAh (54Ah) Nominal Voltage 10 ×3.6V = 36V Maximum Charging Voltage 10 ×4.2V = 42V Nominal Energy 36V ×54Ah = 1,944Wh Therefore, the battery provides approximately 1.944kWh of nominal energy. 3C Lithium-Ion Configuration The 3C specification refers to the discharge capability of the selected DMEGC cells. The 12P configuration increases the available current capability of each series group compared with a single cell. The actual continuous and peak current rating of the finished battery should be determined according to the cell specification, BMS current rating, nickel/busbar construction, wiring, connectors,

PRODUCT DATASHEET

thermal management, and controller requirements. BMS Protection A suitable 10S NMC BMS can provide: Overcharge Protection Over-Discharge Protection Over-Current Protection Short-Circuit Protection Cell Voltage Monitoring Cell Balancing Temperature Monitoring Charging & Discharging Protection The BMS current rating should be selected according to the application's continuous and peak current requirements. Applications The DMEGC 10S 36V 54Ah 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 OEM Battery Packs Advantages 54Ah high-capacity design 10S12P configuration 120-cell battery configuration Approximately 1.944kWh nominal energy Suitable for extended-runtime applications 36V-class lithium battery system DMEGC NMC lithium-ion cell configuration Multiple BMS options Custom wiring and connector options Suitable for OEM and bulk battery manufacturing Package Includes 1 ×DMEGC 10S 36V 54000mAh (54Ah) 10S12P 3C Lithium-Ion Rechargeable Battery Pack