

DMEGC 20S 72V 54000mAh (54Ah) 20S12P 3C Lithium-Ion Rechargeable

SKU / Model: Not specified

PRODUCT OVERVIEW

Specification Details Product Type Rechargeable Lithium-Ion Battery Pack Brand DMEGC Battery Chemistry NMC Lithium-Ion Cell Type Cylindrical Lithium-Ion Cell Capacity 3.7V 4500mAh Cell Discharge Rating 3C Configuration 20S12P Total Number of Cells 240 Nominal Voltage 72V Maximum Charge Voltage 84V Nominal Capacity 54Ah Capacity 54,000mAh Nominal Energy Approx. 3,888Wh / 3.89kWh Charging Method CC/CV Recommended Charger 84V Lithium-Ion Charger BMS JBD HARDWARE BMS Protection Overcharge, Over-discharge, Over-current, Short Circuit & Temperature Protection* Output Connector Customizable Wire Customizable according to current requirement Dimension/weight 235*269*145 / 16.8kg Application EV, E-Scooter, Industrial & Energy Applications *Actual BMS functions and current rating depend on the BMS model selected.

TECHNICAL SPECIFICATIONS

Nominal Voltage: 72V
Capacity: 54000mAh
Energy: 888Wh
Chemistry: Lithium-Ion
Charging Voltage: 84V
Product Category: 20 Cell 72V Li-Ion Battery Pack (74V~84V)

PRODUCT DESCRIPTION

DMEGC 20S 72V 54000mAh (54Ah) 20S12P 3C Lithium-Ion Rechargeable Battery Pack The DMEGC 20S 72V 54000mAh (54Ah) 20S12P 3C Lithium-Ion Rechargeable Battery Pack is a high-capacity NMC Lithium-Ion battery pack designed for electric vehicles, high-power mobility systems, industrial equipment, robotics, and other demanding applications. This battery pack uses DMEGC 3.7V 4500mAh lithium-ion cells arranged in a 20S12P configuration, providing 72V nominal voltage, 54Ah capacity, and approximately 3.89kWh nominal energy. The 3C cell configuration provides high discharge capability, while the final pack current capability depends on the selected BMS, cell characteristics, interconnections, wiring, connectors, and thermal management. Key Features Brand: DMEGC Battery Chemistry: NMC Lithium-Ion Configuration: 20S12P Nominal Voltage: 72V Maximum Charging Voltage: 84V Capacity: 54Ah / 54,000mAh Cell Capacity: 4500mAh Cell Rating: 3C Total Cells: 240 cells Nominal Energy: Approx. 3.89kWh High-capacity rechargeable battery pack Suitable for high-power applications Custom BMS options available Custom wires and connectors available Suitable for OEM and customized battery requirements 20S12P Battery Configuration The battery pack consists of 20 series groups, with 12 cells connected in parallel in each group. 20S ×12P = 240 cells Using 3.7V 4500mAh cells: Total cells: 20 ×12 = 240 cells Nominal voltage: 20 ×3.6V = 72V Maximum charging voltage: 20 ×4.2V = 84V Parallel capacity: 12 ×4.5Ah = 54Ah Nominal

LION BATTERY

PRODUCT DATASHEET

energy: $72V \times 54Ah = 3,888Wh$ Total energy: Approximately 3.89kWh 3C Lithium-Ion

Configuration The cells are specified as 3C-rated. The theoretical discharge capability depends on the cell's specified continuous discharge rating, but the complete battery pack's safe operating current is determined by the BMS and complete electrical/thermal design, not by the cell C-rating alone. Important factors include: BMS continuous and peak current rating Cell specifications Nickel/copper interconnection design Wire gauge Connector rating Thermal management Operating temperature BMS Protection A suitable 20S 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, CAN, UART or RS485 communication according to application requirements. Applications The 72V 54Ah lithium-ion battery pack is suitable for: Electric motorcycles High-power electric scooters Electric vehicles Electric carts Industrial vehicles Robotics AGV/AMR systems Industrial equipment Portable power systems Custom high-capacity power applications Advantages 54Ah high-capacity battery Approximately 3.89kWh nominal energy 20S12P configuration 3C-rated cell configuration DMEGC lithium-ion cells High-energy rechargeable battery solution Custom BMS options Custom connectors and wiring Suitable for OEM and bulk requirements Package Includes 1 x DMEGC 20S12P 72V 54Ah Lithium-Ion Battery Pack BMS as specified/configured Output wires and connector as specified Battery insulation and protective packaging

Important Charging Information For this 20S NMC battery pack, use a compatible 84V CC/CV Lithium-Ion battery charger. Do not use an incompatible charger intended for a different battery voltage or chemistry.