

DMEGC 20S 72V 49500mAh (49.5Ah) 20S11P 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 20S11P Total Number of Cells 220 Nominal Voltage 72V Maximum Charge Voltage 84V Nominal Capacity 49.5Ah Capacity 49,500mAh Nominal Energy Approx. 3,564Wh / 3.56kWh 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*247*145mm / 15.4kg Application EV, E-Bike, Industrial & Energy Applications *Actual BMS functions and ratings depend on the BMS model selected for the battery pack.

TECHNICAL SPECIFICATIONS

Nominal Voltage: 72V
Capacity: 49500mAh
Energy: 564Wh
Chemistry: Lithium-Ion
Charging Voltage: 84V
Product Category: 20 Cell 72V Li-Ion Battery Pack (74V~84V)

PRODUCT DESCRIPTION

DMEGC 20S 72V 49500mAh (49.5Ah) 20S11P 3C Lithium-Ion Rechargeable Battery Pack The DMEGC 20S 72V 49500mAh (49.5Ah) 20S11P 3C Lithium-Ion Rechargeable Battery Pack is a high-capacity NMC Lithium-Ion battery pack designed for electric vehicles, industrial equipment, mobility applications, backup systems, and other high-energy applications. This pack uses DMEGC 3.7V 4500mAh lithium-ion cells arranged in a 20S11P configuration, providing a nominal voltage of 72V, capacity of 49.5Ah, and approximately 3.56kWh of nominal energy. The 3C-rated cell configuration is suitable for applications requiring high discharge performance. The final usable current capability depends on the selected BMS, wiring, nickel/copper interconnections, connectors, thermal management, and complete pack design. Key Features Brand: DMEGC Battery Chemistry: NMC Lithium-Ion Configuration: 20S11P Nominal Voltage: 72V Maximum Charging Voltage: 84V Capacity: 49.5Ah / 49,500mAh Cell Capacity: 4500mAh per cell Cell Rating: 3C Total Cells: 220 cells High Energy Capacity: Approx. 3.56kWh Rechargeable lithium-ion battery pack Suitable for high-power applications BMS protection can be configured according to application requirements Custom connectors, wires, dimensions and enclosure options available 20S11P Battery Configuration The pack contains 20 series groups, with 11 cells connected in parallel in each group. 20S ×11P = 220 cells Using 3.7V 4500mAh cells: Series voltage: 20 ×3.6V = 72V nominal Maximum charging voltage: 20 ×4.2V = 84V

LION BATTERY

PRODUCT DATASHEET

Parallel capacity: $11 \times 4.5\text{Ah} = 49.5\text{Ah}$ Total cells: $20 \times 11 = 220$ cells Nominal energy: $72\text{V} \times 49.5\text{Ah} = 3,564\text{Wh}$ Total energy: Approximately 3.56kWh 3C Lithium-Ion Configuration The individual cells are specified as 3C-rated cells. The theoretical cell-level discharge capability is based on the cell manufacturer's rating, but the actual battery pack output should not be calculated from the C-rating alone. The final discharge capability is determined by: BMS continuous/peak current rating Cell specifications Nickel/copper busbar design Wire gauge Connectors Temperature Thermal management Pack construction BMS Protection

A suitable 20S NMC BMS can provide protection against: Overcharge Over-discharge Over-current Short circuit Over-temperature Cell voltage imbalance Battery charging/discharging abnormalities For advanced applications, the pack can be configured with a Smart BMS featuring Bluetooth, CAN, UART or RS485 communication, depending on the requirement. Applications The $72\text{V } 49.5\text{Ah}$ battery pack can be used for: Electric motorcycles High-power electric scooters Electric vehicles Industrial electric vehicles Electric carts Robotics AGV/AMR systems Portable power systems Industrial machinery Custom energy storage applications High-capacity DC power applications Advantages High 49.5Ah capacity Approx. 3.56kWh energy storage 20S11P configuration provides high capacity 3C-rated cell configuration for high-power applications DMEGC lithium-ion cell technology Rechargeable and suitable for repeated use Custom BMS options Custom connector and cable options Suitable for OEM and customized battery pack requirements Package Includes 1 $\times$ DMEGC 20S11P $72\text{V } 49.5\text{Ah}$ 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 charger. Do not use a charger intended for 48V , 60V , 72V LiFePO_4 , or another incompatible battery chemistry.