

DMEGC 6S 22.2V 31500mAh (31.5Ah) 6S7P 3C Lithium-Ion Rechargeable

SKU / Model: Not specified

PRODUCT OVERVIEW

Specification Details Brand DMEGC Chemistry NMC Lithium-Ion Cell Format Cylindrical Cell
Capacity 4500mAh Configuration 6S7P Total Number of Cells 42 Nominal Voltage 22.2V Maximum
Charge Voltage 25.2V Battery Capacity 31.5Ah / 31500mAh Nominal Energy ~699.3Wh Series
Groups 6 Parallel Cells per Group 7 Cell Nominal Voltage 3.7V Cell Discharge Rating Up to
3C* dimension/weight 81*137*145mm / 2.52kg BMS optional

TECHNICAL SPECIFICATIONS

Nominal Voltage: 22.2V
Capacity: 31500mAh
Energy: 699.3Wh
Chemistry: Lithium-Ion
Maximum / BMS Current: 94.5A
Charging Voltage: 25.2V
Product Category: 6 Cell 24V Li-Ion Battery Pack (22.2V~25.2V)

PRODUCT DESCRIPTION

DMEGC 6S 22.2V 31500mAh (31.5Ah) 6S7P 3C Lithium-Ion Rechargeable Battery Pack The DMEGC 6S 22.2V 31500mAh (31.5Ah) Lithium-Ion Rechargeable Battery Pack is a high-capacity NMC lithium-ion battery pack configured in 6S7P using DMEGC 4500mAh cells. With a 22.2V nominal voltage and 31.5Ah capacity, this battery provides approximately 699.3Wh of nominal energy. The 6S7P configuration combines 6 series groups with 7 cells connected in parallel in each group, making it suitable for applications requiring extended runtime and dependable rechargeable power. Key Features Brand: DMEGC Chemistry: NMC Lithium-Ion Cell Type: Cylindrical Lithium-Ion Cell Capacity: 4500mAh Configuration: 6S7P Nominal Voltage: 22.2V Maximum Charging Voltage: 25.2V Capacity: 31500mAh / 31.5Ah Nominal Energy: Approximately 699.3Wh Total Cells: 42 3C-class configuration Rechargeable lithium-ion technology Suitable for custom BMS and connector configurations 6S7P Battery Configuration The battery pack contains 42 DMEGC cells arranged in a 6S7P configuration: 6 cells/groups connected in series = 6S 7 cells connected in parallel per group = 7P Total cells = 6 × 7 = 42 cells Capacity = 7 × 4.5Ah = 31.5Ah Nominal voltage = 6 × 3.7V = 22.2V Maximum charge voltage = 6 × 4.2V = 25.2V Nominal energy = 22.2V × 31.5Ah = 699.3Wh 3C Lithium-Ion Configuration The theoretical 3C current calculation is: 31.5Ah × 3C = 94.5A The 94.5A figure is a theoretical cell-based calculation and should not automatically be considered the finished pack’s continuous discharge rating. The actual safe current depends on the BMS and complete battery-pack design. BMS Protection A suitable 6S NMC Lithium-Ion BMS can provide: Overcharge protection Over-discharge protection Over-current protection Short-circuit protection Over-temperature protection Cell balancing Charging and discharging protection The BMS should be selected

PRODUCT DATASHEET

according to the required continuous and peak current of the application. Applications The DMEGC 6S 22.2V 31.5Ah battery pack is suitable for: Electric scooters Electric bikes Robotics Portable power systems Industrial equipment Backup power systems Custom EV projects DC power systems DIY lithium battery projects OEM battery applications Advantages 31.5Ah high-capacity battery Approximately 699.3Wh nominal energy 6S7P configuration Uses high-capacity cylindrical lithium-ion cells Suitable for extended-runtime applications Rechargeable NMC battery technology Custom BMS and connector options available Suitable for OEM and custom battery-pack projects Package Includes 1 xDMEGC 6S7P 22.2V 31.5Ah Lithium-Ion Battery Pack BMS according to selected configuration Battery interconnects and wiring Output connector according to requirement Important Charging Information Use a 25.2V lithium-ion charger specifically designed for a 6S NMC battery pack. Do not use a LiFePO4 charger or a charger designed for a different series configuration. Always use an appropriately rated BMS and charger.