

DMEGC 6S 22.2V 40500mAh (40.5Ah) 6S9P 3C Lithium-Ion Rechargeable Battery Pack

SKU / Model: Not specified

PRODUCT OVERVIEW

Specification Details Brand DMEGC Chemistry NMC Lithium-Ion Cell Format Cylindrical Cell

Capacity 4500mAh Configuration 6S9P Total Number of Cells 54 Nominal Voltage 22.2V Maximum

Charge Voltage 25.2V Battery Capacity 40.5Ah / 40500mAh Nominal Energy ~899.1Wh Series

Groups 6 Parallel Cells per Group 9 Cell Nominal Voltage 3.7V Cell Discharge Rating Up to

3C* Dimension/weight 81*203*145mm / 3.78kg BMS JBD HARDWARE BMS

TECHNICAL SPECIFICATIONS

Nominal Voltage: 22.2V
Capacity: 40500mAh
Energy: 899.1Wh
Chemistry: Lithium-Ion
Maximum / BMS Current: 121.5A
Charging Voltage: 25.2V
Product Category: 6 Cell 24V Li-Ion Battery Pack (22.2V~25.2V)

PRODUCT DESCRIPTION

DMEGC 6S 22.2V 40500mAh (40.5Ah) 6S9P 3C Lithium-Ion Rechargeable Battery Pack The DMEGC 6S

22.2V 40500mAh (40.5Ah) Lithium-Ion Rechargeable Battery Pack is a high-capacity NMC

lithium-ion battery pack configured in 6S9P, using DMEGC 4500mAh cylindrical cells. With a

22.2V nominal voltage and 40.5Ah capacity, the battery provides approximately 899.1Wh

(0.90kWh) of nominal energy. The 6S9P configuration is suitable for applications requiring

high capacity, extended runtime, and dependable rechargeable power. Key Features Brand:

DMEGC Battery Chemistry: NMC Lithium-Ion Cell Type: Cylindrical Lithium-Ion Cell Capacity:

4500mAh Configuration: 6S9P Nominal Voltage: 22.2V Maximum Charging Voltage: 25.2V Capacity:

40500mAh / 40.5Ah Nominal Energy: Approximately 899.1Wh Total Cells: 54 3C-class

configuration Rechargeable lithium-ion technology Suitable for custom BMS and connector

configurations 6S9P Battery Configuration The battery pack contains 54 DMEGC cells arranged

in a 6S9P configuration: 6 cells/groups in series = 6S 9 cells in parallel per group = 9P

Total cells = 6 ×9 = 54 cells Capacity = 9 ×4.5Ah = 40.5Ah Nominal voltage = 6 ×3.7V =

22.2V Maximum charge voltage = 6 ×4.2V = 25.2V Nominal energy = 22.2V ×40.5Ah = 899.1Wh 3C

Lithium-Ion Configuration The theoretical 3C current calculation is: 40.5Ah ×3C = 121.5A

The 121.5A value is a theoretical cell-based calculation and should not automatically be

considered the continuous discharge rating of the finished battery pack. The actual current

capability must be determined by the selected BMS and complete battery construction. 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 current rating should

PRODUCT DATASHEET

be selected according to the application's continuous and peak current requirements.

Applications The DMEGC 6S 22.2V 40.5Ah 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 40.5Ah high-capacity battery Approximately 899.1Wh nominal energy 6S9P

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 ×DMEGC 6S9P 22.2V

40.5Ah 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.