

22.2 V 102 Ah Lithium Battery Module

TWS-6S1P-102-NCM is a compact standard cell-stack VDA module with built-in low leakage & intrinsic safety which target for e-Mobility (EV/MH/AGV/eForklift) & ESS applications.



Specifications

Configuration	6S1P
Nominal capacity	102 Ah @ 0.3 C
Nominal voltage	22.2 V @ 0.3 C
Charge cut-off voltage	25.8 V
Discharge cut-off voltage	16.8 V
Energy	2,264 Wh
Module weight	11.3 ± 0.2 kg
Module size	L 355 ± 2 mm W 152 ± 2 mm H 108 ± 2 mm
Energy density	200 Wh/kg 389 Wh/L
Charge current	Continuous: 100 A Peak: 300 A @ 10 s
Discharge current	Continuous: 100 A Peak: 400 A @ 10 s
Battery cell	NMC, 102 Ah, prismatic

Common specifications

Charge temperature	-20 °C ~ 55 °C
Discharge temperature	-30 °C ~ 55 °C
Best storage temperature	-10 °C ~ 35 °C
Dielectric strength	2,700 VDC
Factory test of insulation resistance	> 100 MΩ
Voltage difference of sets	≤ 20 mV

Main features

- No memory effect
- Following protections are needed externally to ensure normal & safe operations :
 - **Over current**
 - **Over/under voltage**
 - **Over/under temperature**
 - **Short circuit**
- Cell balancing is recommended
- Flame retardant material
- Interface
 - B+, B-
 - Cell voltage sensing
 - Temperature sensing (NTC)