

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 @ 0.33 C |
| Nominal voltage | 22.2 V @ 0.33 C |
| Charge cut-off voltage | 25.8 V |
| Discharge cut-off voltage | 16.8 V |
| Energy | 2,264 Wh @ 0.33 C |
| Module weight | 11.3 ± 0.2 kg |
| Module size | L 355.0 mm H 151.5 mm W 108.0 mm |
| Energy density | 200 Wh/kg 389 Wh/L |
| Charge current | Continuous: Max.100 A Peak: 300 A @ 10 s |
| Discharge current | Continuous: Max.150 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 | 2,700V DC |
| 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)