

VDA Module Battery Solutions



TWS VDA Module Solutions Advantages

- Robustness design with light weight structure
- Optimal mechanical design to reduce the risk of thermal runaway
- Validated with 50g impact force

Application



Electric passenger car



Electric bus



Electric excavator



TWS Module Solutions

Solution	TWS-6S1P-102-NCM	TWS-9S1P-135-NCM
Module layout	6S1P	9S1P
Min. capacity	102 Ah @ 0.33 C	135 Ah @ 0.33 C
Nominal voltage	22.2 V @ 0.33 C	33.3 V @ 0.33 C
Charge cut-off voltage	25.8 V	38.7 V
Discharge cut-off voltage	16.8 V	25.2 V
Energy	2,264 Wh @ 0.33 C	4,496 Wh @ 0.33 C
Module weight	11.3 ± 0.2 kg	23.5 ± 0.5 kg
Energy density	200 Wh/kg	191 Wh/kg
Charge current rate	Continuous: 100 A Peak: 300 A @ 10 s	Continuous: 67.5 A Peak: 270 A @ 30 s
Discharge current rate	Continuous: 150 A Peak: 400 A @ 10 s	Continuous: 135 A Peak: 400 A @ 30 s
Operating temperature	-20 °C ~ 55 °C (Charge) -30 °C ~ 55 °C (Discharge)	-20 °C ~ 55 °C (Charge) -30 °C ~ 55 °C (Discharge)
Module size	L 355.0 mm W 151.5 mm H 108.0 mm	L 490.3 mm W 178.1 mm H 144.3 mm
Type	TWS Standard VDA Module	TWS Standard Module

TWS- Powering Up Your Mobility

TWS is a global and dynamic industry pioneer, focused on portable and large format rechargeable battery solutions. We have 7 technical centers, 3 manufacturing bases and 11 sales offices worldwide. Our vision is to “Create a better life for people” and our mission is “To be the industry leader in rechargeable energy solutions”.