

**About TWS**

**Dynamic Leadership in Innovative Rechargeable Lithium-ion Battery Solutions**

TWS, a dynamic and global industry leader focused on providing innovative Lithium-based battery technology solutions, was founded in 1998. With 25 years development, we have now grown to over 2,000 global employees to service the worldwide markets. TWS always follows the practice of customer-focused values and we're committed to providing innovative solutions in response to the rapid growth of new lithium-ion battery applications.

**A Better Life through Innovation**

**Vision:** Create a better life for people

**Mission:** To be the industry leader in rechargeable energy solutions

Founded in <b>1998</b>	Tech Centers <b>7</b>	Factories <b>4</b>	Annual production capacity <b>13 GWh</b>
Patents <b>80+</b>	Active SKUs <b>500+</b>	Batteries Sold <b>300,000,000+</b>	<b>ISO &amp; IATF</b> Certified

**TWS Technology**

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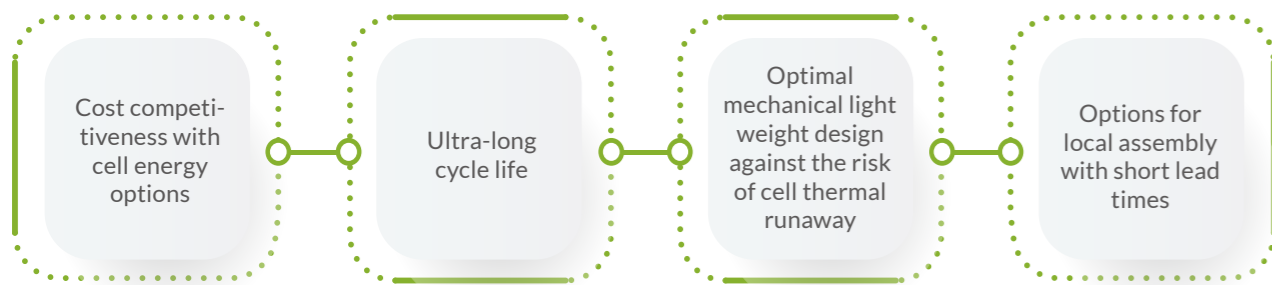


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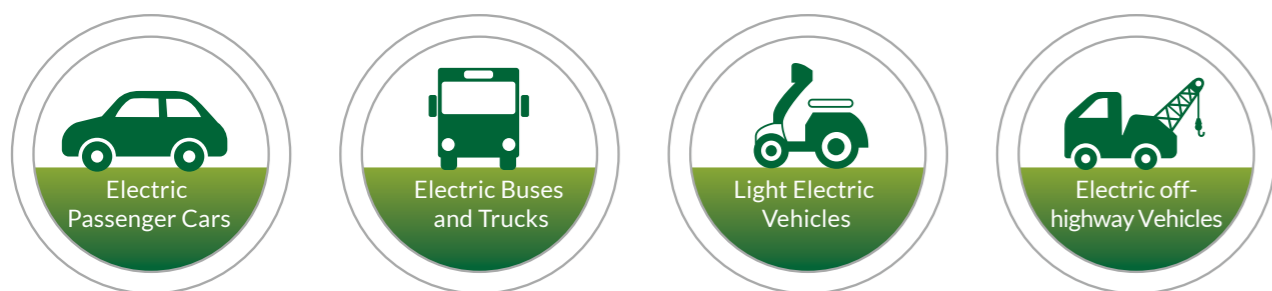


TWS provides modules battery solutions with both standard and customized module design for many years with significant volumes supplied to automotive customers, offering flexibility in battery pack design with cost advantages with or without BMS and option for local assembly.

**Product advantages**



**Application**



**TWS Standard Modules: NCM**

Both TWS-1P12S-139-NCM and TWS-1P4S-177-NCM are compact standard cell-stack VDA modules with built-in low leakage & intrinsic safety which target for EV applications.

Picture		
Model	TWS-1P 12S -139-NCM	TWS-1P4S-177-NCM
<i>Parameters</i>		
Cell	139Ah NCM	177Ah NCM
Configuration	1P 12S	1P 4S
Capacity (Ah, @0.33C)	139	177
Nominal Voltage (V, @0.33C)	44.76	14.96
Maximum continuous charge current (A)	164	174
Maximum continuous discharge current (A)	274	261
Energy (Wh, @0.33C, 25°C)	6221	2647
Weight (Wh/kg)	30.5	12.0
Energy density (Wh/kg)	203.9	220.5
Dimensions (mm, L*W*H)	590.0*225.0*109.0 (VDA standard & for MEB platform)	355.0*151.5*109.0 (VDA standard)
<i>General specification</i>		
Charging temperature	-20°C ~ 55°C	
Discharging temperature	-30°C ~ 55°C	
storage temperature	-30°C ~ 55°C	
Dielectric strength	2700V DC	
Insulation resistance	≥ 500 MΩ	
Voltage difference of sets	≤ 20 mV	

**TWS Standard Modules: LFP**

Both TWS-1P8S-50-LFP and TWS-1P9S-50-LFP are compact cell-stack modules with built-in low leakage & intrinsic safety which target for ESS and Material Handling applications.

Picture		
Model	TWS-1P8S-50-LFP	TWS-1P9S-50-LFP
<i>Parameters</i>		
Cell	50Ah LFP	50Ah LFP
Configuration	1P8S	1P9S
Capacity (Ah, @0.33C)	50	50
Nominal Voltage (V, @0.33C)	25.60	28.80
Maximum continuous charge current (A)	50	50
Maximum continuous discharge current (A)	50	50
Energy (Wh, @0.33C, 25°C)	1280	1280
Weight (Wh/kg)	11.0	11.7
Energy density (Wh/kg)	116.3	123.0
Dimensions (mm, L*W*H)	356.0*152.0*108.0 (VDA standard)	401.6*153.0*112.0 (Non-standard)
<i>General specification</i>		
Charging temperature	-20°C ~ 55°C	
Discharging temperature	-30°C ~ 55°C	
storage temperature	-30°C ~ 55°C	
Dielectric strength	2700V DC	
Insulation resistance	≥ 500 MΩ	
Voltage difference of sets	≤ 20 mV	