

# SPECIFICATIONS

## Enerdrive B-TEC 12v Lithium Battery Technical Data

Normal Specification	EPL-100BT-12V	EPL-125BT-12V	EPL-200BT-12V
Nominal Voltage	12.8V		
Nominal Capacity	100Ah	125Ah	200Ah
Cycle Life (DOD - 80% under controlled conditions)	≥2000 Cycles		
<b>Standard Charge Specification (Lithium profile charger required)</b>			
Battery Charge Temperature	0 - 45°C		
Normal Charge Voltage CV/CC*	14.40 - 14.60V		
Standby (Float) Voltage	13.50 - 13.80V		
Maximum Charge Current	50A @ 25°C for 30mins	60A @ 25°C for 30mins	150A @ 25°C for 30mins
Recommended Charge Current for Maximum Life	≤33A	≤40A	≤60A
<b>Standard Discharge Specification</b>			
Battery Discharge Temperature	-20 - 60°C		
Battery Output Voltage Range	11.00 - 14.60V		
Maximum Discharge Current	100A @ 25°C ±5°C for 30mins		200A @ 25°C ±5°C for 30mins
Pulse Discharge Current	450A for 1.0s		
Discharge Cut-off Voltage	≤11.20V		
<b>Circuit Protection</b>			
The battery is supplied with a LiFePO4 Battery Management System (BMS) that can monitor and optimize each single prismatic cell during charge & discharge, to protect the battery pack from overcharge, over discharge & short circuit. Overall, the BMS helps to ensure safe and accurate operation of the battery.			
<b>Over-Charge Protection</b>			
Over-charge Protection Per Cell	3.90V ± 0.03V		
Over-charge Release Per Cell	3.60V ± 0.05V		
Over-charge Release Method	Discharge below release voltage		

<b>Over-Discharge Protection</b>	<b>EPL-100BT-12V</b>	<b>EPL-125BT-12V</b>	<b>EPL-200BT-12V</b>
Over-discharge Protection Per Cell	2.80V ± 0.05V		
Over-discharge Release Per Cell	3.20V ± 0.05V		
Over-discharge Release Method	Apply Charge/Voltage ≥12.8v		
<b>Over Current Protection</b>			
Discharge Over Current	110A for 30s – 450A for 1s	110A for 30s – 450A for 1s	220A for 30s – 450A for 1s
Protection Reset Time	5s Auto Release		
Over Current Release Method	Disconnect Load		
<b>Over Temperature Protection</b>			
Battery Discharge Over Temperature	Protection to 65°C ± 5°C		
	Release at 50°C ± 5°C		
Battery Charge Over Temperature	Protection to 55°C ± 5°C		
	Release at 45°C ± 5°C		
Short Circuit Protection	Auto release after 5s		
<b>Mechanical Characteristics</b>			
Dimensions	Length 318mm		485mm
	Width 165mm		170mm
	Height 215mm		245mm
Weight	Approx 12.6 Kg	Approx 15.0 Kg	Approx 25.0 Kg
<b>Storage Information</b>			
Temperature & Humidity Range	≤30 days -20°C to 35°C, 45 to 75% RH		
	≥30 days -10°C to 30°C, 45 to 75% RH		
Self-discharge Rate	≤3%Per Month		

\* CV/CC, Constant Voltage – Constant Current Lithium Charge Profile