

4 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		
Standard Charge Specification (Lithium profile charger required)			
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
Standard Discharge Specification			
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		
Circuit Protection			
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.			
Over-Charge Protection			
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		

Over-Discharge Protection	EPL-100BT-12V	EPL-125BT-12V	EPL-200BT-12V
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		
Over Current Protection			
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		
Over Temperature Protection			
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		
Mechanical Characteristics			
Dimensions	Length 318mm		485mm
	Width 165mm		170mm
	Height 215mm		245mm
Weight	Approx 12.6 Kg	Approx 15.0 Kg	Approx 25.0 Kg
Storage Information			
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