



BATTERY SPECIFICATION SHEET



Enduro Power Baja Series 24V 50Ah Deep Cycle LiFePO4 Battery

EN2450BAJA

Product Specifications

Basic Electrical Specification

Nominal Voltage	25.6 V
Nominal Capacity	50 Ah
Energy	1280 Wh
Resistance	≤1.5mΩ
Efficiency	99%
Self Discharge	≤3% per month
Parallel Connection	6+ (call us if over 6)
Series Connection	48V

Charge Specification

Recommended Charge Current	5 A - 25 A
Maximum Charge Current	50 A (1C)
Recommended Charge Voltage	29.2 V
BMS Charge Voltage Cut-Off	29.6 V (3.9 ±0.025 vpc) (1.1 ±0.4 s)
Reconnect Voltage	28.4 V (3.8 ±0.05 vpc)
Balancing Voltage	27.2 V (3.6 ±0.025 vpc)

Discharge Specification

Maximum Continuous Discharge Current	50 A
Peak Discharge Current	100 A (3-5s)
BMS Discharge Current Cut-Off	240 A (300ms)
Recommended Low Voltage Disconnect	22 V
BMS Discharge Voltage Cut-Off	18.8 V (2.0 ±0.08 vpc) (140 ±60 ms)
Reconnect Voltage	20.4 V (2.3 ±0.1 vpc)
Short Circuit Protection	200-300 μs

Temperature Specification

Discharge Temperature	-4 to 130 °F (-20 to 55 °C)
Charge Temperature	32 to 130 °F (0 to 55 °C)
Storage Temperature - 1 month	-4 to 113 °F (-20 to 45 °C)
Storage Temperature - 1 year	32 to 95 °F (0 to 35 °C)
BMS High Temperature Cut-Off	176 °F (80 °C)
Reconnect Temperature	122 °F (50 °C)
BMS Low Temperature Cut-Off (Charging)	32 °F (0 °C)
Reconnect Temperature (Charging)	41 °F (5 °C)

BMS Overview

Over Current Protection	yes
Under Voltage Protection	yes
Over Voltage Protection	yes
Overload Protection	yes
High Temperature Protection	yes
Low Temperature Protection	yes
Short Circuit Protection	yes

Certifications

MSDS Datasheet	MSDS
UN38.3	DG61
CE Certification	EN61000-6-1, EN61000-6-3
ROHS Certification	ROHS
FCC Certification	Part15B
IEC62619 documentation or 49 CFR	IEC62619 / 49 CFR 173.185
IMDG Code	UN3840 / Class 9

Mechanical Specifications

Dimensions (L x W x H)	10.24 x 6.62 x 8.23" (260 x 168 x 209 mm)
Weight	24.8lbs (11.25 kg)
Terminal Type	M8 (20mm)
Terminal Torque	10 ~12 N-m
Case Material	ABS
Enclosure Protection	IP65
Cell Type - Chemistry	Prismatic - LiFePO4

