



BATTERY SPECIFICATION SHEET



Enduro Power ProConnect Series 36V 50Ah LiFePO4 Battery

EP3650BT

Product Specifications

Basic Electrical Specification

Nominal Voltage	38.4 V
Nominal Capacity	50 Ah
Energy	1920 Wh
Resistance	≤ 30mΩ @1kHz AC
Efficiency	99%
Self Discharge	≤3% per month
Parallel Connection	4+ (call us if over 4)
Series Connection	No Series Connections

Charge Specification

Recommended Charge Current	10 A - 40 A
Maximum Charge Current	60 A
Recommended Charge Voltage	44 V
BMS Charge Voltage Cut-Off	45 V (3.75 ±0.025 vpc)
Reconnect Voltage	36.0 V
Balancing Voltage	3450mV (cell)

Discharge Specification

Maximum Continuous Discharge Current	100A (up to 30 mins)
Peak Discharge Current	350 A (3s)
BMS Discharge Current Cut-Off	110A / (30s)
Recommended Low Voltage Disconnect	33.6 V
BMS Discharge Voltage Cut-Off	30 V
Reconnect Voltage	36 V
Short Circuit Protection	1000 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)	13 x 6.8 x 9.43" (330 x 172 x 214 mm)
Weight	34.14 lbs (15.49 kg)
Terminal Type	M8
Terminal Torque	10 ~12 N-m
Case Material	ABS
Enclosure Protection	IP54
Cell Type - Chemistry	Prismatic - LiFePO4

