



LiFePO4 Deep Cycle Battery ALS-48100BT



ENERGY STORAGE SOLUTIONS

LiFePO4 chemistry battery with safe performance and longer cycle life, offers you various capacities options to meet different requirements. Lighter weight than lead acid batteries but with higher power. It delivers twice the power of lead acid battery, even at high discharge rates, while maintaining higher energy capacity.

Wide Temperature Range • High Safety • IP65 Protection • Flexible Expansion

Features and Advantages



APP Monitoring

Remote upgrade available



IP65

High protection level



Easy to Install

Save time and effort



High Safety

LFP & smart BMS



Longer Cycle Life

≥6000 Cycles ⁽¹⁾



Wide Temperature Range

Range of -20 to 60 °C

Technical Parameters

Model		LiFePO4 Deep Cycle Battery ALS-48100BT
ELECTRICAL SPECIFICATIONS		
Nominal Voltage		51.2V
Nominal Capacity		100 Ah
Capacity @ 20A		300 min
Resistance		≤25 mΩ @ 50% SOC
Efficiency		99%
Self Discharge		<3% per Month
Maximum Modules in Series¶llel		2S4P
Warranty		3years
Cycle Life ⁽¹⁾		≥6000 Cycles
CHARGE SPECIFICATIONS		
Recommended Charge Current		20 A
Maximum Charge Current		100 A
Recommended Charge Voltage		56.8 V – 58.4V
BMS Charge Voltage Cut-Off		60.0 V (3.75 ±0.025 v) (2s)
Reconnect Voltage		56.0 V (3.5 ±0.05 v)
Balancing Voltage		54.4V (3.4 ±0.025 v)
DISCHARGE SPECIFICATIONS		
Maximum Continuous Discharge Current		100 A
Peak Discharge Current		300 A (1-3 s)
BMS Discharge Current Cut-Off		300 A (1-3 s)
Recommended Low Voltage Disconnect		44V
BMS Discharge Voltage Cut-Off		38.4 V (2.4 ±0.08 vpc) (2s)
Reconnect Voltage		41.6 V (2.6 ±0.1 v)
Short Circuit Protection		200-600 μs
TEMPERATURE SPECIFICATIONS		
Discharge Temperature		-4 to 140 °F (-20 to 60 °C)
Charge Temperature		32 to 131 °F (0 to 55 °C)
Storage Temperature		14 to 113 °F (-10 to 45°C)
BMS High Temperature Cut-Off		167 °F (75 °C)
Reconnect Temperature		122°F (50 °C)
MECHANICAL SPECIFICATIONS		
Dimensions (L x W x H)		20.47 x 10.59 x 8.66 inch 520 x 269 x 220 mm
Weight		83.7 lbs (38.0 kg)
Terminal Type		M8 x 1.25
Terminal Torque		80 - 100 in-lbs (9 - 11 N-m)
Case Material		ABS
Enclosure Protection		IP65
Cell Type - Chemistry		LiFePO4
COMPLIANCE SPECIFICATIONS		
Certifications		UN38.3 (battery) CE (battery) UL1642 (cells)
Shipping Classification		UN 3480, CLASS 9
Cycle Test Conditions:0.2C Charging/Discharging, @25°C,80% DOD.		