



LiFePO4 Deep Cycle Battery ALS-12300BT



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



Expandable

Higher capacity available



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-12300BT (3840Wh)
ELECTRICAL SPECIFICATIONS	
Nominal Voltage	12.8V
Nominal Capacity	300 Ah
Capacity @ 60A	300 min
Resistance	≤10 mΩ @ 50% SOC
Efficiency	99%
Self Discharge	<3% per Month
Maximum Modules in Series¶llel	4S4P
Warranty	3years
Cycle Life ⁽¹⁾	≥6000 Cycles
CHARGE SPECIFICATIONS	
Recommended Charge Current	60 A
Maximum Charge Current	200 A
Recommended Charge Voltage	14.2 V – 14.6 V
BMS Charge Voltage Cut-Off	15.0 V (3.75 ±0.025 v) (2s)
Reconnect Voltage	14.0 V (3.5 ±0.05 v)
Balancing Voltage	13.6 V (3.4 ±0.025 v)
DISCHARGE SPECIFICATIONS	
Maximum Continuous Discharge Current	200 A
Peak Discharge Current	600 A (1-3 s)
BMS Discharge Current Cut-Off	600 A (1-3 s)
Recommended Low Voltage Disconnect	11V
BMS Discharge Voltage Cut-Off	9.6 V (2.4 ±0.08 vpc) (2s)
Reconnect Voltage	10.4 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	66.1lbs (30.0 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) UL1973 & IEC62133 (cells)
Shipping Classification	UN 3480, CLASS 9
Cycle Test Conditions:0.2C Charging/Discharging, @25°C,80% DOD.	