



LiFePO4 Deep Cycle Battery ALS-24120BT



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-24120BT (3072Wh)
ELECTRICAL SPECIFICATIONS		
Nominal Voltage	25.6V	
Nominal Capacity	120 Ah	
Capacity @ 24A	300 min	
Resistance	≤15 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	24 A	
Maximum Charge Current	60 A	
Recommended Charge Voltage	28.4 V – 29.2 V	
BMS Charge Voltage Cut-Off	30.0 V (3.75 ±0.025 v) (2s)	
Reconnect Voltage	28.0 V (3.5 ±0.05 v)	
Balancing Voltage	27.2V (3.4 ±0.025 v)	
DISCHARGE SPECIFICATIONS		
Maximum Continuous Discharge Current	60A	
Peak Discharge Current	180 A (1-3s)	
BMS Discharge Current Cut-Off	180 A (1-3s)	
Recommended Low Voltage Disconnect	22 V	
BMS Discharge Voltage Cut-Off	19.2 V (2.4 ±0.08 vpc) (2s)	
Reconnect Voltage	20.8V (2.6 ±0.1v)	
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)	20.55 x 9.45 x 8.58 inch 522 x 240 x 218 mm	
Weight	48.5 lbs (23.0 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	N/A	
Shipping Classification	UN 3480, CLASS 9	
Cycle Test Conditions:0.2C Charging/Discharging, @25°C,80% DOD.		