

## LiFePO4 Deep Cycle Battery ALS-24100



## **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 betteries but with higher power. It deliver twice power of lead acid battery, even high discharge rate, while maintaining higher energy capacity.

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

## **Features and Advantages**



Wide Temperature Range Range of -20 to 60 °C



IP65 High protection level



**Expandable**Higher capacity available



High Safety
LFP & smart BMS



Longer Cycle Life ≥6000 cycles <sup>(1)</sup>



Easy to Install
Save time and effort

## **Technical Parameters**

Model	LiFePO4 Deep Cycle Battery ALS-24100 (2560Wh)
ELECTRICAL SPECIFICATIONS	AL3-24100 (2300VIII)
Nominal Voltage	25.6V
Nominal Capacity	100 Ah
Capacity @ 20A	300 min
Resistance	≤15 mΩ @ 50% SOC
Efficiency	99%
Self Discharge	<3% per Month
Maximum Modules in Series∥	2S4P
Warranty	3years
Cycle Life (1)	≥6000 Cycles
CHARGE SPECIFICATIONS	
Recommended Charge Current	20A
Maximum Charge Current	100A
Recommended Charge Voltage	28.4 V – 29.2V
BMS Charge Voltage Cut-Off	30.0 V (3.75 ±0.025 vpc) (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	100 A
Peak Discharge Current	300 A (1-3 s)
BMS Discharge Current Cut-Off	300 A (1-3 s)
Recommended Low Voltage Disconnect	22V
BMS Discharge Voltage Cut-Off	19.2 V (2.4 ±0.08 v) (2s)
Reconnect Voltage	20.8V (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)	20.55 x 9.45 x 8.58 inch
· · ·	522 x 240 x 218 mm
Weight	48.5 lbs (22.0 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℃,80% DOD	).







