



LC 80 L LiFePO₄ Lithium Battery

12.8 V | 80 Ah | 1024 Wh

Electrical Specifications

Nominal Voltage	12,8V
Nominal Capacity	80Ah
Capacity @ 25 A	192min
Energy	1024Wh
Resistance	≤15mΩ @ 50% SOC
Self Discharge	<3% / month
Cell Type	IFR26650EC - LiFePO ₄

Discharge Specifications

Max. Continuous Discharge Current	80A
Peak Discharge Current	160A (3s)
BMS Discharge Cut-Off Current	240A ±5A (31ms)
Recommended Low Voltage Disconnect	11V
BMS Discharge Cut-Off Voltage	>8.0V (14 to 26ms)
Reconnect Voltage	>10V
Short Circuit Protection	200 to 600µs

Charge Specifications

Recommended Charge Current	16A
Maximum Charge Current	80A
Recommended Charge Voltage	14.6 V
BMS Charge Cut-Off Voltage	<15.6 V (0.8 to 1.2s)
Reconnect Voltage	>14.4 V
Balancing Voltage	<14.4 V
Maximum Batteries in Series	4

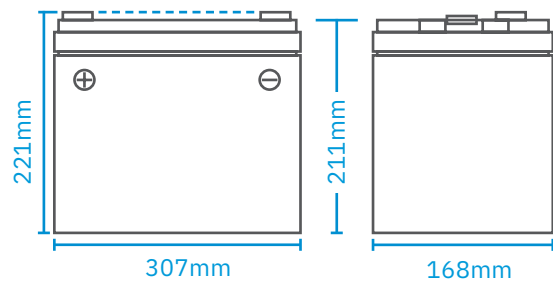
Mechanical Specifications

Measurements (L x W x H)	307 x 168 x 221 mm
Approx. Weight	10.4kg
Terminal Type	F2
Terminal Torque	9 to 11 N m
Case Material	ABS
Enclosure Protection	IP65

Temperature Specifications

Discharge Temperature	-20 to 60°C
Charge Temperature	0 to 45°C
Storage Temperature	-5 to 35°C
BMS High Temperature Cut-Off	65°C
Reconnect Temperature	55°C

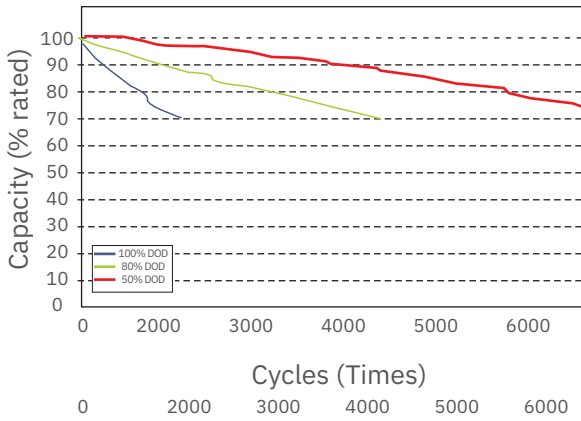
Measurements



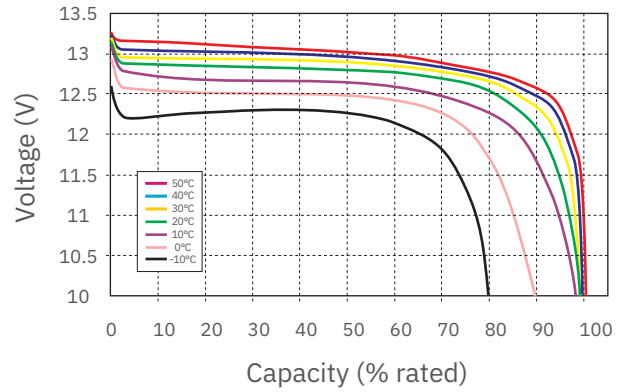
Compliance

Certifications	CE (Battery) UN38.3 (Battery) RoHS
Shipping Classification	UN 3480, CLASS 9

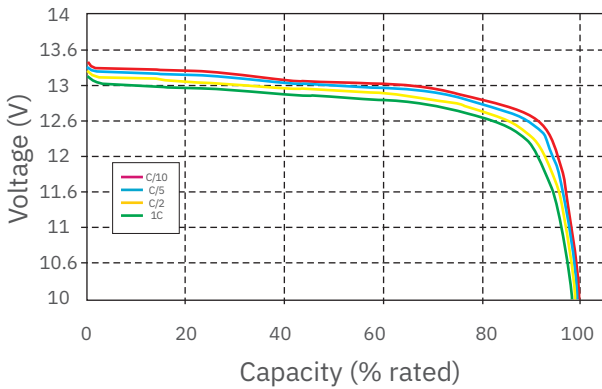
Cycle Life vs. Depth of Discharge (DOD)
Discharge 0.5C / Charge 0.5C (25°C)



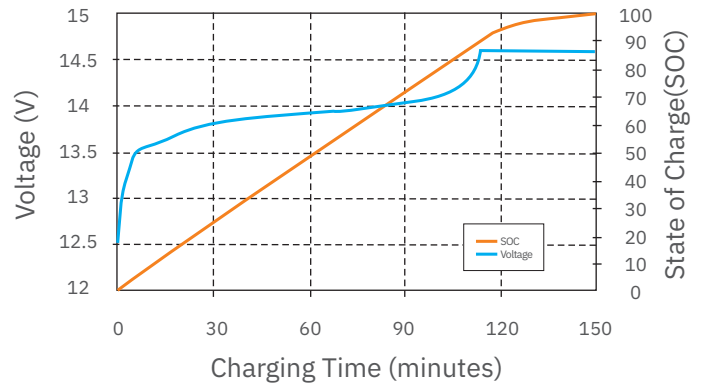
Discharge Voltage Profiles
at 0.5C Discharge Rate
(Various Ambient Temperatures)



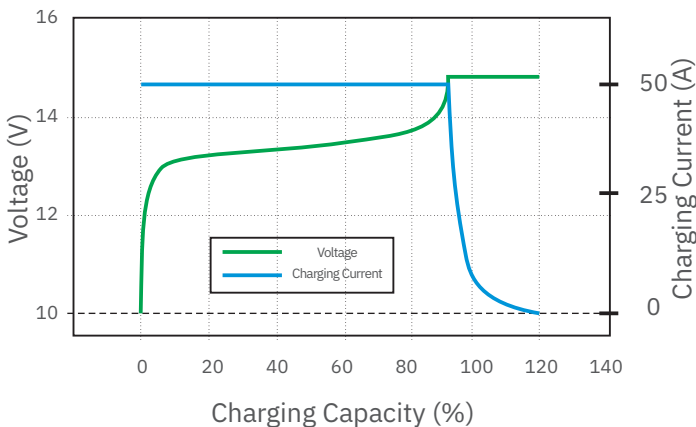
Discharge Voltage Profiles at Various Rates (25°C Ambient Temperature)



Typical Voltage and SOC Profiles at 0.5C Charging (25°C Ambient Temperature)



Charging Characteristics
(0.5C at 20°C)



Constant Power Discharge Characteristics
(25°C Ambient Temperature)

