



# LC 120 L

**LiFePO<sub>4</sub> LITHIUM BATTERY**  
12.8V | 120Ah | 1536Wh



## Electrical Specifications

Nominal Voltage	12.8V
Nominal Capacity	120Ah
Capacity @ 25 A	288min
Energy	1536Wh
Resistance	≤10mΩ @ 50% SOC
Self Discharge	<3% / month
Cell Type	IFR18650EC - LiFePO <sub>4</sub>

## Discharge Specifications

Max. Continuous Discharge Current	150A
Peak Discharge Current	200A (5s ± 5s)
BMS Discharge Cut-Off Current	300A (1s)
Recommended Low Voltage Disconnect	11.3V
BMS Discharge Cut-Off Voltage	<11.2V (2.8V / cell)
Reconnect Voltage	>11.2V (2.8V / cell)
Short Circuit Protection	200 to 600μs

## Charge Specifications

Recommended Charge Current	≤ 60A
Maximum Charge Current	80A
Recommended Charge Voltage	14.6V
BMS Charge Cut-Off Voltage	15V (3.75V / cell)
Over-charge release	<14.4V (3.6V / cell)
Float charge voltage	13.8V
Maximum Batteries in Series	-

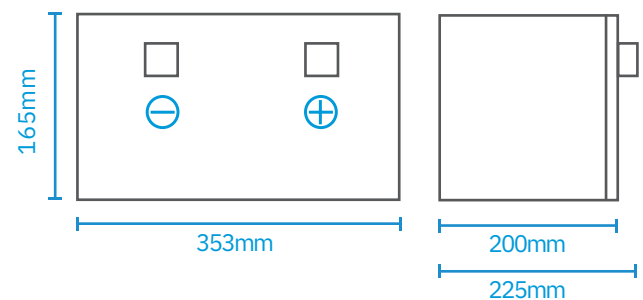
## Mechanical Specifications

Measurements (L × W × H)	353 × 225 × 165mm
Approx. Weight	19kg
Terminal Type	SAE round
Terminal Torque	-
Case Material	Metal

## 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

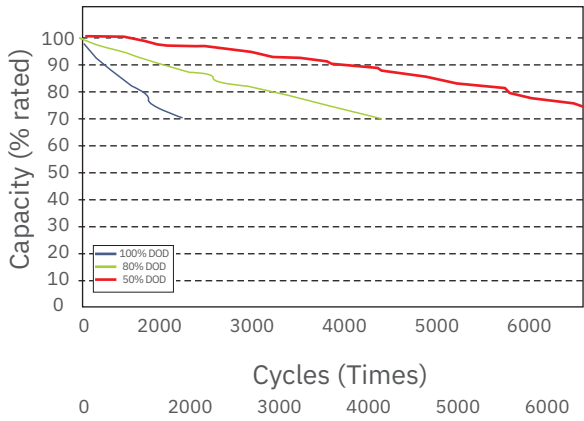
## Measurements



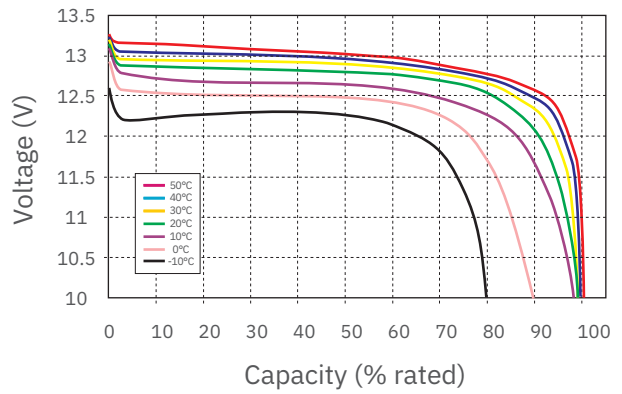
## Compliance

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

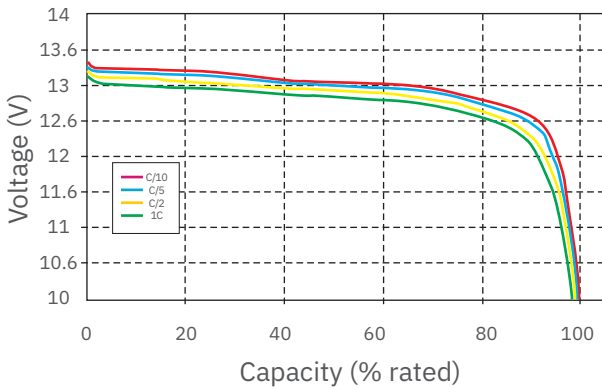
Cycle Life vs. Depth of Discharge (DOD)  
Discharge 0.5C / Charge 0.5C (25°C)



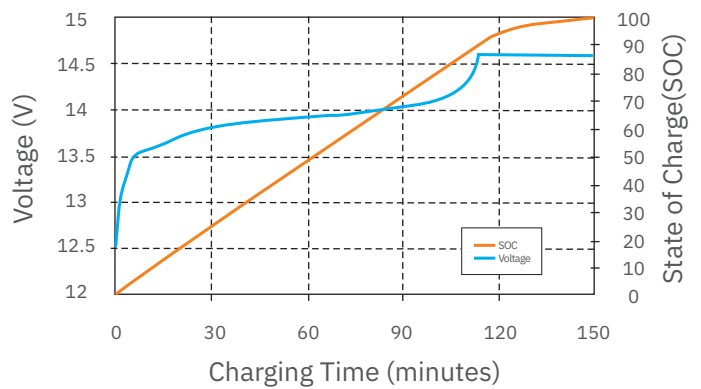
Discharge Voltage Profiles  
at 0.5C Discharge Rate  
(Various Ambient Temperatures)



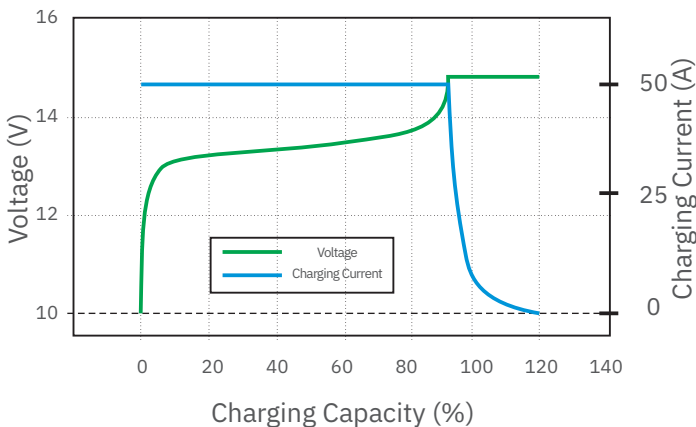
Discharge Voltage Profiles at Various Rates (25°C Ambient Temperature)



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)

