

LC 12L

LiFePO₄ Battery | 12.8V | 12Ah | 153Wh



Electrical Specifications

Nominal Voltage	12.8V
Nominal Capacity	12Ah
Capacity Tolerance	± 4%
Capacity @ 25 A	28min
Energy	153Wh
Resistance	≤ 45 mΩ @ 50% SOC
Self Discharge	< 3% / month
Cell Type	IFR18650EC - LiFePO ₄

Discharge Specifications

Max. Continuous Discharge Current	15A
Peak Discharge Current	30A (3s)
BMS Discharge Cut-Off Current	45A ±5A (31ms)
Recommended Low Voltage Disconnect	11V
BMS Discharge Cut-Off Voltage	> 8V (2s)
Reconnect Voltage	> 10V
Short Circuit Protection	200 to 600µs

Charge Specifications

Recommended Charge Current	2.4A
Maximum Charge Current	12A
Recommended Charge Voltage	14.6V
BMS Charge Cut-Off Voltage	< 15.6V (0.5 to 1.5s)
Reconnect Voltage	> 14.4V
Float Charge Voltage	< 14.4V
Maximum Batteries in Series	6

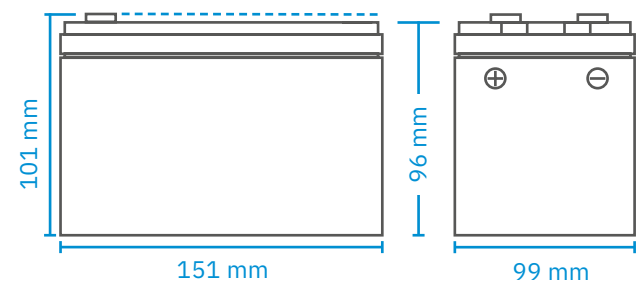
Mechanical Specifications

Measurements (L × W × H)	151 × 99 × 101 mm
Approx. Weight	1.65 kg
Terminal Type	F2
Terminal Torque	-
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

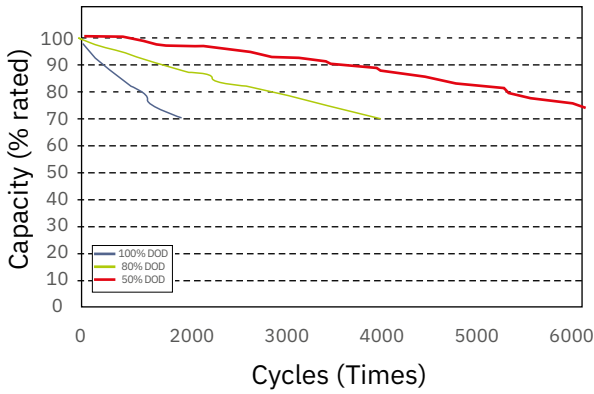
Measurements



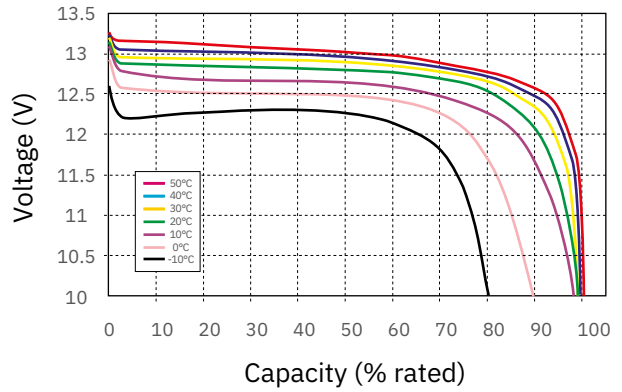
Compliance

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

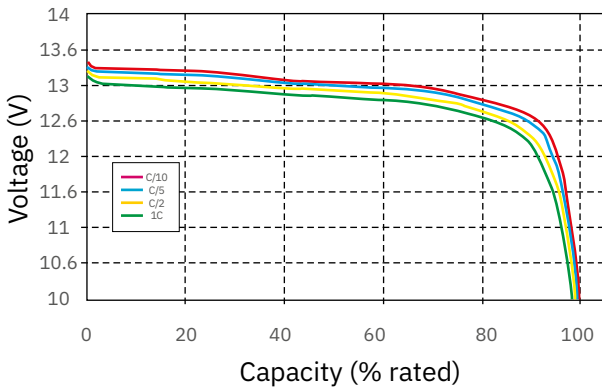
**Cycle Life vs. Depth of Discharge (DOD)
Discharge 0.5C / Charge 0.5C (25°C)**



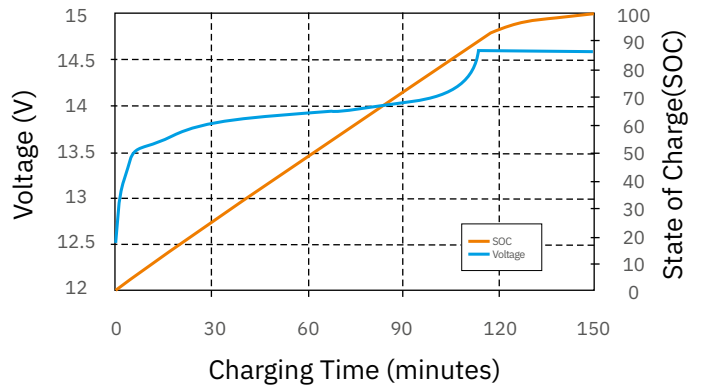
**Discharge Voltage Profiles at 0.5C Discharge Rate
(Various Ambient Temperatures)**



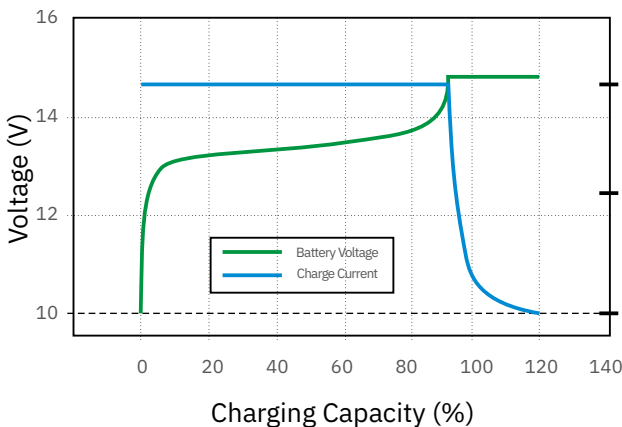
Discharge Voltage Profiles at Various Rates (25°C Ambient Temperature)



**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)

