

LC 20L

LiFePO₄ Battery | 12.8V | 20Ah | 256Wh



Electrical Specifications

Nominal Voltage	12.8V
Nominal Capacity	20Ah
Capacity Tolerance	± 4%
Capacity @ 25 A	48min
Energy	256Wh
Resistance	≤ 50 mΩ @ 50% SOC
Self Discharge	< 3% / month
Cell Type	IFR26650EC - LiFePO ₄

Discharge Specifications

Max. Continuous Discharge Current	20A
Peak Discharge Current	40A (5 to 7.5s)
BMS Discharge Cut-Off Current	55A ±10A (5 to 13ms)
Recommended Low Voltage Disconnect	11V (2.0V / Zelle)
BMS Discharge Cut-Off Voltage	> 8.0V (120 to 180ms)
Reconnect Voltage	> 8.64V (2.16V / Zelle)
Short Circuit Protection	200 to 600μs

Charge Specifications

Recommended Charge Current	4A
Maximum Charge Current	20A
Recommended Charge Voltage	14.6V
BMS Charge Cut-Off Voltage	15.6V (3.9V/Zelle)
Reconnect Voltage	> 15.2V (3.8V/Zelle)
Float Charge Voltage	< 14.4V (3.6V/Zelle)
Maximum Batteries in Series	6

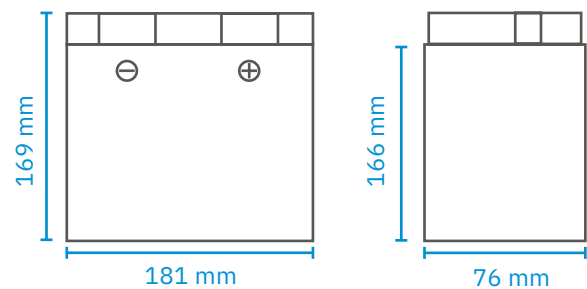
Mechanical Specifications

Measurements (L × W × H)	181 × 76 × 169 mm
Approx. Weight	2.55 kg
Terminal Type	F4-Terminal (6 mm)
Terminal Torque	4 - 5 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	75°C
Reconnect Temperature	53°C

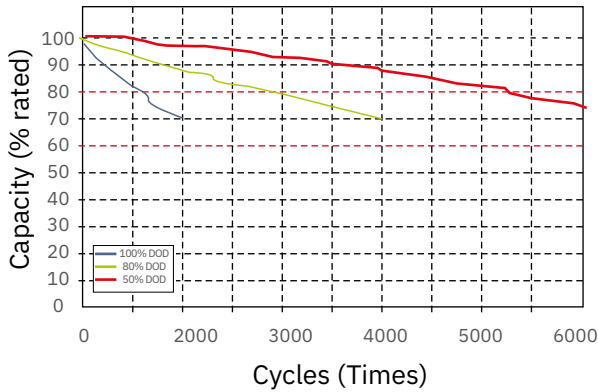
Measurements



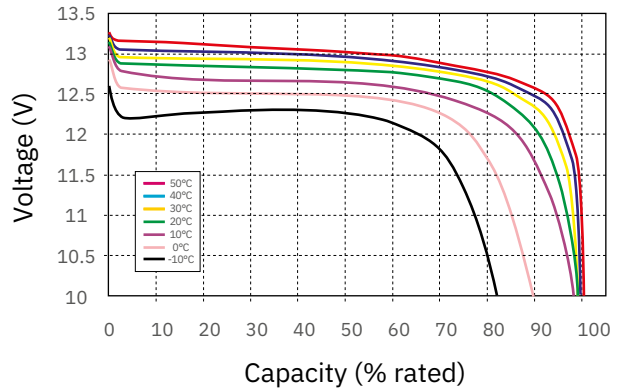
Compliance

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

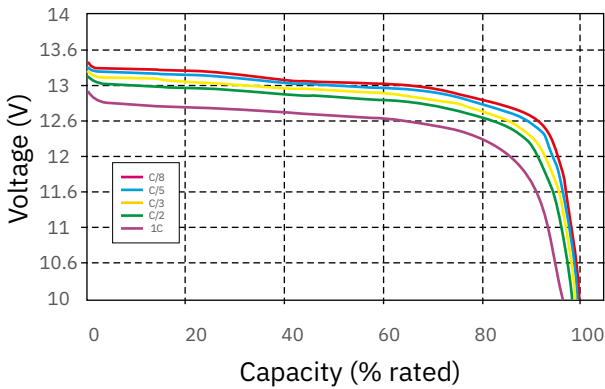
**Cycle Life vs. Depth of Discharge (DOD)
Discharge 0.5C / Charge 0.5C (25°C)**



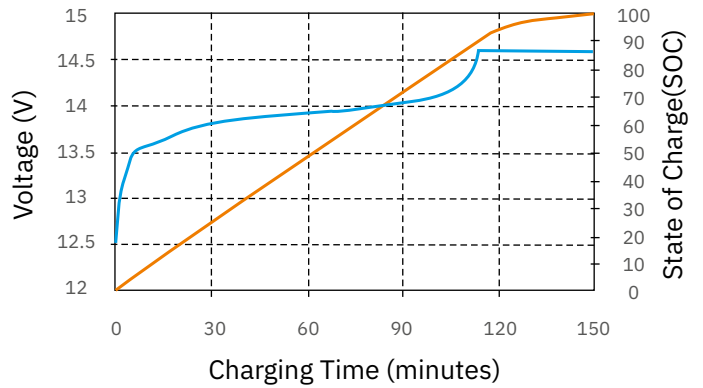
**Discharge Voltage Profiles
at 0.5C Discharge Rate
(Various Ambient Temperatures)**



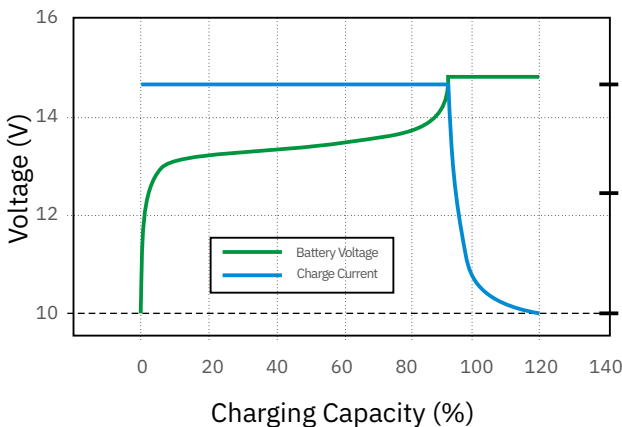
**Discharge Voltage Profiles at Various
Rates (25°C Ambient Temperature)**



**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)**

