



LC 20 L LiFePO₄ Lithium Battery

12.8 V | 20 Ah | 256 Wh

Electrical Specifications

Nominal Voltage	12,8 V
Nominal Capacity	20 Ah
Capacity @ 25 A	48 min
Energy	256 Wh
Resistance	≤50 mΩ @ 50% SOC
Self Discharge	<3% / month
Cell Type	IFR26650EC - LiFePO ₄

Discharge Specifications

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

Charge Specifications

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

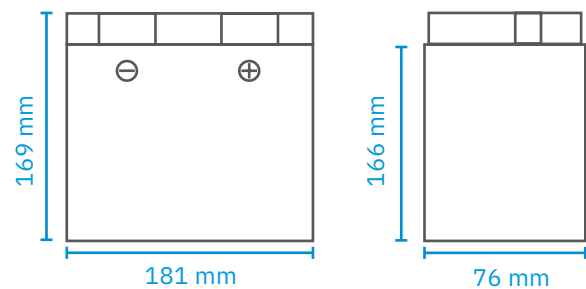
Mechanical Specifications

Measurements (L x W x H)	181 x 76 x 169 mm
Approx. Weight	2.55 kg
Terminal Type	M6
Terminal Torque	4 - 5 N m
Case Material	ABS
Enclosure Protection	IP65

Temperature Specifications

Discharge Temperature	-20 ~ 60 °C
Charge Temperature	0 ~ 45 °C
Storage Temperature	-5 ~ 35 °C
BMS High Temperature Cut-Off	75 °C
Reconnect Temperature	53 °C

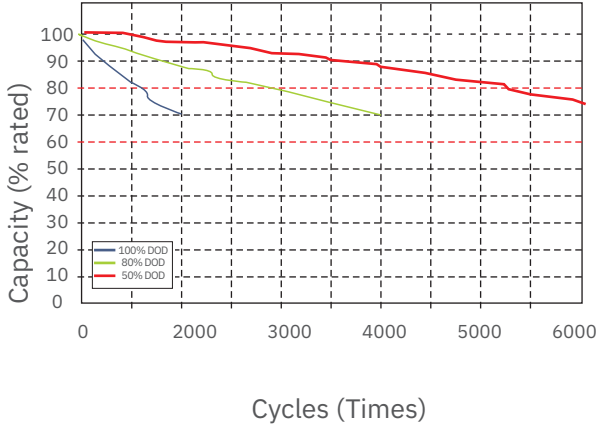
Measurements



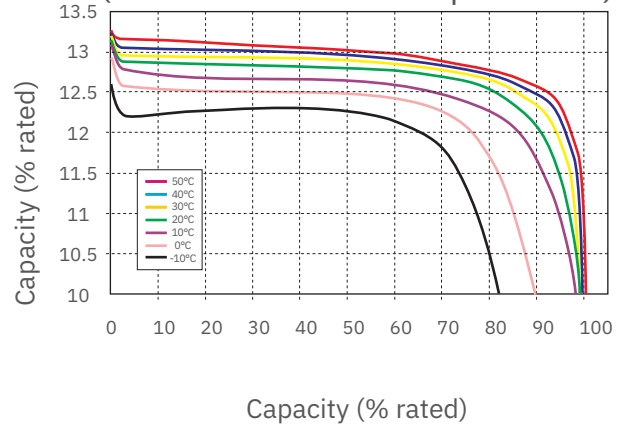
Compliance

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

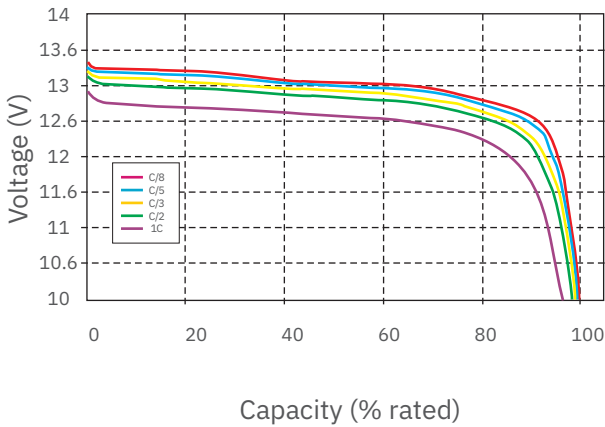
Cycle Life vs. Depth of Discharge (DOD)
Discharge 0.5C / Charge 0.5C (25°C)



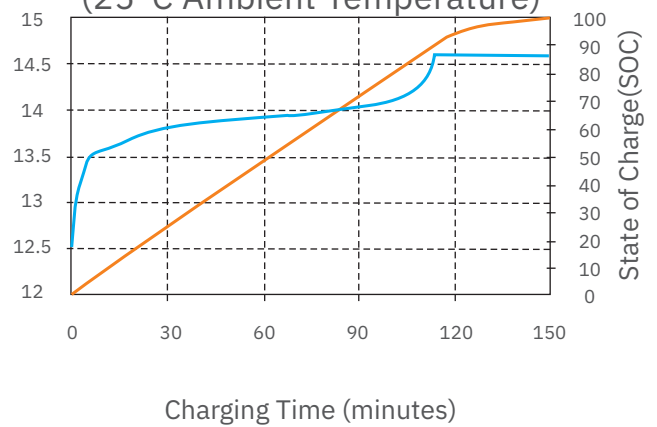
Discharge Voltage Profiles at 0.5C Discharge Rate
(Various Ambient Temperatures)



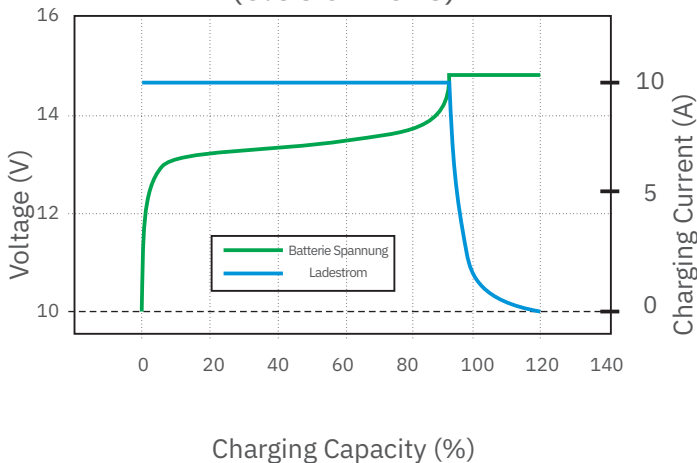
Discharge Voltage Profiles at Various Rates
(25°C Ambient Temperature)



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)

