

A40-24 LiFePO_4 Lithium Battery

25.6 V | 40 Ah | 1024 Wh



Electrical Specifications

Nominal Voltage	25.6 V
Nominal Capacity	40 Ah
Capacity	@ 25 A 96 min
Energy	1024 Wh
Resistance	$\leq 50 \text{ m}\Omega$ @ 50 % SOC
Self Discharge	<3% / Month
Cell Type	LiFePO_4

Discharge Specifications

Max. Continuous Discharge Current	40 A
Peak Discharge Current	80 A ($\approx 2 \text{ s}$)
BMS Discharge Cut-Off Current	100 A (50 ms)
Recommended Low Voltage Disconnect	22 V
BMS Discharge Cut-Off Voltage	20.8 V
Reconnect Voltage	21.6 V
Short Circuit Protection	200 to 600 μs

Charge Specifications

Recommended Charge Current	10 A
Maximum Charge Current	40 A
Recommended Charge Voltage	29.2 V
BMS Charge Cut-Off Voltage	<30.8 V (0.5 to 1.5 s)
Reconnect Voltage	> 29.2 V
Balancing Voltage	< 28.8 V
Maximum Batteries in Series	4

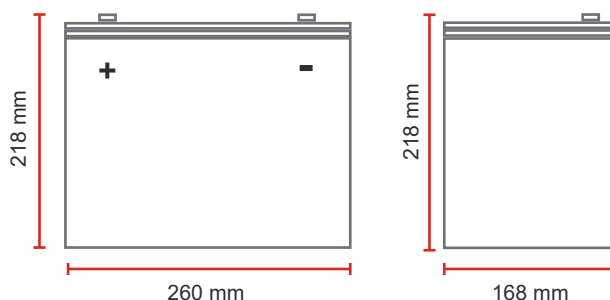
Mechanical Specifications

Measurements (L x W x H)	260 x 168 x 218 mm
Approx. Weight	10.00 kg
Terminal Type	M8
Terminal Torque	9 ~ 11 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-Of	65 °C
Reconnect Temperature	48 °C

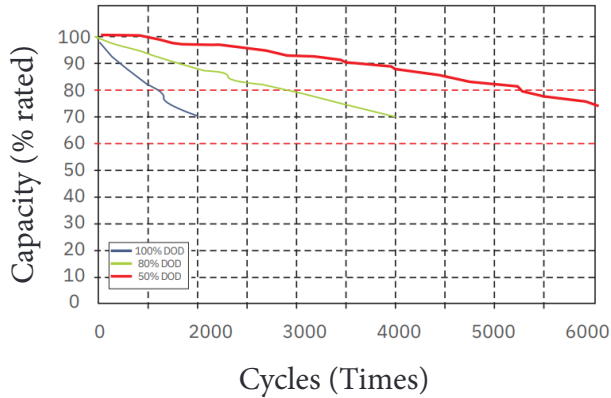
Measurements



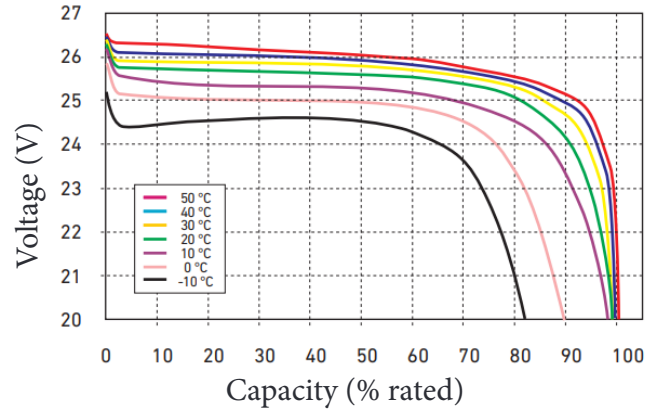
Compliance

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

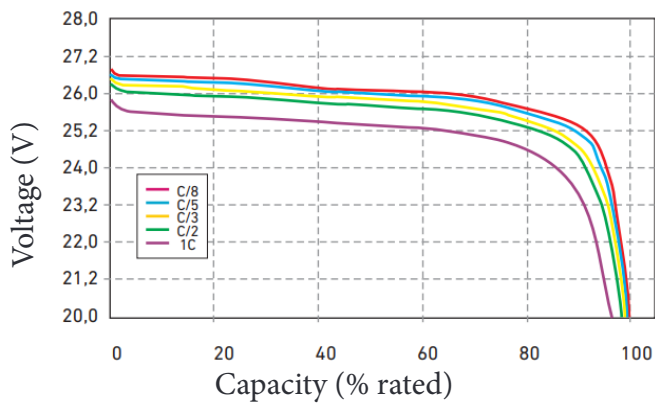
Cycle Life vs. Depth of Discharge (DOD)
Discharge 0.5C / Charge 0.5C (25°C)



Discharge Voltage Profiles at 0.5C Dis-charge Rate



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



Charging Characteristics (0.5C at 20°C)

