

51.2V 100Ah Lithium (LiFePo4) Battery

General

Nominal Voltage	51.2V
Working Voltage	40.0V - 57.6V
Nominal Capacity	100Ah
Energy	5120Wh
Self Discharge	≤3% Per Month

Discharging

Rec Continuous Discharge	100A
Rec. Voltage Cutoff	44.8V
BMS Voltage Cutoff	40.0V
BMS Voltage Recovery	43.2V
Discharge Temp Range	-4F to 140F

Charging

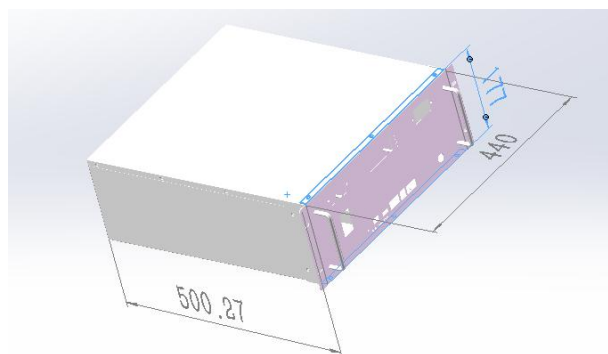
Rec Charging Current	20A
Max Charging Current	100A
Bulk/Absorb Voltage	57.6V
Float Voltage	57.6V or Off
BMS High Voltage Cutoff	57.6V
Charging Temp. Range	32F to 140F

Physical

Cell Chemistry	Lithium Iron Phosphate
Cell Type	Prismatic
Cell Configuration	16S1P
Series Connectable	No
Parallel Connectable	Yes, up to 16
Weight	46Kg
Dimensions LxWxH	440mm * 500.27mm * 177mm
Terminal Type	M8
Shell Type	Metal
UN Shipping Class	UN 3480



All efforts have been made to ensure the data in this datasheet are correct and up to date. XD Battery constantly monitors product documentation for inaccuracy and routinely update documentation to reflect the most accurate information available.



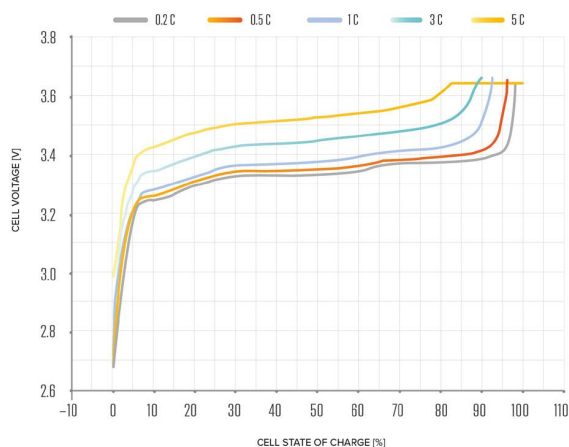
Safety

Charging Freeze Protection	Yes, under 32F
Pack Over-Voltage	Yes
Cell Over-Voltage	Yes
Pack Under-Voltage	Yes
Cell Under-Voltage	Yes
Cell Over-Temp	Yes
BMS Over-Temp	Yes
Short Circuit / Over Current	Yes
Certifications	UN38.3, CE
IP Rating	IP43

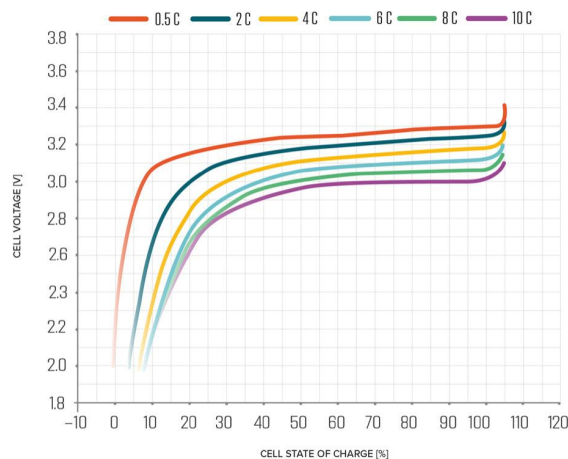


Battery Characteristics

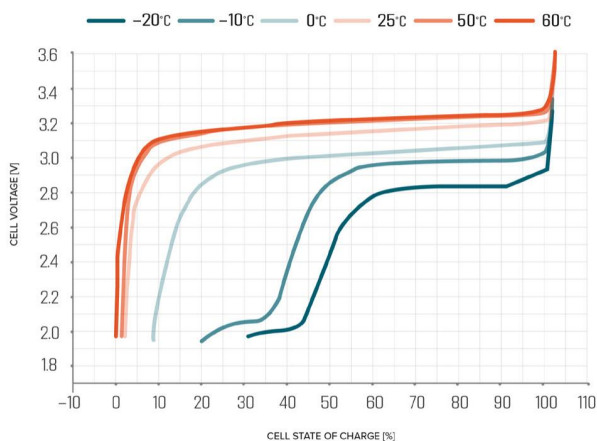
The following graphs demonstrate the operational characteristics of LiFePo4 cells under a variety of conditions. Many factors play a role in the exact capacity, performance, lifetime and safety of a lithium battery so every installation varies depending on the exact setup and use case. These serve only as a guide and do not reflect the exact characteristics of any individual battery.



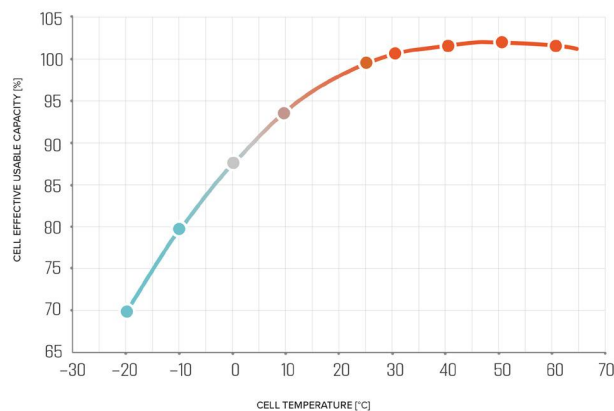
CELL VOLTAGE VS STATE OF CHARGE AT
DIFFERENT CHARGE RATES (25 °C)



CELL VOLTAGE VS STATE OF CHARGE AT
DIFFERENT DISCHARGE RATES (25 °C)



CELL VOLTAGE VS STATE OF CHARGE AT
DIFFERENT TEMPERATURES



TYPICAL EFFECTIVE USABLE CAPACITY
VS CELL TEMPERATURE



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