

POWER LITHIUM BATTERIES

Dual Purpose Deep Cycle Starting Lithium Battery

LFP12.8VNX120-7

Starting / Deep cycle

Features of LiFePO4 Battery

Longer Cycle Life

LiFePO4 batteries would be is five times than SLA batteries on cycle life

High Power & Light weight

LiFePO4 batteries performance twice power of SLA batteries, while half weight helpful for transport and installation

Intelligent management control

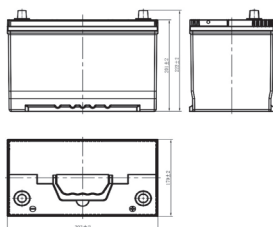
Intelligent BMS system covered by LFP batteries to ensure that batteries work on safety and perfect condition

Lower Self-discharge rate

Lower Self-discharge rate to guarantee LFP batteries be stored more longer than SLA batteries

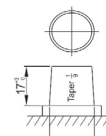


Physical Dimension



Standard Terminal

Terminal Type	D	
	Positive	Negative
1	19.5 _{+0.3}	17.9 _{+0.3}



Electrical Characteristics

Chemistry	LiFePO4
Nominal Voltage	12.8V
Nominal Capacity	80Ah
Energy	1024Wh
Cold Cranking Amps	1600CCA
Internal Resistance	≤1.9 mΩ
Cycle Life	≥1500 cycles
Self Discharge Rate	≤30uA
Efficiency of Charge	100% @0.5C
Efficiency of Discharge	96-99% @1C

Standard Charge

Charge Voltage	14.6±0.2V
Charge Mode	0.2C to 14.6V, then 14.6V, charge current to 0.02C (CC/CV)
Rated Charge Current	≤40A
Max. Charge Current	≤80A
BMS Charge Cut-off Voltage	15.6V
Over Charge Recovery Voltage	15.2V

Standard Discharge

Continuous Discharge Current	≤180A
Instantaneous Discharge Current	1600A(5S)
BMS Discharge Cut-off Voltage	8V
Over Discharge Recovery Voltage	9.2V
Charge Temperature	0 °C to 45 °C (32Fto 113F) @60±25% Relative Humidity
Discharge Temperature	-20 °C to 60 °C (-4F to 140F) @60±25% Relative Humidity
Storage Temperature	0 °C to 40 °C (32Fto 104F) @60±25% Relative Humidity
Water Dust Resistance	IP56

Mechanical

BMS Withstand voltage value	30V
Plastic Case	ABS
Dimensions (in./mm.)	303*170*201*222mm ± 2mm
Weight (lbs./kg.)	9.8kg(21.56lbs)
Terminal	Brass

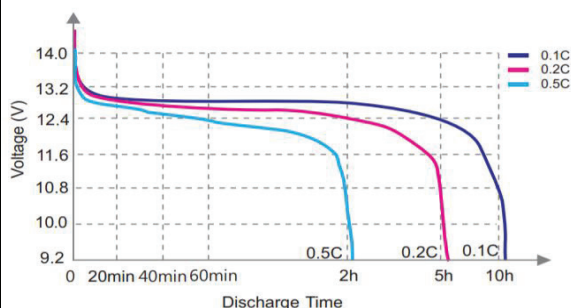
POWER LITHIUM BATTERIES

Dual Purpose Deep Cycle Starting Lithium Battery

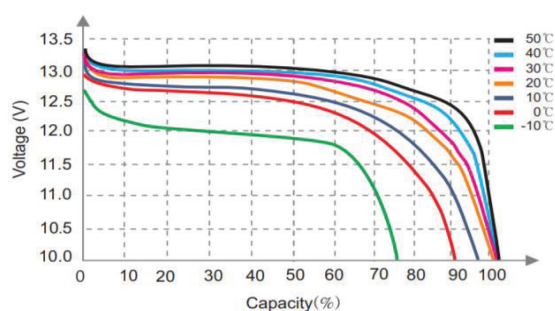
LFP12.8VNX120-7

Starting / Deep cycle

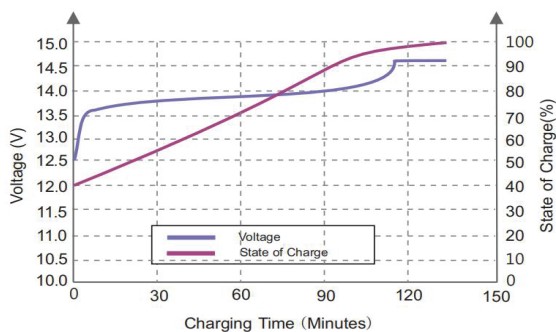
Different Rate Discharge Curve(25°C)



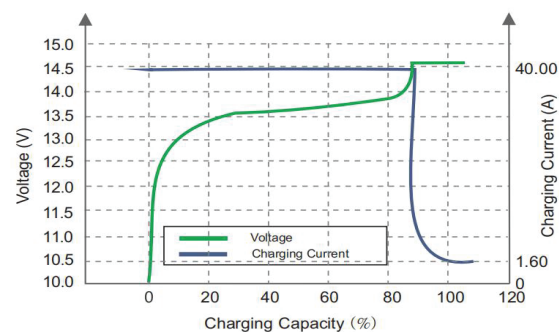
Different Temperature Discharge Curve(0.5C)



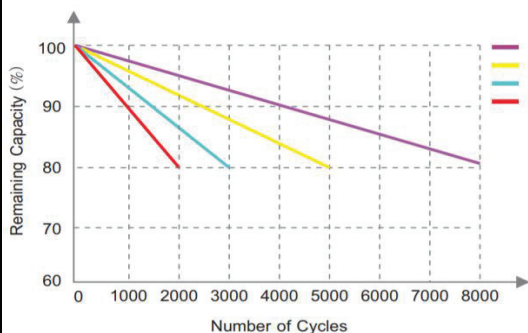
State of Charge Curve(0.5C, 25°C)



Charging Characteristics(0.5C, 25°C)



Different DOD Discharge Cycle Life Curve(0.5C)



Different Temperature Self Discharge Curve

