



## NANTONG NINGYUAN AUTOMATION TECHNOLOGY CO.,LTD

Add:11#c, 299 Kerun road, Gangzha District,

Nantong, China TEL:0086-0513-83598587

FAX:0086-0513-83598587

# LITHIUM IRON PHOSPHATE BATTERY

## ELECTRICAL SPECIFICATIONS

Nominal Voltage	12.8 V
Nominal Capacity	30 Ah
Capacity @ 3A	10H
Energy	384Wh
Resistance	≤60 mΩ @ 50% SOC
Efficiency	99%;
Self Discharge	<3% per Month
Maximum Modules in Series	1 (Single Use)

## DISCHARGE SPECIFICATIONS

Maximum Continuous Discharge Current	10 A
Peak Discharge Current	20 A (7.5 s ± 2.5 s)
BMS Discharge Current Cut-Of	f 215 A ± 15 A (10 ± 5 ms)
Recommended Low Voltage Disconnect	10 V
BMS Discharge Voltage Cut-Of	f 8 V (2.0 ± 0.08 vpc) (20 ± 6 ms)
Reconnect Voltage	10 V (2.5 ± 0.05 vpc)
Short Circuit Protection	200-600 μs

## TEMPERATURE SPECIFICATIONS

Discharge Temperature	-4 to 140 °F (-20 to 60 °C)
Charge Temperature	-4 to 113 °F (-20 to 45 °C)
Storage Temperature	23 to 95 °F (-5 to 35 °C)

BMS High Temperature Cut-Of	f 176 °F (80 °C)
Reconnect Temperature	122 °F (50 °C)

## DIMENSIONAL SPECIFICATIONS

## MECHANICAL SPECIFICATIONS

Dimensions (L x W x H)	330x 20 x 255 mm
Weight	4.2kg
Terminal Type	Lead cable
Terminal Torque	No
Case Material	Epoxy board
Enclosure Protection	IP54
Cell Type - Chemistry	Prismatic - LiFePO <sub>4</sub>

## CHARGE SPECIFICATIONS

Recommended Charge Current	2.5 A - 10A
Maximum Charge Current	10 A
Charge Current (0 to -10 °C)	≤ 0.1 C
Charge Current (-20 to -10 °C)	≤ 0.05 C
Recommended Charge Voltage	14.2 V - 14.6 V
BMS Charge Voltage Cut-Off	15.6 V (3.9 ± 0.025 vpc) (1.1 ± 0.4 s)
Reconnect Voltage	15.2 V (3.8 ± 0.05 vpc)
Balancing Voltage	14.4 V (3.6 vpc)

## COMPLIANCE SPECIFICATIONS

Certifications	CE (battery) UN38.3 & IEC62133 (cells)
Shipping Classification	UN 3480, CLASS 9



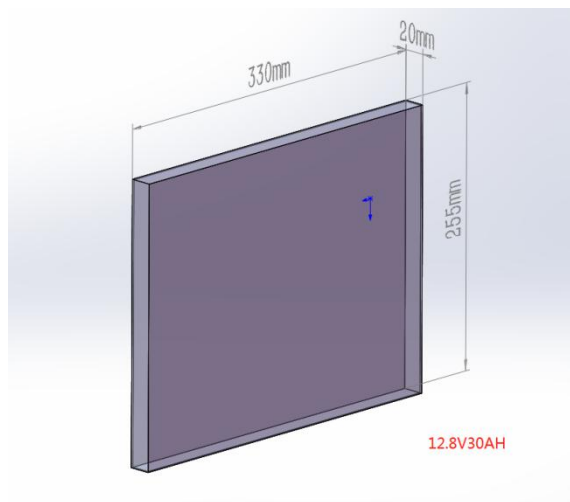
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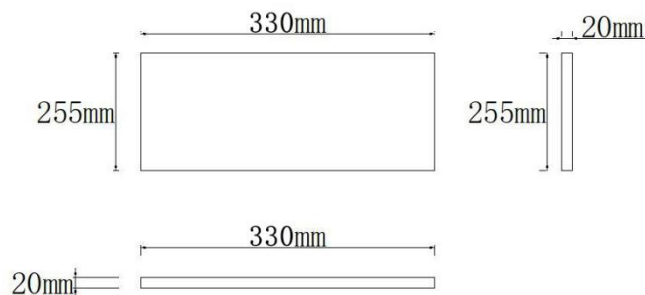
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## ProductImage



## Product Dimensions



Discharge Constant Current per Cell (Amperes at 77°F25°C)							
F.V/Time	30min	45min	1h	2h	3h	5h	8h
3.75V	25.05	16.66	12.48	6.35	4.16	2.49	1.58
3.65V	25.02	16.46	12.50	6.22	4.11	2.47	1.56
3.65V	24.99	16.26	12.52	6.09	4.06	2.45	1.54
3.50V	24.96	16.06	12.54	5.96	4.01	2.43	1.52

Discharge Constant Power per Cell (Watts at 77°F 25°C)									
E.V/Time	l2min	15min	30min	45min	1h	2h	3h	5h	8h
2.10V	62.5	31.3	6.3	16.7	12.5	25.1	4.2	2.5	1.6
2.20V	62.7	31.5	6.3	16.9	12.7	25.3	4.4	2.7	1.7
2.30V	62.9	31.7	6.3	17.1	12.9	25.5	4.6	2.9	1.8
2.40V	63.1	31.9	6.3	17.4	13.1	25.7	4.9	3.1	2.0
2.50V	63.3	32.1	6.3	17.6	13.3	25.9	5.1	3.3	2.1

Note The above data are average values, and can be obtained within 20 charge/discharge cycles. These are not minimum values. Cell and batteiy designs/specifications are subject to modification without notice. Contact US for the latest information.



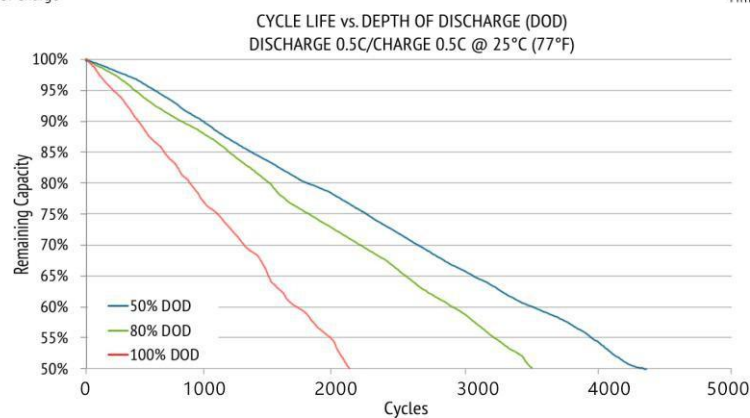
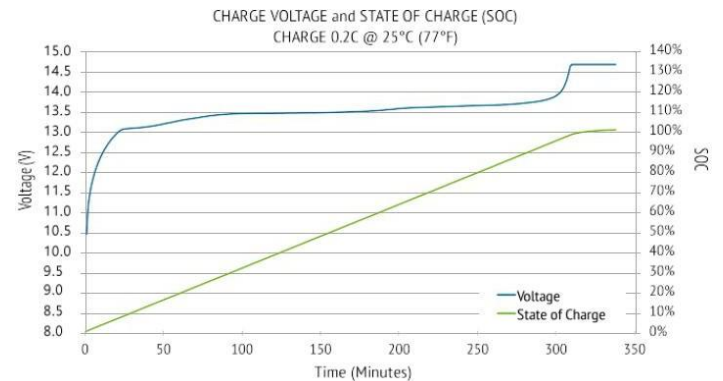
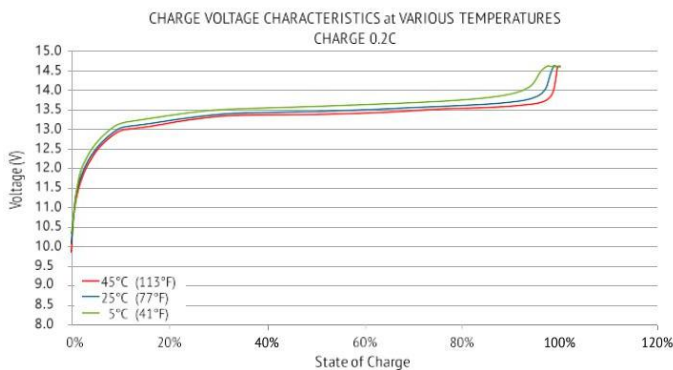
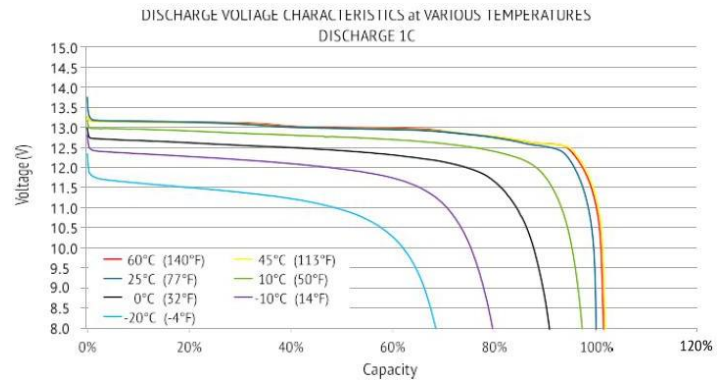
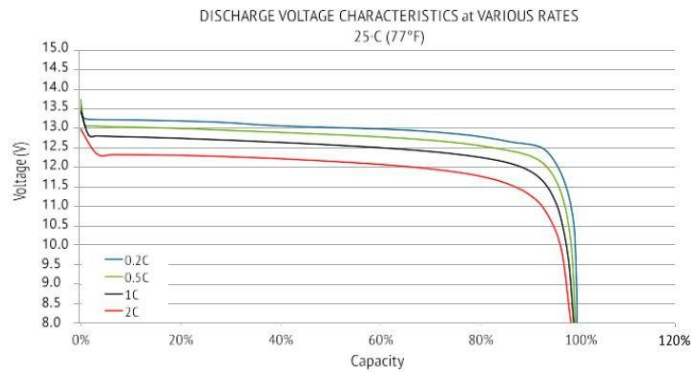
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## PERFORMANCE CHARACTERISTICS



## Battery Construction

Component	Positive plate	Negative plate	Container	Cover	Safety valve	Terminal
Raw material	lifepo4	lifepo4	Epoxy board	PVC	PVC	lifepo4