

Neata®

Lithium Battery Series

LFP12200(12V200AH)



Lithium Series Batteries provide superior performance, capacities and reliability. Using state of high power cell technology the lithium series is designed for environmentally sensitive areas that require enhanced cycle life capabilities in commercial, industrial, residential, and private applications. The maintenance free construction and advanced design features makes the lithium Series the definitive choice for a wide variety of markets; Solar and Renewable Energy Storage; Electric Vehicle and Golf cart; Industrial equipment, Floor Machines, Forklifts, Aerial lifts, and Robotics; Marine, RV, and no-idle solutions; Mobility and Medical Equipment; Telecom, Broadband and Cable TV; UPS systems.



Applications



BATTERY SPECIFICATIONS

Battery Type - Chemistry	LiFePO ₄	Internal Resistance - Milliohms	< 4mΩ
Nominal Voltage	12.8 V	Efficiency - round trip	> 99.5%
Amp Hour Capacity	200 AH	Self Discharge per Month	< 3%
Energy Density	2560 Wh	Max 4 - series connections	12-48V
Dimensions (L*W*H)	510*185*240 mm	Parallel connections	No Limited
Box dimensions (L *W*H)	445*165*240 mm	Case IP Rating	IP65
Weight	18.3 KG	Design Life	20 Years
Terminal Type	M8	Cycle Life (1C, 25°C@80%DOD)	>4000 cycles
Terminal Torque	12.4 NM	Cycle Life (0.2C, 25°C@80%DOD)	>6000 cycles
Case Material	ABS	Discharge Temperature	(-23 to 65)°C
BMS build-in	Yes	Charge Temperature	(-3 to 65)°C
Recommend Charge Voltage	14.2 ± 0.20V	Storage Temperature	(-20 to 45)°C
Max Charge Voltage	14.8 ± 0.20V	Bluetooth(APP)	Optional
Recommend Charge current	40 A	LCD Screen	Optional
Max Charge Current	200 A	Heating functions -20°C	Optional By Charger
Charge Current (0 to -10°C)	<0.1C	Batteryself heating function	Optional By Cell
Charge Current (-20 to -10°C)	<0.05C	Shipping Classification	UN3480, CLASS9
Recommend Discharging voltage	10.8 ± 0.20V	Other Certifications	CB /CE
Max Discharging Voltage	9.6 ± 0.20V		
Max Discharge Current	200 A		
Pulse Discharge Current	600A/3S		





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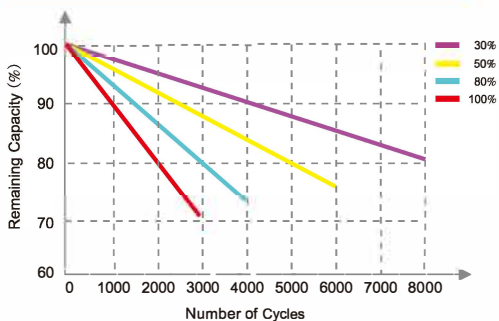
BMS SPECIFICATIONS

BMS Version: SMTK

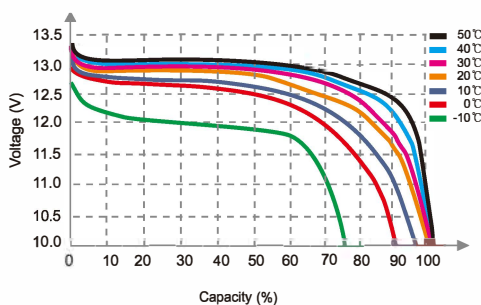
BMS Protections Range: Over (Voltage, Current, Temperature management) and cell balance

Over Charging Cell protection	>3.90±0.05V	Delay	700-1500ms
Over Charging Pack protection	>15.6±0.20V	Delay	700-1500ms
Over Charging Current 1	--	Delay	2s
Over Charging Current 2	--	Delay	2s
Over Charging Temp Protection 1	65±5°C	Release	48±12°C Delay:5s
Over Discharging Cell protection	<2.4±0.10V	Delay	70-150ms
Over Discharging Pack protection	<9.6±0.40V	Delay	70-150ms
Over Discharging current 1	205±2.5A	Delay	170-410ms
Over Discharging current 2	250±2.5A	Delay	170-410ms
Over Discharging Temp Protection 1	65±5°C	Release	48±12°C Delay:5s
PCB Temp protection	100±5°C	Release	70±15°C Delay: 5s
Cell Balance Start	3.60±0.05V		
Cell Balance Current	60±5mA		
Short circuit	2100A±200A	Delay	< 500us

Different DOD Discharge Cycle Life Curve 1C 25°C



Different Temperature Discharge Curve(0.2C)



State of Charge Curve(0.5C, 25°C)

