

# Neata®

+ Super energy

## Lithium Battery Series

### LFP24100(25.6V100AH)

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 Type -Chemistry Nominal	LiFePO4	Internal Resistance - Milliohms	< 80 mΩ
Voltage	25.6 V	Efficiency - round trip	> 99.5 %
Amp HourCapacity	100 AH	Self Discharge per Month	< 3 %
Energy Density	2560 Wh	Max parallel connections	4 pcs
Dimensions (L* W* H)	510*185*240	SeriesI connections	51.2 V
Box dimensions (L* W* H)	445*165*240	Case IP Rating	IP65
Weight	18.3 KGS	DesignLife	20 Years
Terminal Type	M 8	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	28.5 ±0.20V	Storage Temperature	(-20 to 45C) °C
Max Charge Voltage	29.5 ±0.20V	Bluetooth(APP)	Optional
Recommend Charge current	25 A	LCD Screen	Optional
Max Charge Current	100 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)	<0.05 C		
Recommend Discharging voltage	22.5 ±0.20V		
Max Discharging Voltage	19.2 ±0.20V	Shipping Classification	UN3480, CLASS 9
Max Discharge Current	180 A±3S	Other Certifications	CB /CE
Pulse Discharge Current	100 A		





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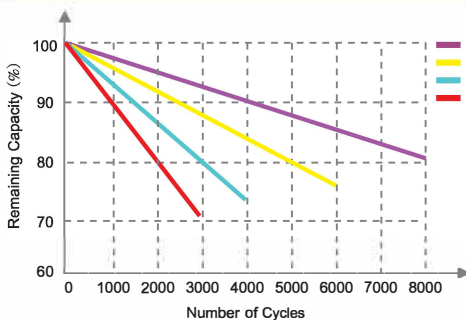
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### BMS SPECIFICATIONS

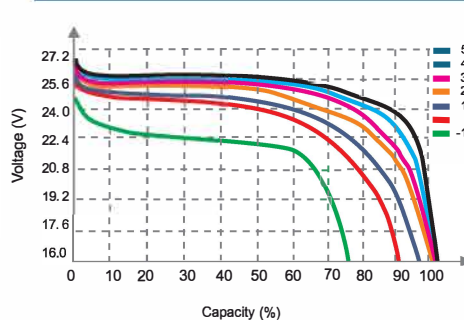
BMS Version :LL

BMS Protections Range:		Over (Voltage, Current, Temperaturemanagement ) and cell balance			
Over Charging Cell protection	>3.80	±0.05V	Delay	2 ±0.5S	
Over Charging Pack Warning	>29.6	±0.20V			
Over Charging Pack protection	>30	±0.20V	Delay	2 ±0.5S	
Over Charging Current Warning	>105	±2.0A			
Over Charging Current protection 1	>105<125	±2.5A	Delay	15 ±1.0S	
Over Charging Current protection 2	≥125	±2.5A	Delay	3 ±1.0S	
OverCharging Temp Protection 1	<-5 or>70	±3°C	Release	>0 or < 60	±3°C Delay:2±0.5S
Over Discharging Cell protection	<2.4	±0.05V	Delay	2 ±0.5S	
Over Discharging Pack protection	<19.2	±0.20V	Delay	2 ±0.5S	
Over Discharging current Warning	>105	±2.5A			
Over Discharging current protection 1	>105 <180	±2.5A	Delay	20 ±1.0S	
Over Discharging current protection 2	≥180	±2.5A	Delay	3 ±1.0S	
Over Discharging Temp Protection 1	< -25 or>75	±3°C	Release	> -20 or < 70	±3°C
PCB Temp protection	>95	±3°C	Release	< 80	±3°C Delay:2±0.5S
Cell Balance Start	3.5 ±0.05V			Cell voltage difference < 20mV	Passive balance
Balance Current	150 ±10mA				
Short circuit			Delay	0.1 ±0.2ms	
Power consumption	<300	uA	Switch-off mode	Storage & transportation	
	<500	uA	Sleep mode	Protection & stand-by	
	<15	mA	Operating mode	Operating	
	<28	mA	Operating mode	Low voltage to start Pre-charge	
Communication ports	Major CAN/RS485 optional for Bluetooth/Dryport/SNMP			Can be customized	
Temperature accuracy	±2	°C	Measuring range -40~100°C		
Voltage accuracy	±15	mv	For cells and module		
Current accuracy	FSC	±5%	Measuring range -200~+200A		
SOC	±5%		Integral calculation		

Different DOD Discharge Cycle Life Curve 1C 25°C



Different Temperature Discharge Curve(0.2C)



State of Charge Curve(0.5C, 25°C)

