LiFePO4 Lithium Iron Phosphate Batteries

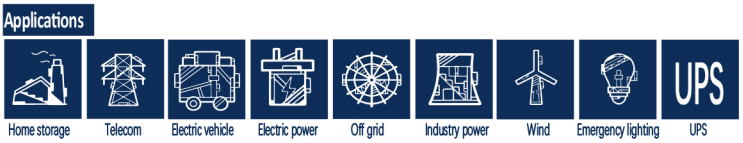
12V100AH

Model:SL4576B

Powerhouse BATTERIES

The latest generation in maintenance free batteries is here! LiFePO4 batteries offer longer service life than traditional lead acid batteries, plus weigh less than HALF as much as SLA batteries. LiFePO4 also provide more usable life per cycle, allowing for longer run times by holding a higher voltage until capacity is almost exhausted. These batteries will also maintain 80-90% charge when in storage - far higher than their lead acid counterparts.

Each battery is fitted with an internal battery management system to provide safe charging and discharging at all times. This system provides internal short circuit, over temperature and under/over voltage cut off. Can be wired in series and/or parallel.



BATTERY SPECIFICATIONS

Battery Type - Chemistry	LiFePO4		Internal Resistance - Milliohms	< 50	mΩ
Nominal Voltage	12.8	V	Efficiency - round trip	> 99.5	%
Amp Hour Capacity	100	AH	Self Discharge per Month	< 3	%
Energy Density	1280	Wh	Max - series connections	51.2	V
Dimensions(LxWxH)	330*171*222	mm	Parallel connections	4PCS	
Weight	11.2	KGS	Case IP Rating	IP65	
Terminal Type	M8		DesignLife	20	Years
Terminal Torque	16	NM	Cycle Life (1C, 25℃@80%DOD)	>4000	cycles
Case Material	ABS		Cycle Life (0.2C, 25℃@80%DOD)	>6000	cycles
BMS build-in	Yes				
			Discharge Temperature	(-23 to 65)	℃
Recommend Charge Voltage	14.8	±0.20V	Charge Temperature	(-3 to 65)	℃
Max Charge Voltage	15.2	±0.20V	Storage Temperature	(-20 to 45C)	℃
Recommend Charge current	25	A			
Max Charge Current	100	A	Bluetooth(APP)	Optional	
Charge Current (0 to -10℃)	<0.1	C	LCD Screen	Optional	
Charge Currrent (-20 to -10℃)	<0.05	C	Heating functions -20°C	Optional	By Charger
Recommend Discharging voltage	10.4	±0.20V	Batteryself heating function	Optional	BY Cell
Max Discharging Voltage	9.2	±0.20V			
Max Discharge Current	100	A	Shipping Classification	UN3480, CLASS 9	
Pulse Discharge Current	420	A±15S	Other Certifications	CB /CE	

LiFePO4 Lithium Iron Phosphate Batteries
12V100AH
Model:SL4576B

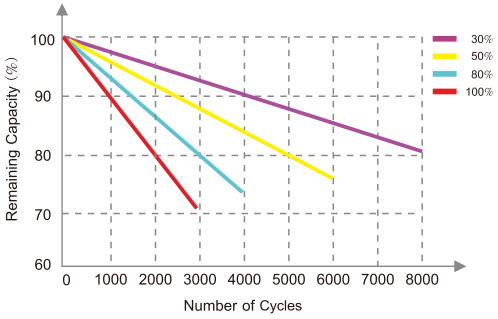
Powerhouse BATTERIES

BMS SPECIFICATIONS

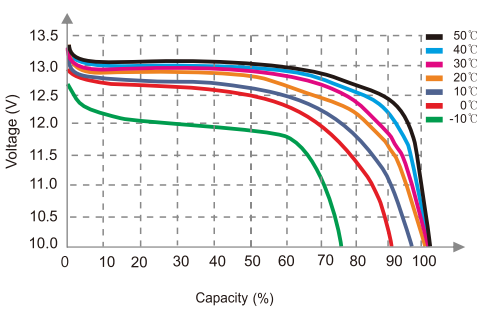
BMS Version :JWZN

BMS Protections Range:	Over (Voltage, Current, Temperaturemanagement) and cell balance					
Over Charging Cell protection	>3.85	±0.05V	Delay		2 ±0.5S	
Over Charging Pack protection	>15.4	±0.20V	Delay		2 ±0.5S	
Over Charging Current 1	>100	±2.0A	Delay		5 ±2.0S	
Over Charging Current 2	-	±2.5A	Delay	-	±1.0S	
OverCharging Temp Protection 1	<-0 or>65	±3℃	Release	>3 or < 60	±3℃	Delay:2±0.5S
Over Discharging Cell protection	<2.3	±0.05V	Delay		2 ±0.5S	
Over Discharging Pack protection	<9.2	±0.20V	Delay		2 ±0.5S	
Over Discharging current 1	>420	±2.5A	Delay		15 ±2.0S	
Over Discharging current 2	>840	±2.5A	Delay		1 ±1.0S	
Over Discharging current 3	--	±2.5A	Delay		±1.0S	
Over Discharging Temp Protection 1	<-20 or>65	±3℃	Release	>-15 or < 60	±3℃	
PCB Temp protection	>95	±3℃	Release	< 75	±3℃	Delay:2±0.5S
Cell Balance Start		3.6 ±0.05V				
Balance Current		36 ±20mA				
Short circuit			Delay		350 ±0.5ms	
Power consumption	<100	uA	Switch-off mode		Storage & transportation	
	<100	uA	Sleep mode		Protection & stand-by	
	<15	mA	Operating mode		Operating	
	<28	mA	Operating mode		Low voltage to start Pre-charge	
Communication ports	Opitional for CAN/Bluetooth/RS485/Dryport/SNMP				Can be customizeddevice	
Temperature accuracy	±2	℃	Measuring range -40~100℃			
Voltage accuracy	±3.5	mv	For cells and module			
Current accuracy	FSC	±5%	Measuring range -200~+200A			
SOC	±5%		Integral calculation			

Different DOD Discharge Cycle Life Curve 1C 25C



Different Temperature Discharge Curve(0.2C)



State of Charge Curve(0.5C, 25℃)