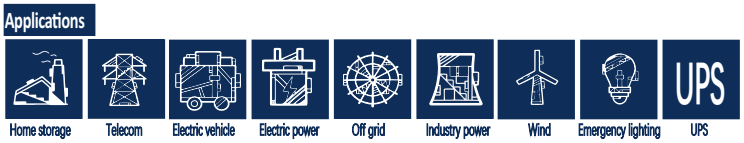
LiFePO4 Lithium Iron Phosphate Batteries
12V50AH
Model:SL4566A

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	50 AH	Self Discharge per Month	< 3 %
Energy Density	640 Wh	Max - series connections	51.2 V
Dimensions(LxWxH)	229*138*213 mm	Parallel connections	4PCS
Weight	6.3 KGS	Case IP Rating	IP50
Terminal Type	M6	DesignLife	20 Years
Terminal Torque	14 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	13.8 ±0.20V	Charge Temperature	(-3 to 65) ℃
Max Charge Voltage	14.8 ±0.20V	Storage Temperature	(-20 to 45C) ℃
Recommend Charge current	25 A		
Max Charge Current	50 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	10.6 ±0.20V	Batteryself heating function	Optional BY Cell
Max Discharging Voltage	8.8 ±0.20V		
Max Discharge Current	50 A	Shipping Classification	UN3480, CLASS 9
Pulse Discharge Current	180 A±15S	Other Certifications	CB /CE

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BMS SPECIFICATIONS

BMS Version :JWZN

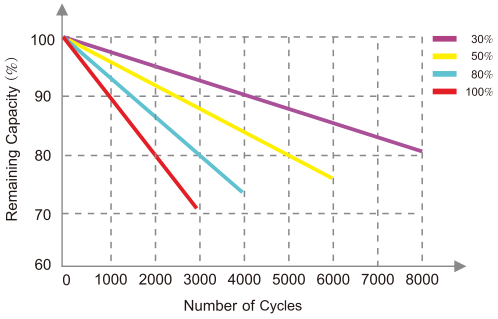
BMS Protections Range: Over (Voltage, Current, Temperaturemanagement) and cell balance

Over Charging Cell protection	>3.75	±0.05V	Delay		2 ±0.5S	
Over Charging Pack protection	>15.0	±0.20V	Delay		2 ±0.5S	
Over Charging Current 1	>50	±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	<2.2	±0.05V	Delay		2 ±0.5S	
Over Discharging Pack protection	<8.8	±0.20V	Delay		2 ±0.5S	
Over Discharging current 1	>180	±2.5A	Delay		15 ±2.0S	
Over Discharging current 2	>360	±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	3.5	±0.05V				
Balance Current	35	±20mA				
Short circuit			Delay	350	±0.5ms	

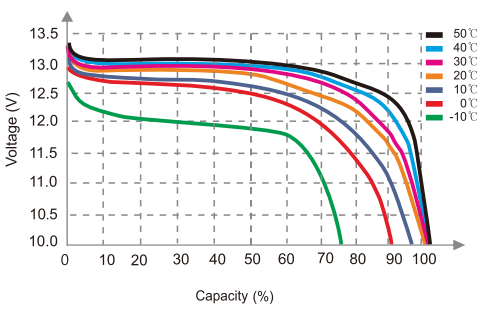
Power consumption	<100	uA	Switch-off mode	Storage & transportation
	<100	uA	Sleep mode	Protection & stand-by
	<15	mA	Operating mode	Operating
	<28	mA	Operating mode	Low voltage to start Pre-charge

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℃)