

Power

SLPO48-200(LiFePO₄ 48V200AH Battery)

General Information

SLPO series is a LiFePO₄(lithium iron phosphate)battery pack for communications standby application. The battery pack adopts the advanced LiFePO₄ battery technology with the advantages of long cycle life, small size, lightweight, safety and environmental protection, and also has a strong environmental adaptability. It is ideal for harsh outdoor environments.

The battery pack integrates a smart battery management and monitoring module, support for remote centralized monitoring and remote battery management and maintenance, to satisfy the demands of unattended. Therefore, the SLPO series can fully meet the backup power supply requirements of the access network equipment, mobile communication equipment, transmission equipment, micro base station, and microwave communication equipment.





Key Features

X Super long cycle life

Over 2000 cycle @ 90%DOD @ 40°C can be circularly used, 8 times of Lead acid battery.

X Communication port

RS485 standard communication interface meet requirement of several packages to connect in parallel.

※ Fast charge capability

Very fast charging capability up to 1C.

X Low self discharge

<1% per month @ 20°C

X Long Life

10 years design life at 40°C

X Completely maintenance-free

Completely Maintenance-free throughout battery lifetime saves OPEX for the users.

X Intelligent Integrated Battery Manage System(BMS)

Built-in BMS automatically protects internal cells from over-charge, over-discharge, over-temperature, short-circuit, etc. Ensure battery safety and reliability. Equalize and balance each cell. Prolong battery life. SOC-DOD-SOH reporting/setting device events, battery parameters, and storage, intelligent monitor, remote measure, remote communication, remote control.

X LED status and alarm indication

※ In compliance with standard UN/NOT 38.3, CE, IEC.

X High safety & stable performance

No explosion and no fire under collision. No risk of leakage.

X Green environmental material

Eco-friendly and nonpolluting, no acids or no hazardous and noxious substances (including lead, cadmium, mercury).

Application

§ UPS and Backup System

§ Telecommunication Base Station

§ Marine Transport and Fishing

§ Transmission and Distribution Backup

§ Wind Generator and Solar Power Energy Storage

§ Military Equipment

§ Electric Vehicles



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Battery Group Specification

Cell	Model		34135192		
	Capacity(0.5C)		100AH		
	Rated Voltage		3.2V		
	Typical Impedance		≤0.7mΩ		
	Battery Material		LiFePO ₄		
BMS	Single Cell Over-charge Cut-o	ff Voltage	3.75V		
	Over-charge Release Voltage		3.40V		
	Single Cell Under-discharge C	cut-off Voltage	2.50V		
	Discharge Release Voltage		2.80V		
	Over-discharge Cut-off Currer	nt	180A		
	Over-discharge Cut-off Currer	500mS			
	Short-circuit Protection	200A			
	Short-circuit Protection Delay		1mS		
	Condition for the Recovery of		Cut off load		
	Over-current and Short-circuit	t			
	Balance Current		100mA		
	Balance Condition		3.45V		
	Communication Procotol		RS485		
Pack	Combination Method		2P16S		
	Nominal Capacity		200AH		
	Nominal Voltage		48V		
	Max. Charge Voltage		58.4V		
	Discharge Cut-off voltage		40V		
	Max. Charge Current		100A		
	Max. Discharge Current		100A		
	Standard Charging Current		50A		
	Pack Impedance Standard		≤90mΩ		
	Weight (Approx.)		≈90kg		
	Max.Dimension (L*W*H) (mm)		580*483*220		
	Cycle Life		≥2000times at 0	0.5 C 80% capacity@40°C	
		Charge temper	ature	0°C~60°C	
	Operating temperature	Discharge temp	perature	-20°C~60°C	
		Storage tempe	rature	-10°C~60°C	

Constant Current Discharge (Amperes at 25°C/77°F)

Time	1H	2H	4H	6H	8H	10H	
Current	200	100	50	33.2	25	20	

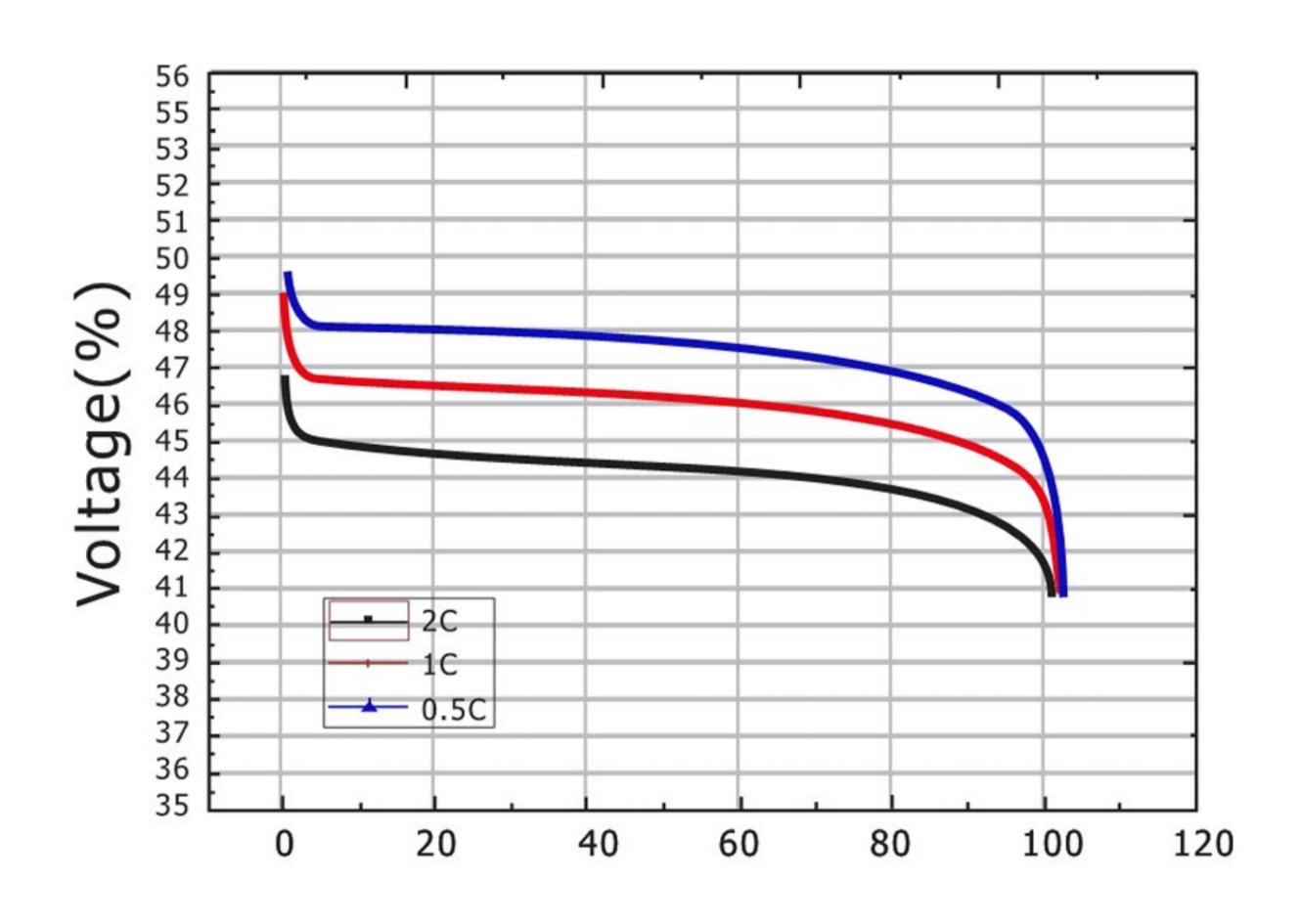
Constant Power Discharge (Watts at 25°C/77°F)

Time	1H	2H	4H	6H	8H	10H	
Watt	640	320	160	106.2	80	64	

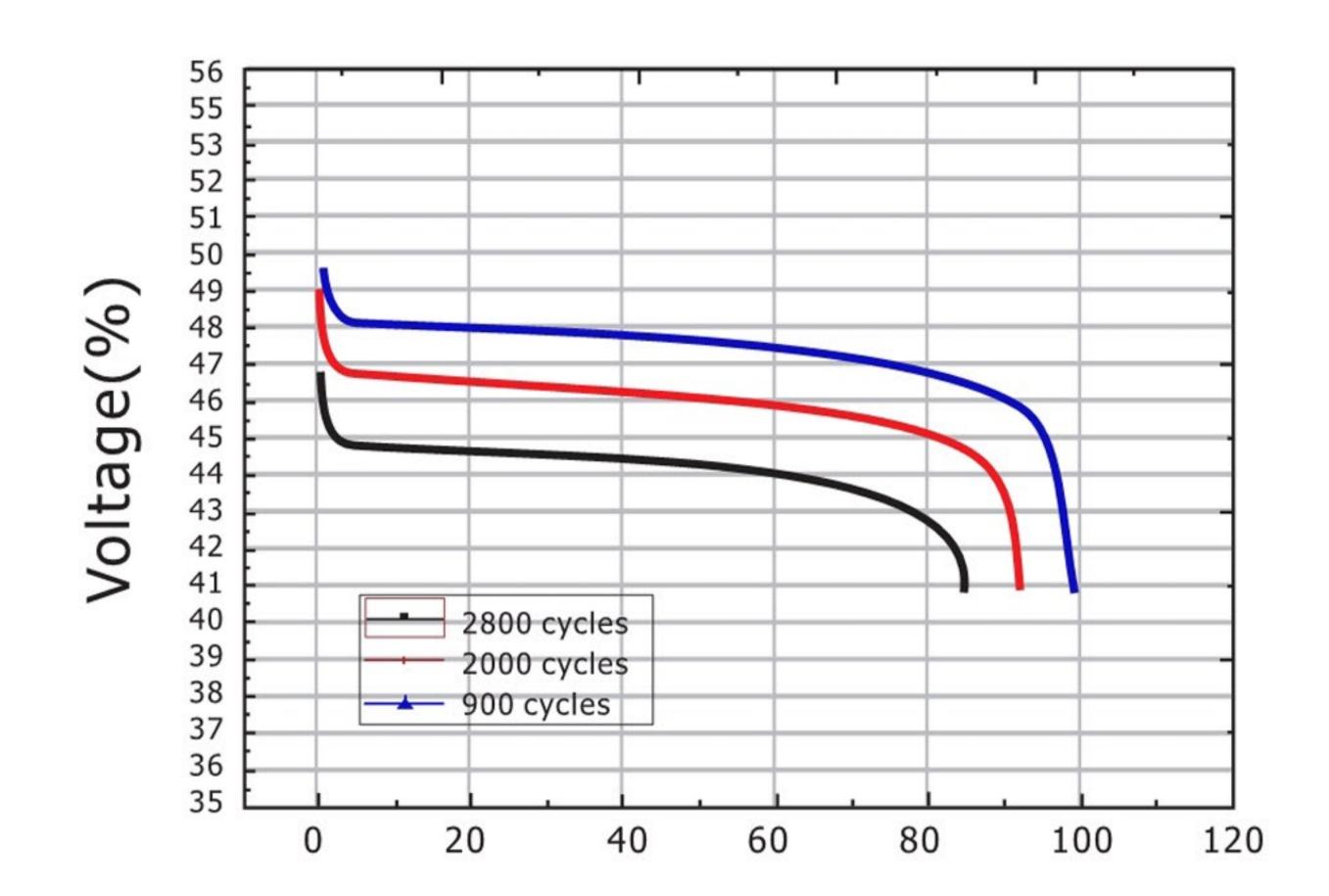
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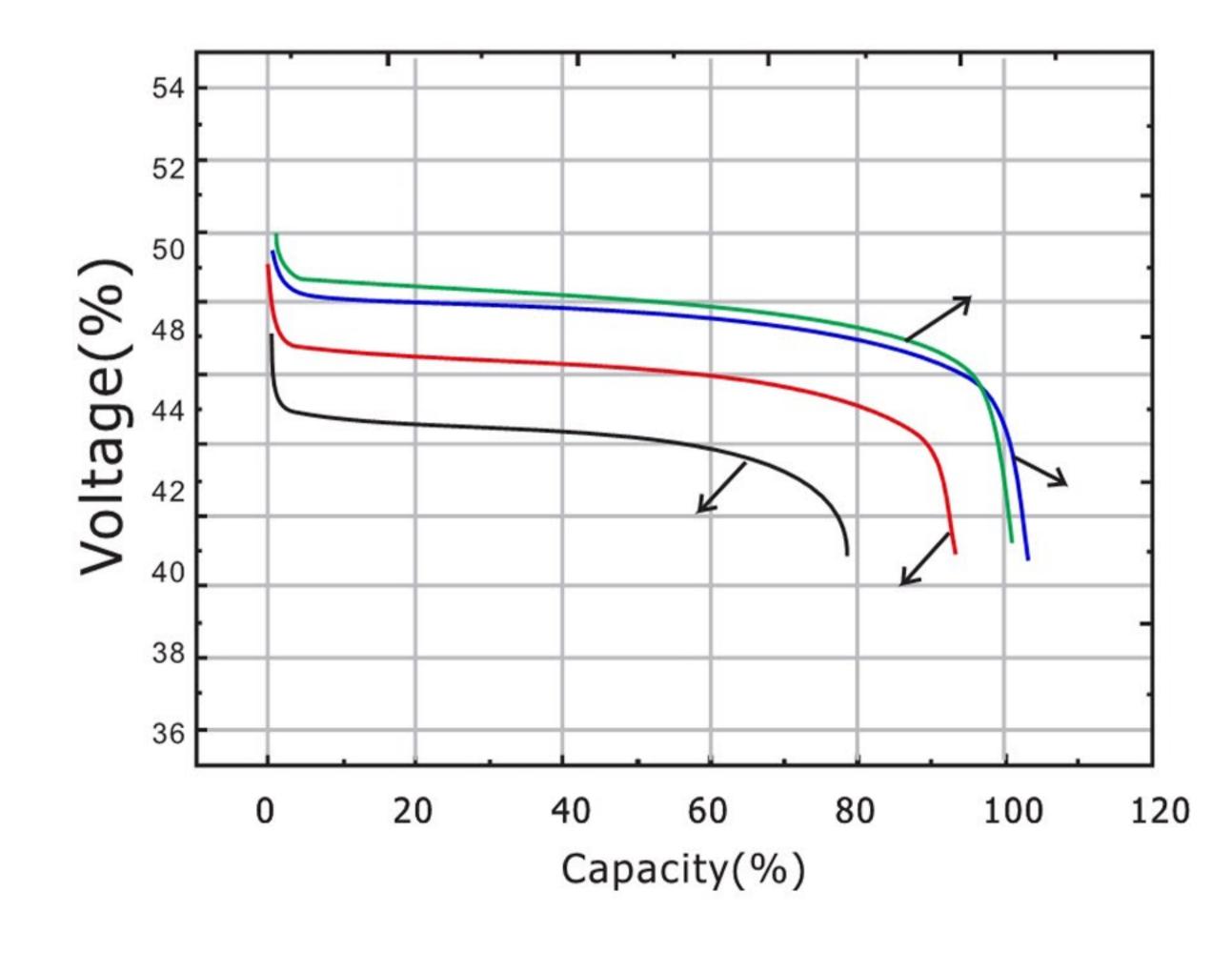
Discharge curve with different C-Rate (0.5C Standard charge)



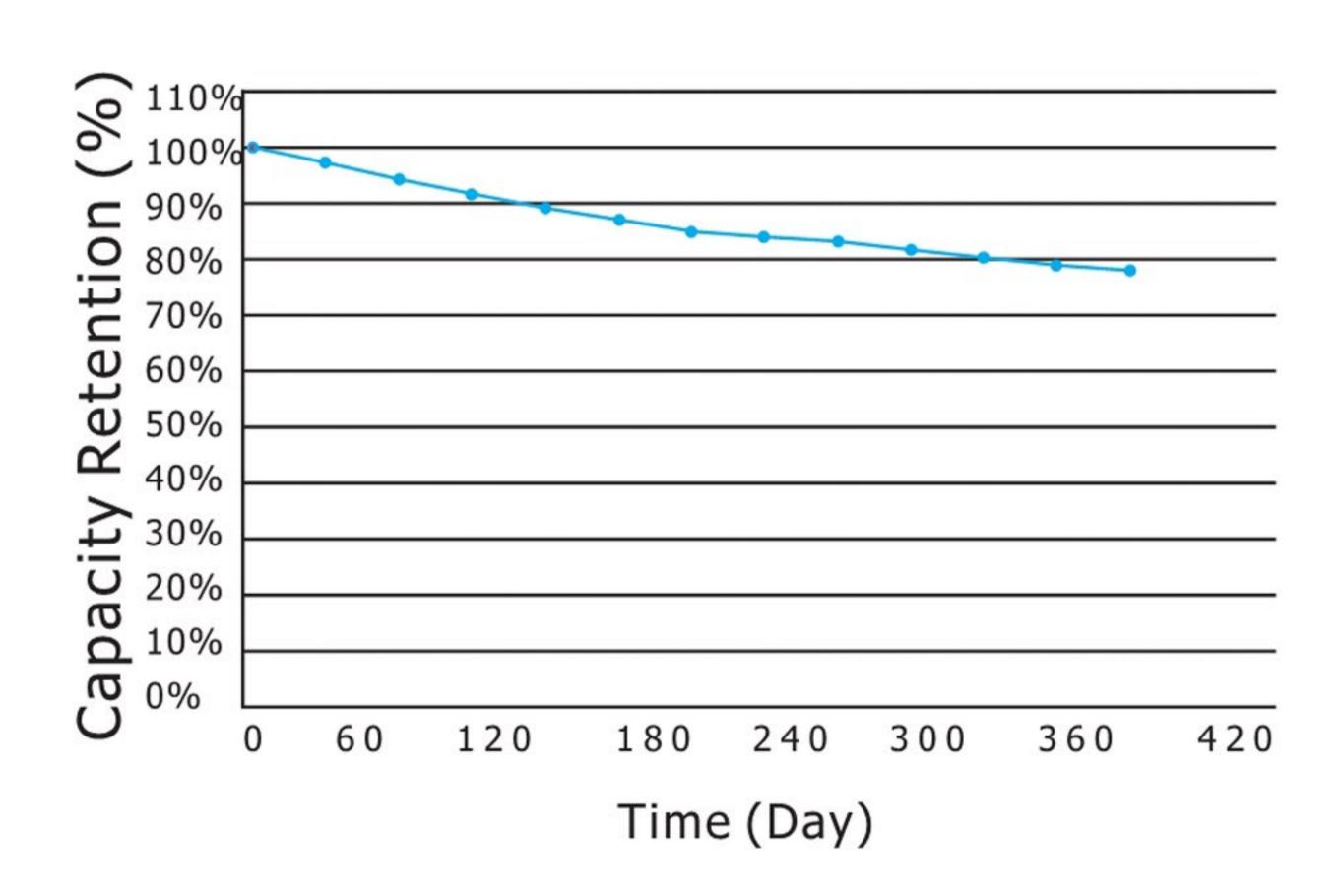
Discharge curve of cycle performance (0.5C Standard charge)



Discharge curve at different temperature (0.5C Standard charge)



Capacity retention curve at room temperature storage (0.5C Standard charge)



Caution

- ※ Do not disassemble the system.
- * The system should be kept away from heat, fire and direct sunlight.
- ※ The system should be kept clean and dry.
- ※ Avoid short-circuit systems and avoid placing the battery where it can cause short circuits.
- ※ Avoid reverse connection, make sure the positive and negative poles of the battery are correct.
- ※ Place the system where children should not be exposed.