

LiFePO4 Lithium Battery

LPR Rack Mounted Battery
51.2V 280Ah/300Ah/314Ah
14.3kWh/15.36kWh16.0kWh
Energy Storage Solutions



LPR Series Brief Introduce

LPR Series 19' Rack Mounted Rechargeable LiFePO₄ Lithium Battery is a safety and reliable solution for providing energy storage in industrial applications such as data centers and telecom base stations. Low voltage offer multiple nominal voltages (12.8V/25.6V/38.4V/48.0V/51.2V etc.). With its high energy density, fast recharge time and compact design, this battery provides a highly efficient and cost-effective energy storage option for a range of applications in the industry. The 19-inch standard Rack Mount Lithium Battery is easy to install, scalable, space-efficient, and compatible with other equipment. It's popular in Lithium Solar Batteries system, Home Solar Energy storage system and SME (Small Medium Enterprise).

Long
Life

Lithium Iron
Phosphate

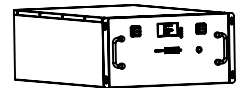
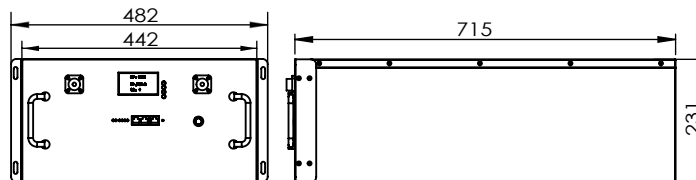
Deep
Cycle



Applications

- BTS Stations, Telecom System
- Internet data center(IDC)
- Solar Energy/Off-Grid System
- Access net work system
- UPS System, EPS System
- Terminal of FTTX
- Indoor distribution system

Dimensions & Weight



Technical Specifications

- Length: 715±1mm Width: 442±1mm Height: 231±1mm
- Weight: 112.5.0±0.1kgs

Electrical Characteristics	Model	LPR48V280H	LPR48V300H	LPR48V314H
	Nominal Voltage	51.2V		
	Nominal Capacity	280Ah	300Ah	314Ah
	Energy	14.3kWh	15.36kWh	16.0kWh
	BMS with internal cell balancing	YES		
	Cycle Life	> 6000cycles 80%DOD		> 8000cycles 80%DOD
	Months Self Discharge	< 3%		
	Efficiency of Charge	100% @ 0.2C		
	Efficiency of Discharge	96~99% @ 0.5C		
Standard Charge	Charge Voltage	57.6V ± 0.2		
	Charge Mode	0.2C to 57.6V, then 57.6V, charge current to 0.02C (CC/CV)		
	Charge Current	50A		
	Max. Charge Current	100A		
	Charge Cut-off Voltage	57.6V ± 0.2		
Standard Discharge	Continuous Current	50A		
	Max continuous discharge current	100A		
	Discharge Cut-off Voltage	43.2V ± 0.1		
Environmental	Charge Temperature	0 °C to 45 °C (32F to 113F) @ 60 ± 25% Relative Humidity		
	Discharge Temperature	-20 °C to 60 °C (-4F to 140F) @ 60 ± 25% Relative Humidity		
	Storage Temperature	0 °C to 40 °C (32F to 104F) @ 60 ± 25% Relative Humidity		
	Water Dust Resistance	IP21		
Mechanical	Cell & Method	Prismatic Cell 16S1P		
	Case	Iron		
	Dimensions (in./mm.)	442*715*231mm/17.41*28.16*9.11ns		
	Weight (lbs./kg.)	Approx: 112.5kgs/247.99lbs		
	Gravimetric specific energy	127.43WH/KG	136.53WH/KG	142.9WH/KG
	Protocol	ModBus: CAN/RS485		
	Display / Operation	Dot Matrix LCD		

Inverters Support Brands: GROWATT solis PYLONTECH MEGAREVO STUDEI Volttronic Power MUST美世乐 victtron energy GOODWE

SACOLAR KSTAR科士达 invt英威腾 Schneider Electric Deye德业 爱阳储能 IYANG SOFAR SOLAR LUPOWERTEK FOXESS SMA SRNE

Durable Lithium Battery use CSSUN

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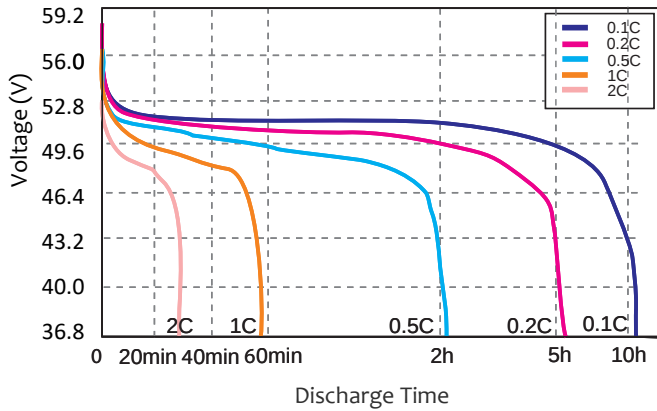


BMS Specifications

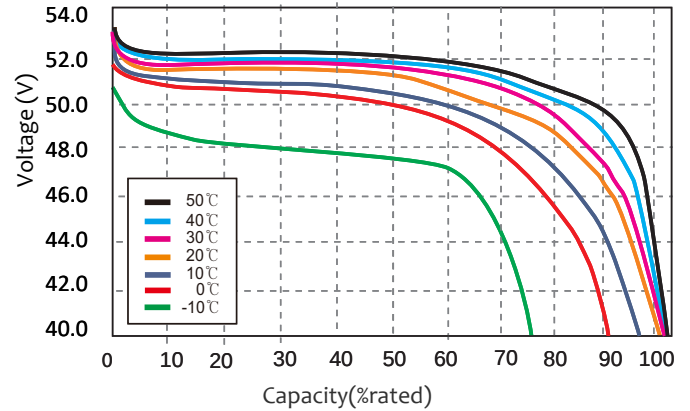
- Overcharge detection function
- Over discharge detection function
- Over current detection function
- Temperature protection
- Cell Voltage balance function
- Short detection function

Performance Characteristics (Data test from 16 Series Cell)

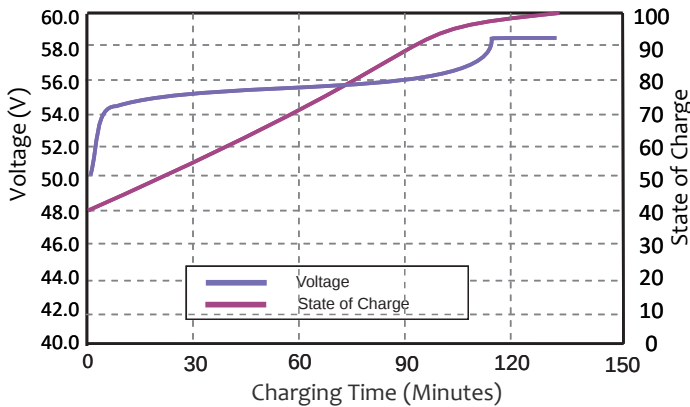
Different Rate Discharge Curve (25°C)



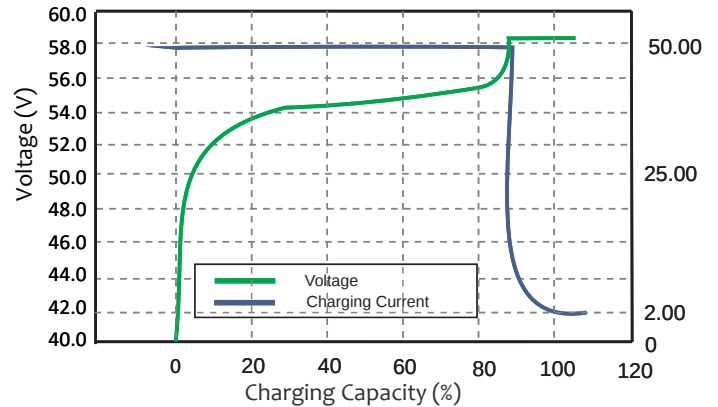
Different Temperature Discharge Curve At 0.5c



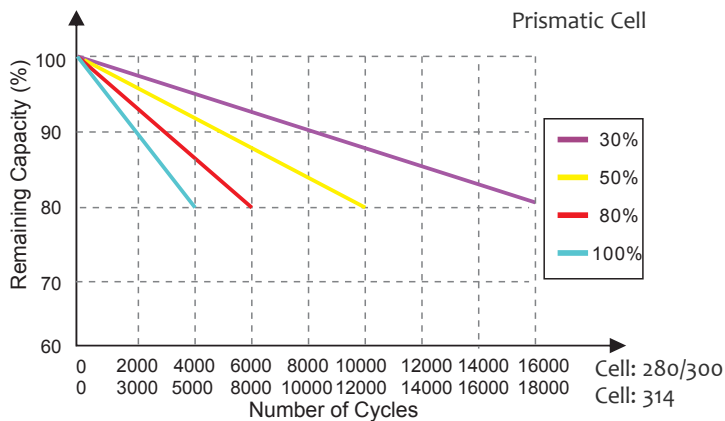
State Of Charge Curve At 0.5c (25°C)



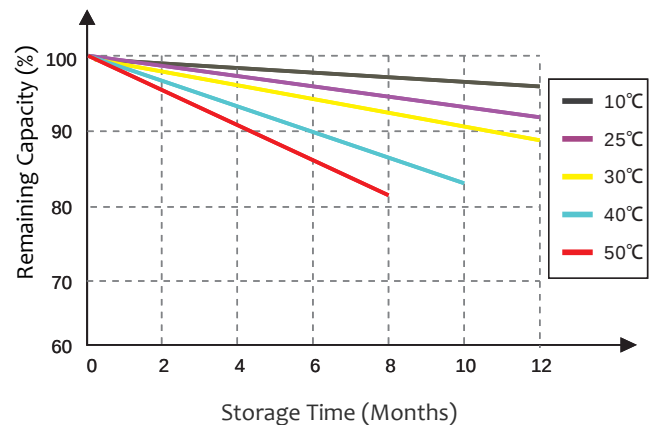
Charging Characteristics At 0.5c (25°C)



Cycle Life Curve At 0.2c According DoD



Self Discharge Characteristics Curve



SAFETY WARNING : Use only within the allowed parameters. Do not short circuit or over-load the battery. Charge only using an approved charger designed specifically to charge this battery. Do not heat above maximum temperatures indicated. Never crush, mutilate, puncture or abuse the battery. Do not dismantle the pack or disable any of the protective devices or circuits. Do not use the battery if you suspect it may be faulty or damaged.

Add: Introduction Building, Xingdong Industry Park, Bao'an District, Shenzhen, Guangdong, China
Tel: +86-755-29123661 email: sales@cssun.net , support@cssun.net
website: www.cssun.net