

LiFePO4 Lithium Battery LPW48V100H KH 51.2V 100Ah



LPW Series Brief Introduce

LPW Series Wall Mounted ESS (energy storage system) is a LiFePO4 battery Pack ideal for new installation of household energy storage. It's stores energy for Solar Power System or Back up Power System. It ranges from 25.6V/48.0V/51.2V and is available in 50Ah to 320Ah capacities. It's rechargeable lithium-ion battery pack. It has a longer cycle life and higher energy density than traditional lead-acid batteries. The compact design allows for easy installation and space-saving. The battery is suitable for off-grid and on-grid solar PV systems, residential and commercial energy storage, and backup power supply. It's one of the best replacement for Tesla PowerWall.

Long
Life

Lithium Iron
Phosphate

Deep
Cycle

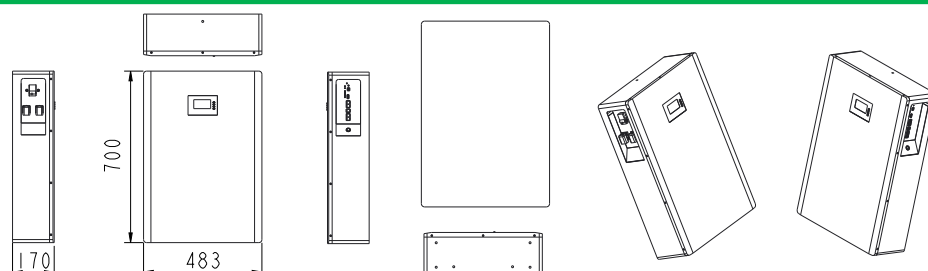


Applications

- 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

Technical Specifications

Dimensions & Weight



Length: 700±1mm Width: 483±1mm Height: 170±1mm | Weight: 48.0±0.1kgs

Electrical Characteristics

Nominal Voltage	51.2V
Nominal Capacity	100Ah
Energy	5120Wh
BMS with internal cell balancing	YES
Cycle Life	> 6000cycles 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	0.5C 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.)	700*483*170mm/27.57*19.02*6.69In
Weight (lbs./kg.)	Approx: 48kgs/105.81lbs
Gravimetric specific energy	106.67WH/KG
Protocol (optional)	ModBus/CAN/RS485/RS232(OPT)
SOC (optional)	LCD

Inverters Support Brands: GROWATT solis PYLONTECH MEGAREVO STUDER Volttronic Power MUST美世乐 victron 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

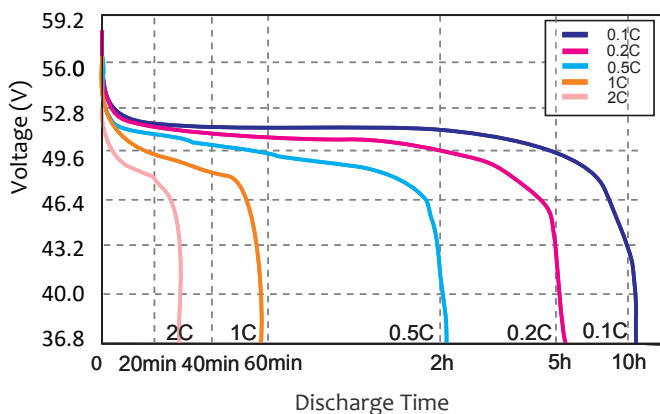
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BMS Specifications

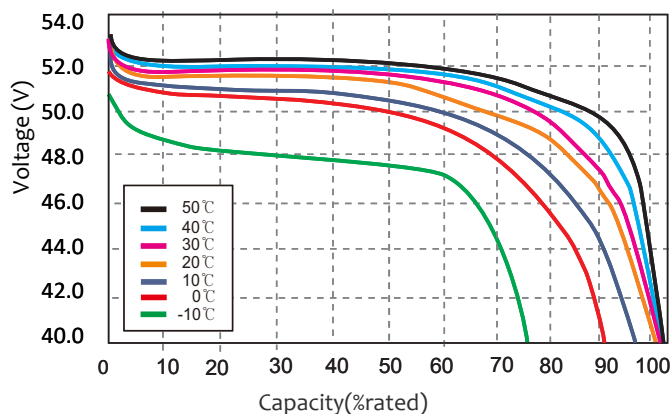
- Overcharge detection function
- Over discharge detection function
- Over current detection function
- Temperature protection
- Cell Voltage balance function
- Short detection function

Performance Characteristic (Data test from 16 Series Cell)

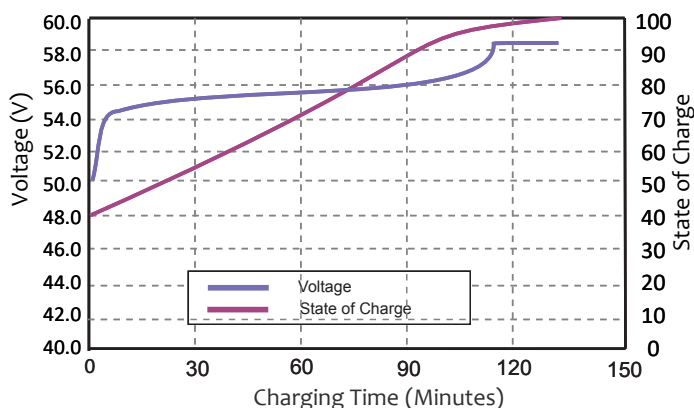
Different Rate Discharge Curve (25°C)



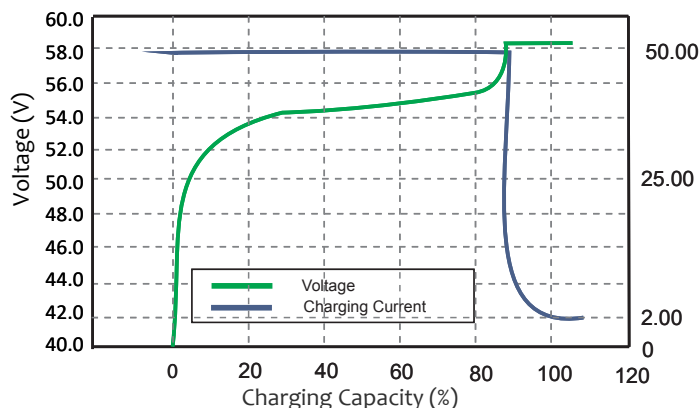
Different Temperature Discharge Curve At 0.5c



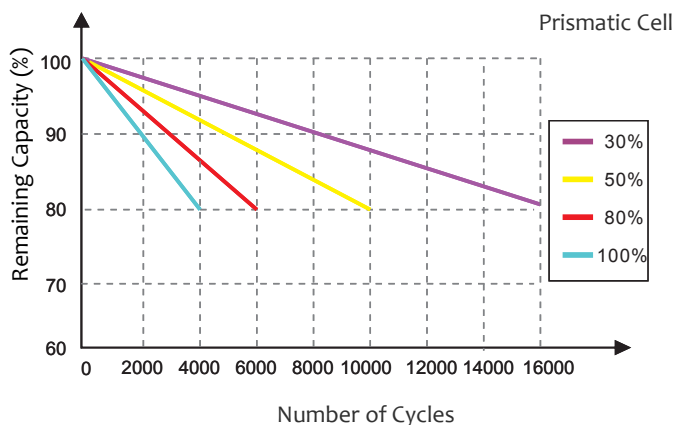
State Of Charge Curve At 0.5c (25°C)



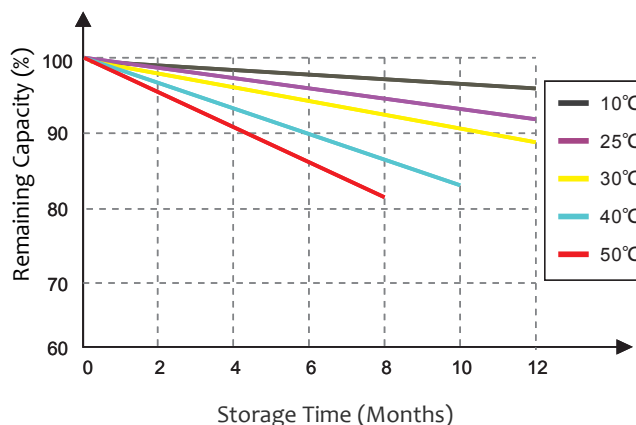
Charging Characteristics At 0.5c (25°C)



Cycle Life Curve At 0.2c According DoD



Self Discharge Characteristics Curve



Note: All above information shall be changed without prior notice, CSSUN reserves the right to explain and update the latest information. Welcome inquiry us !
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.