

48 Volt Lithium-Iron-Phosphate Batteries Series

ESS-2560

51.2V 50Ah LiFePO4 Battery



ESS-5120

51.2V 100Ah LiFePO4 Battery



ESS-10240

51.2V 200Ah LiFePO4 Battery



Power Cabinet Install Type



X-Series Bracket holder replace Cabinet Install Type (Dismountable, saving space, cost)



X-series Bracket holder

South African Market

genixgreen's battery BMS supports simultaneous communication and docking with multiple inverter brands



American Market

genixgreen's battery BMS supports simultaneous communication and docking with multiple inverter brands



Super Points: ONE Battery For Multiple Brand Inverters

Product advantages

Long cycle life

Using high-quality lithium iron phosphate batteries, the cycle life is more than 6000 times at 80%DOD, and can be used for 10-15 years



High quality prismatic lithium iron phosphate battery

Higher capacity, higher current, longer life

Low internal resistance and high current

Low internal resistance of the battery, excellent continuous high current discharge performance



Intelligent BMS battery protection

Built-in intelligent BMS (battery management system), effectively avoiding overcharge, overdischarge, overcurrent, short-circuit, balance and other problems



Communicated with multiple brands inverter same time

genixgreen's battery BMS supports simultaneous communication and docking with multiple brands inverter

Good safety performance

Extreme safety test, no fire, no explosion, no leakage

48 Volt Lithium-Iron-Phosphate Batteries Series

KEY FEATURES

- ★ Automotive Grade Cells-16 cell configuration
- ★ Integrated CAN bus RS485 BMS.
- ★ LCD display shows battery information.
- ★ Pre-configured with optimal parameters.
- ★ No other LiFePO4 battery offers this functionality, longevity and warranty at our price.
- ★ Warranted for daily cycling.
- ★ **Optional Smart Heating Function**
Can work -40°C Degree

Application

- ★ Over charge detection function
- ★ Over discharge detection function
- ★ Over current detection function
- ★ Temperature protection function
- ★ Short circuit detection function
- ★ Balance function
- ★ Upper computer software monitor
- ★ LCD Screen optional

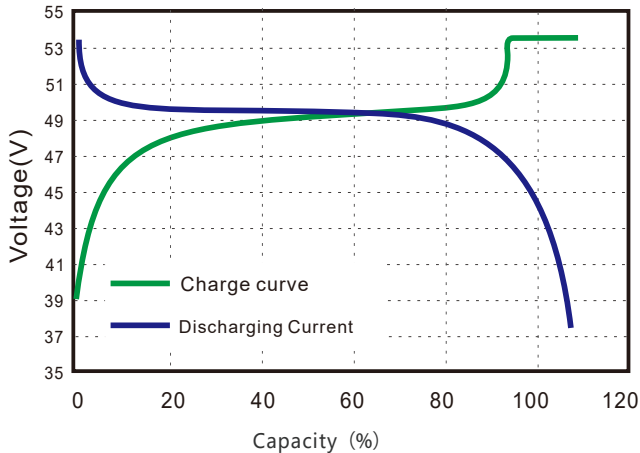
Battery specification

Model	ESS-2560	ESS-5120	ESS-10240
VOLTAGE AND CAPACITY	51.2V/50Ah	51.2/100Ah	51.2V/200Ah
Nominal voltage	51.2V	51.2V	51.2V
Nominal capacity @ 25°C*	50Ah	100Ah	200Ah
Nominal capacity @ 0°C*	40Ah	80Ah	160Ah
Nominal capacity @ -20°C*	25Ah	50Ah	100Ah
Nominal energy @ 25°C*	2560Wh	5120Wh	10240Wh
*Discharge current ≤1C			
CYCLE LIFE (capacity ≥ 80% of nominal)			
100% DOD	3,000 cycles		
80% DOD	6,000 cycles		
50% DOD	10,000 cycles		
DISCHARGE			
Maximum continuous discharge current	50A	100A	200A
Recommended continuous discharge current	≤50A	≤100A	≤100A
End of discharge voltage	40V	40V	40V
OPERATING CONDITIONS			
Operating temperature	Discharge: -20°C to +50°C, Charge: +5°C to +50°C		
Storage temperature	-25°C to 45°C		
Humidity (non-condensing)	Max. 95%		
Protection class	IP 22		
CHARGE			
Charge voltage	58.4V		
Maximum charge current	50A	100A	200A
Recommended charge current	≤50A	≤100A	≤200A
OTHER			
Capable Parallel Quantity	≤15 Modules		
Communication Port	RS232 RS485 CAN		
BMS Connector	Barrier Terminals /customized		
Dimensions (LxWxH) mm	483 x 440 x 134	483 x 440 x 178	483 x 440 x 267
Weight	28kg	45kg	85kg
*When fully charged			

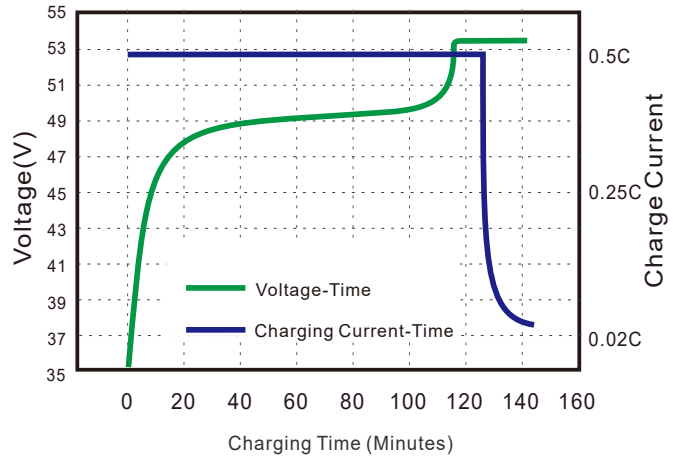
48 Volt Lithium-Iron-Phosphate Batteries Series

Charging and Discharge curve

● Charge and discharge curve @0.5C 25°C

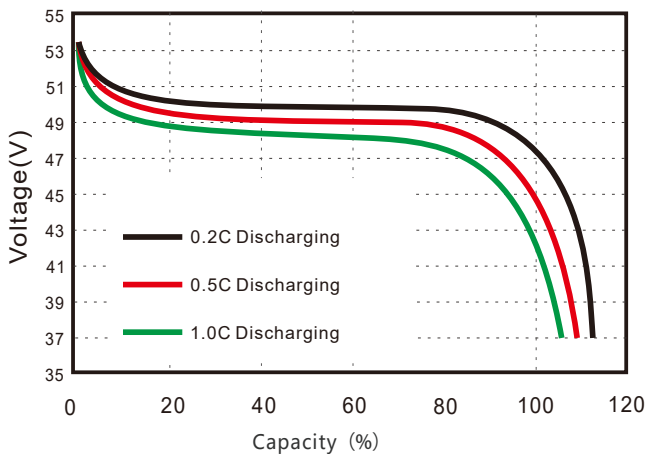


● Charging Characteristics @0.5C 25°C

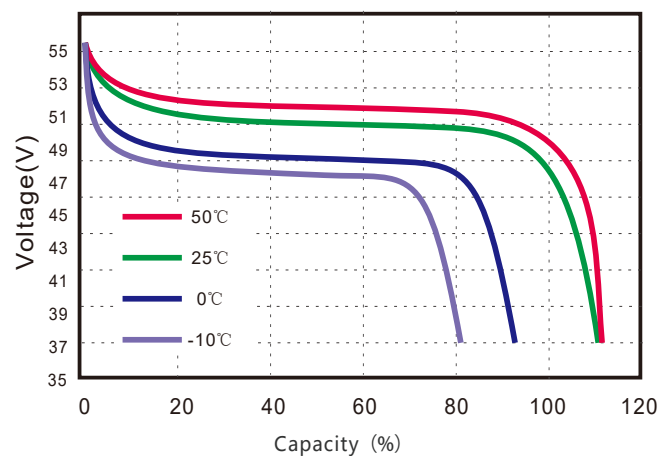


Different current/Temperature Discharge curves

● Different Rate Discharge Curve @25°C

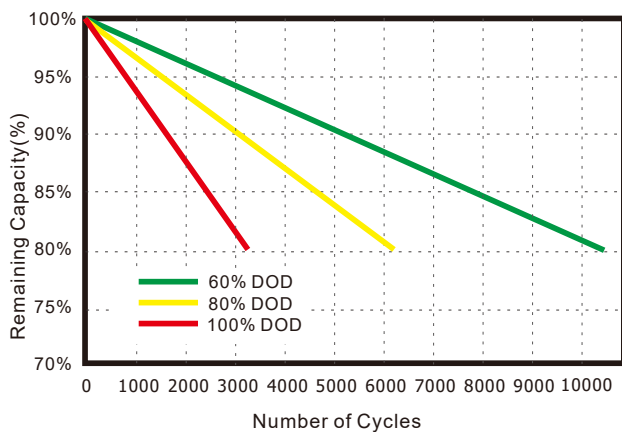


● Different Temperature Discharge Curve @0.5C

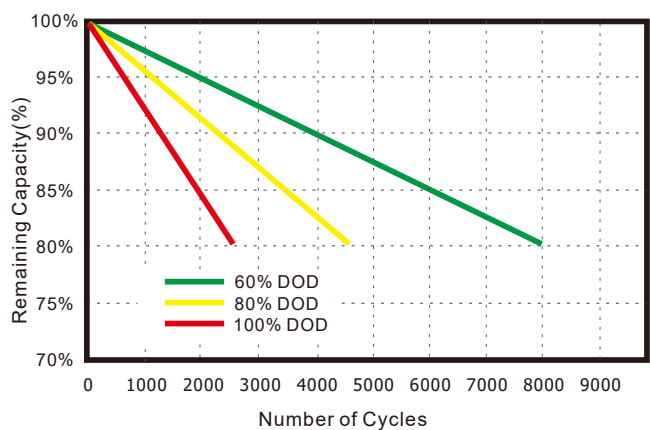


Cycle Life Curve

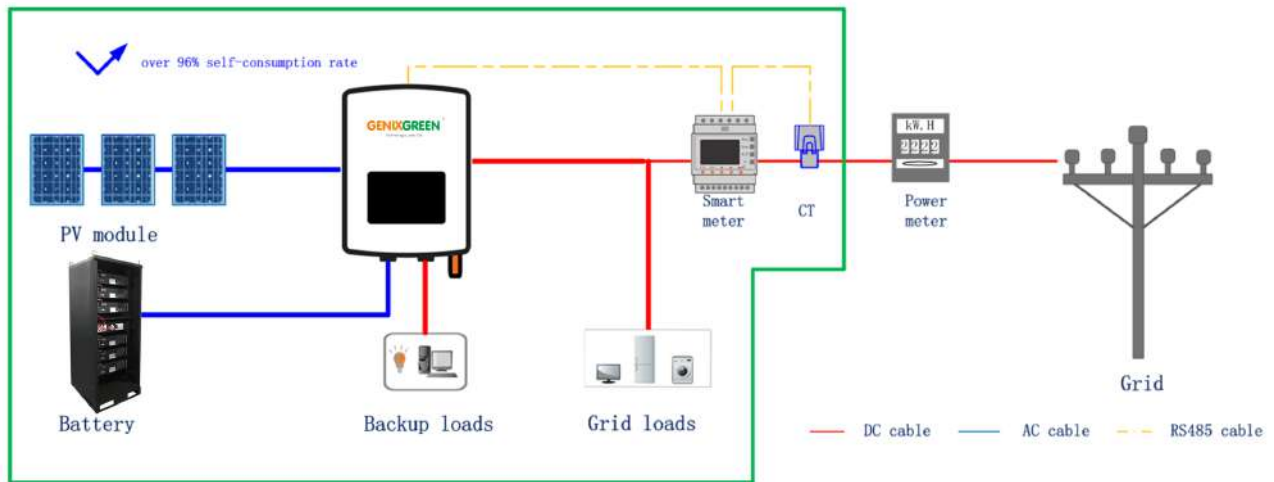
● Different discharge depth life curves & 25°C 0.5C



● Different discharge depth life curves & 40°C 0.5C



48 Volt Lithium-Iron-Phosphate Batteries Series



A wider range of applications

