

HCG-49 Series / Data sheet



12V 200Ah

12V 260Ah

24V 100Ah

24V 125Ah

48V 60Ah



Model Included:

- HCG49-12200** 12V 200Ah LiFePO4 Battery
- HCG49-12260** 12V 260Ah LiFePO4 Battery
- HCG49-24100** 24V 100Ah LiFePO4 Battery
- HCG49-24125** 24V 125Ah LiFePO4 Battery
- HCG49-4860** 48V 60Ah LiFePO4 Battery

		Model				
		HCG49-12200	HCG49-12260	HCG49-24100	HCG49-24125	HCG49-4860
Electrical Specifications	Nominal Voltage	12.8V	12.8V	24V	24V	48V
	Nominal Capacity	200Ah	260Ah	100Ah	125Ah	60Ah
	Parallel Connection	Max. 6units	Max. 6units	Max. 6units	Max. 6units	Max. 6units
	Serial Connection	Max. 4units	Max. 4units	Max. 2units	Max. 2units	No
	BMS	4S150A	4S200A	8S100A	8S150A	16S60A
	Circuit Protection	Over charge, Over discharge, Over current, Over temp, Short, Balance				
	Cycle Life	3000times Cycles @100%DOD and 6000times @80% DOD				
	Self Discharge	Less than 3% per month				
	Charge Efficiency	100% @0.2C				
	Discharge Efficiency	98-100% @1C				
Charge Specifications	Charge Voltage	14.4±0.2V	14.4±0.2V	28.8±0.4V	28.8±0.4V	57.6±0.8V
	Standard Current	40A	52A	20A	25A	12A
	Fast Current	100A	130A	50A	62A	30A
Discharge Specifications	Standard Current	40A	52A	20A	25A	12A
	Max. Con. Current	150A	200A	100A	125A	60A
	Peak Current	600A(300ms)	800A(300ms)	500A(300ms)	600A(300ms)	200A(300ms)
	Cut-off Voltage	10V	10V	20V	30V	40V
Mechanical Specifications	Dimensions (mm)	490×171×240mm				
	Approx Weight(KG)	20	23	22	22.5	22
	Terminal Type	M8				
	Case Color/material	Black Plastic case (ABS)				
	IP Rating	IP65				
	Cell Type	Cylinder LiFePO4 cell				
	Cell holder	Yes				
Temperature Specifications	Charge Temp	0°C to 55°C		(32°F to 131°F)		
	Discharge Temp	-20°C to 60°C		(-4°F to 140°F)		
	Storage Temp	-5°C to 45°C		(23°F to 113°F)		

HCG-49 Series / Data sheet



12V 200Ah

12V 260Ah

24V 100Ah

24V 125Ah

48V 60Ah

Key Points for Quality control:

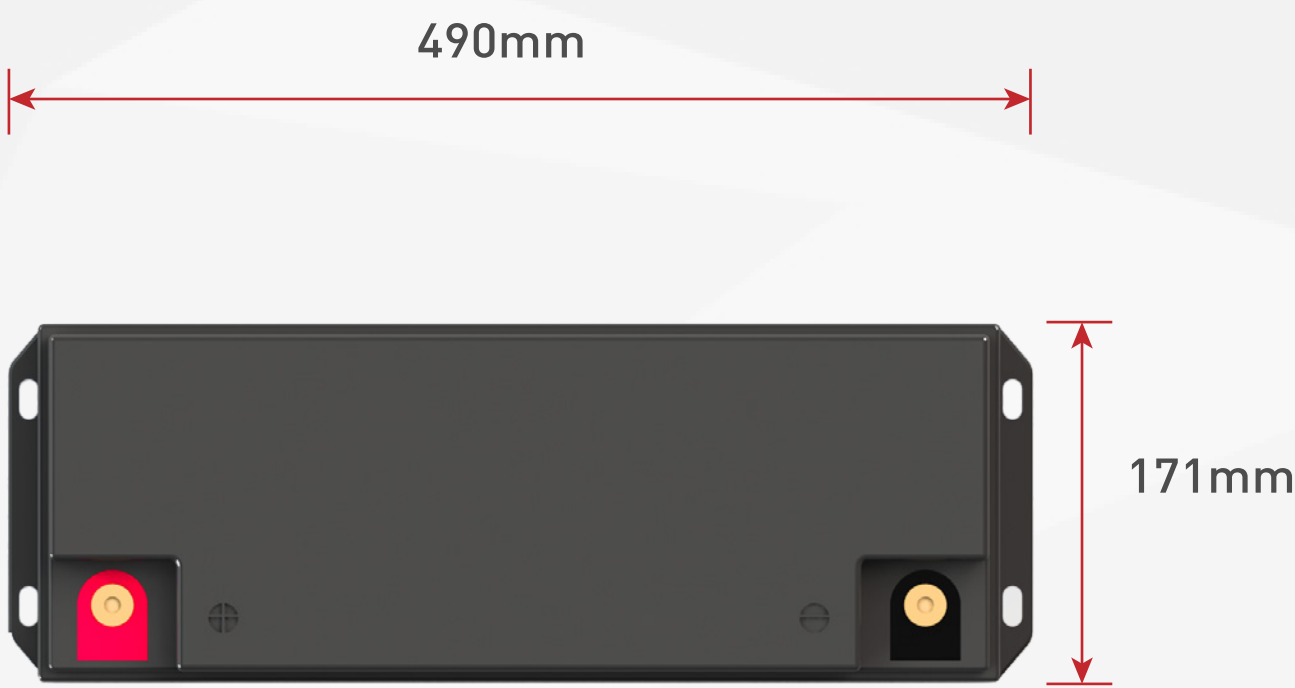
- **Cell match:**
More strict cell matching standard, the difference of Internal resistance is 1mΩ and voltage is 5mV.
- **Automatic cells welding:**
Cells are assembled by Automatic welding equipments to ensure the quality reliability and consistency.
- **100% Cycle test:**
All battery packs are 100% cycle tested (Fully Discharged→Fully Charged→Fully Discharged→60% Charged) before package and all test reports are stored.
- **Unique tracking number:**
All battery packs are lasered an unique number on the case side for quality tracking.

Certifications:

- UL1642 (Cell)
- IEC62133 (Cell)
- IEC62619 (Cell)
- CE (Pack)
- UN38.3 (Cell / Pack)
- ROHS (Cell)



Dimensions:



Internal Structure:

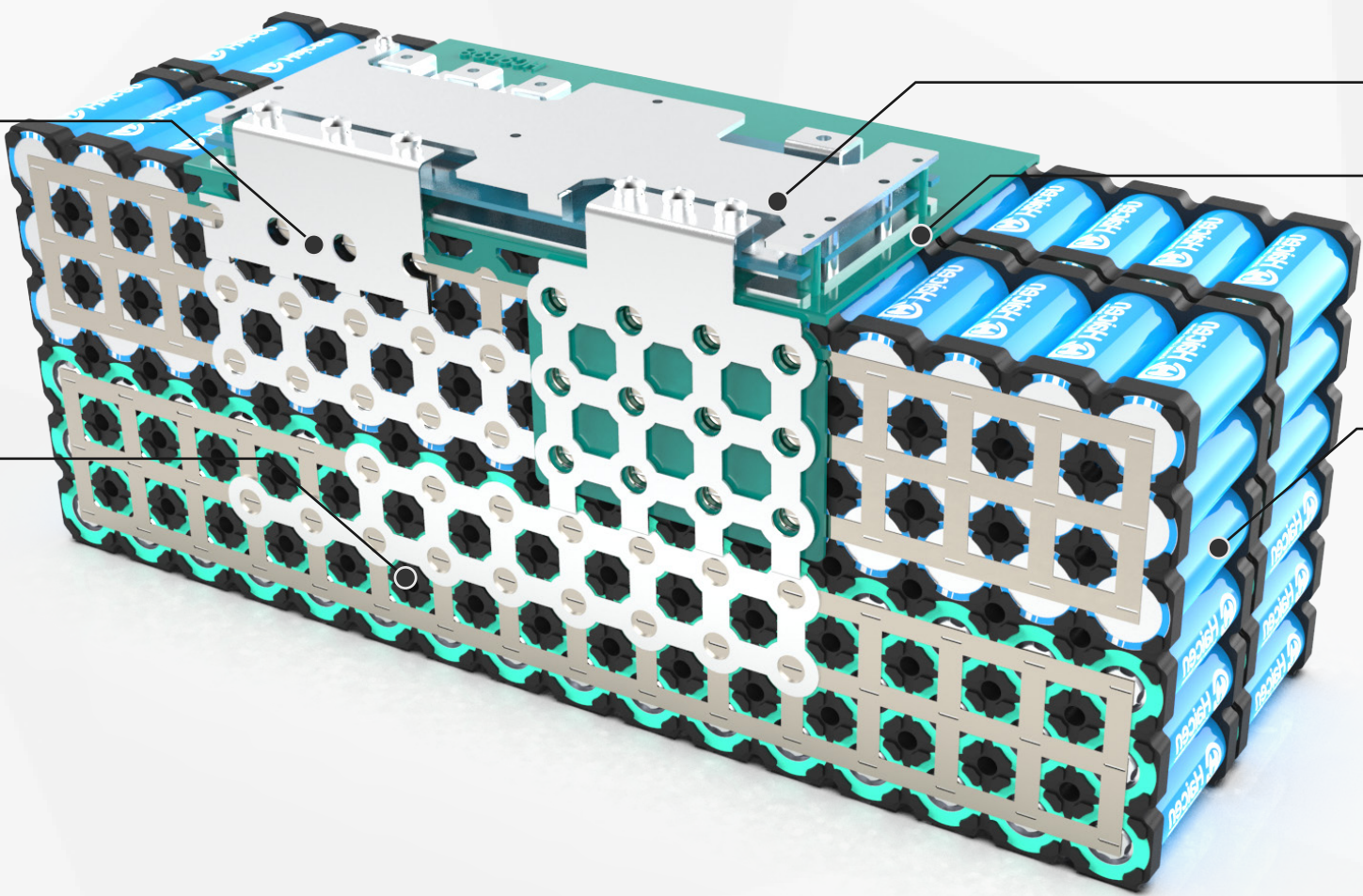
Molded Nickel sheet

Molded Plastic cell holder

BMS

BMS holder

Cell



12V 200Ah

12V 260Ah

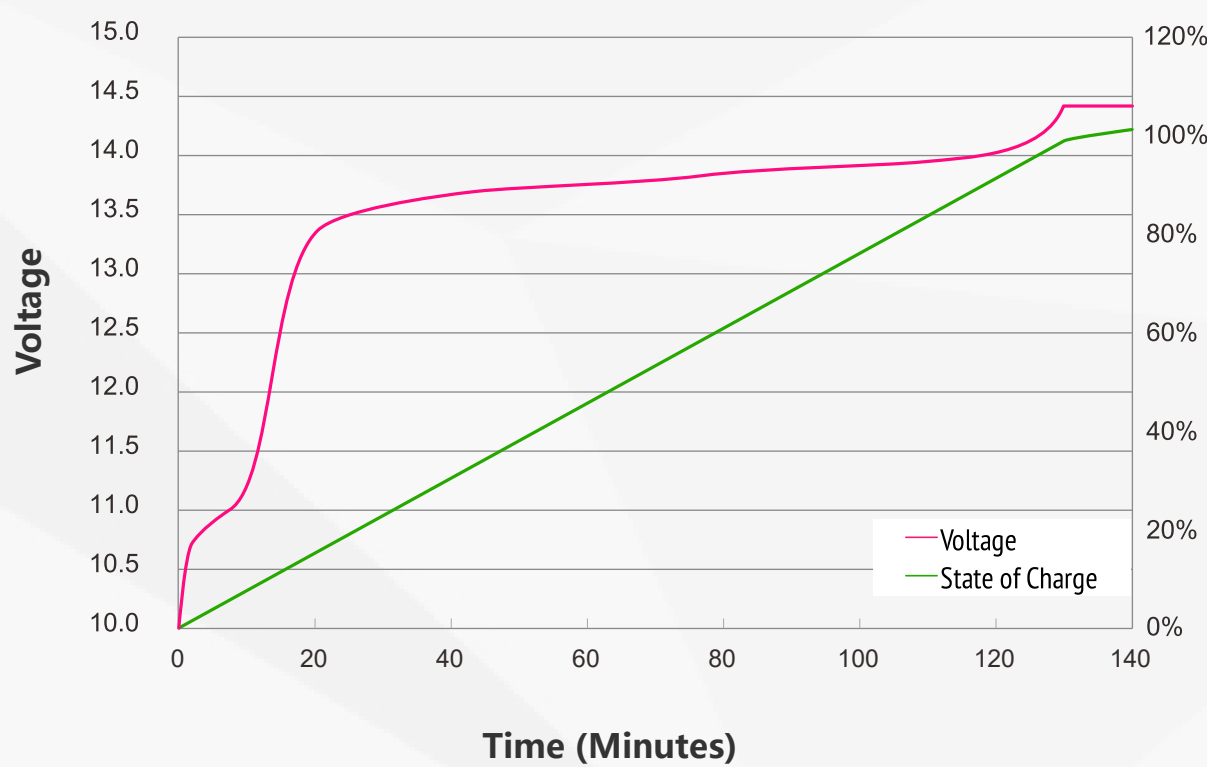
24V 100Ah

24V 125Ah

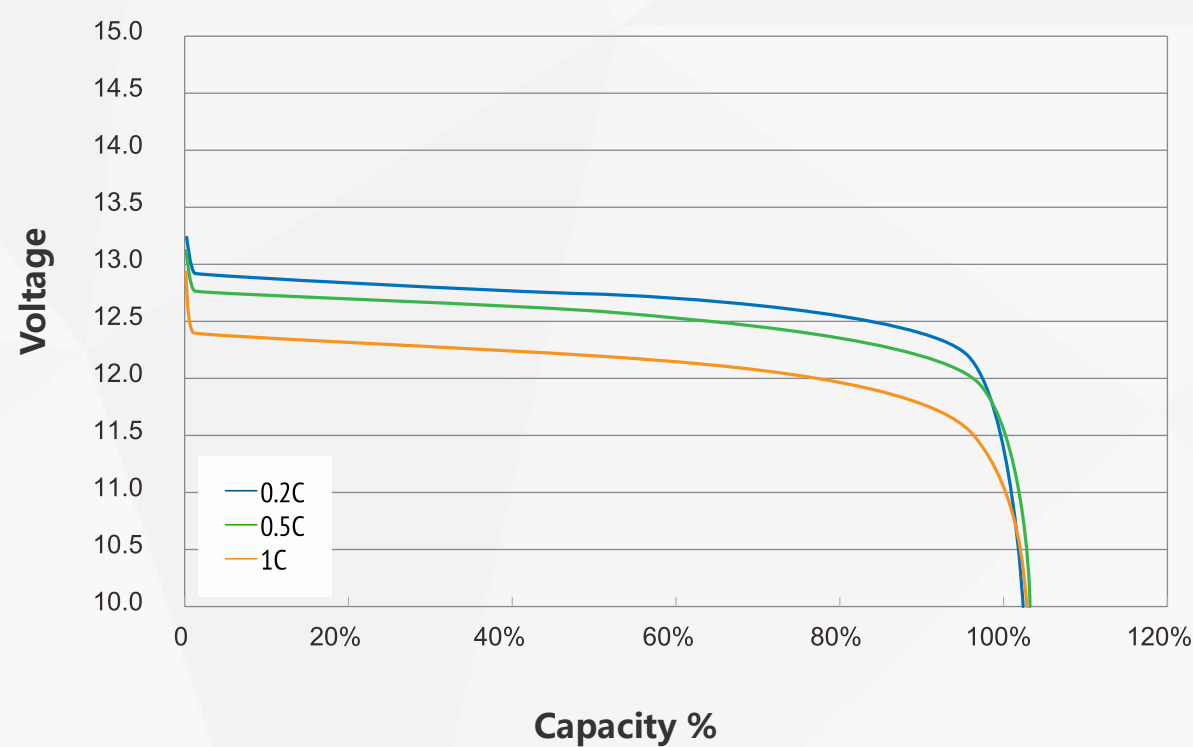
48V 60Ah

Characteristics Curve:

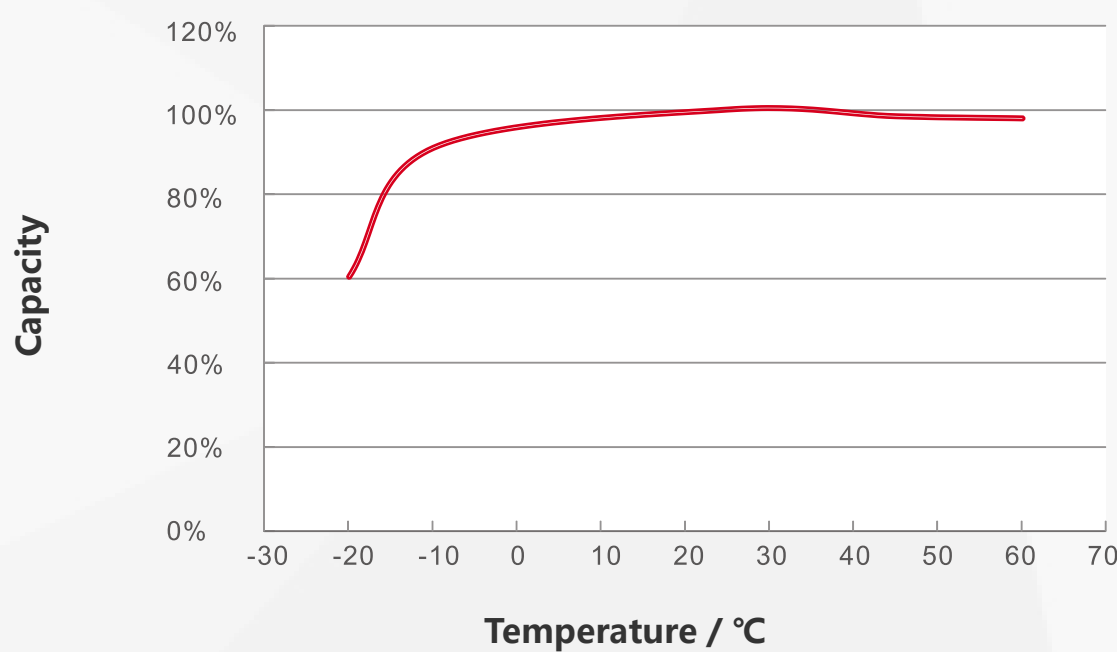
Charging Characteristics (0.5C @25°C)



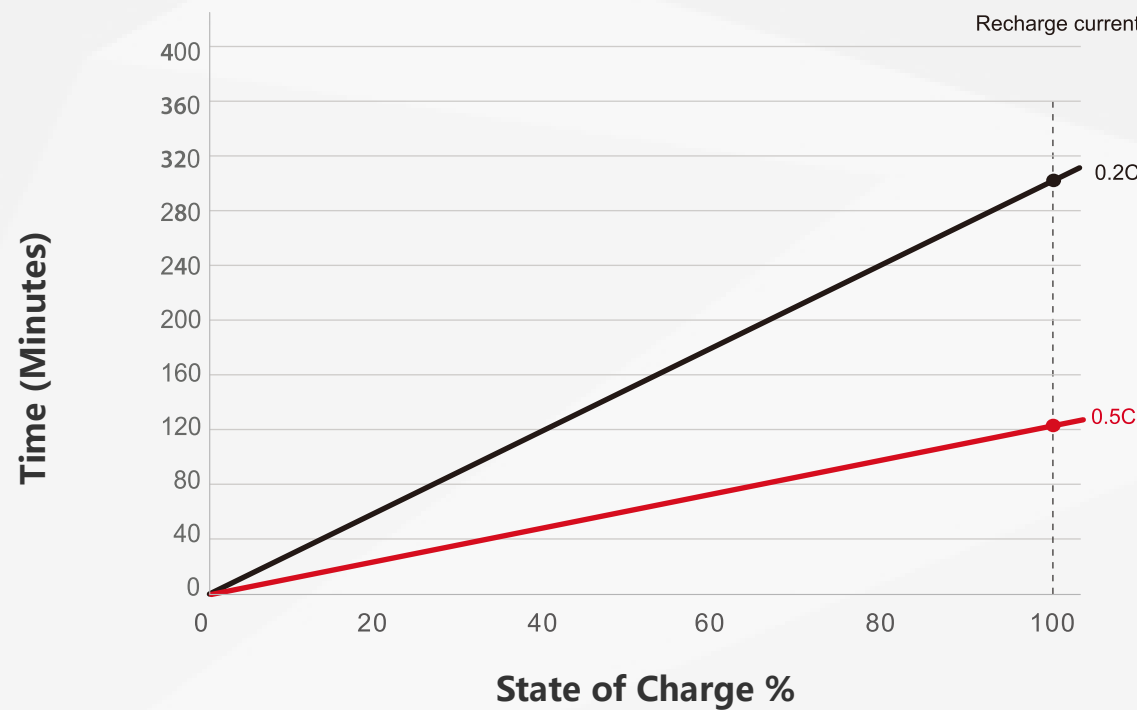
Discharging Characteristics (0.2C, 0.5C, 1C @25°C)



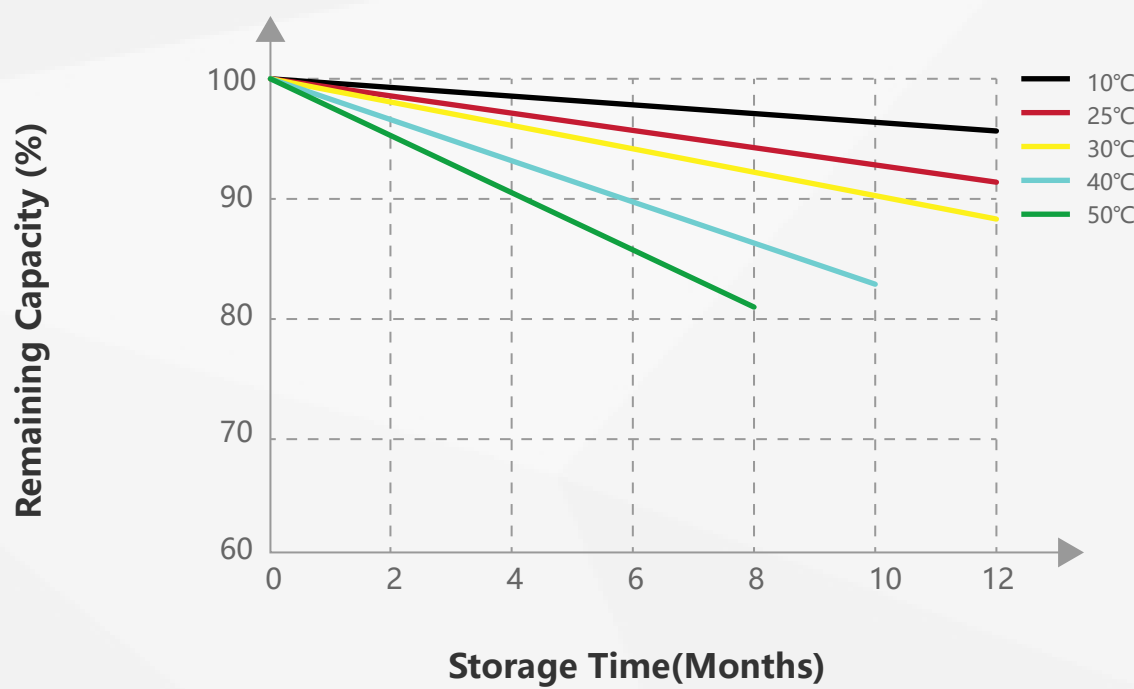
Different Temperature Capacity Curve



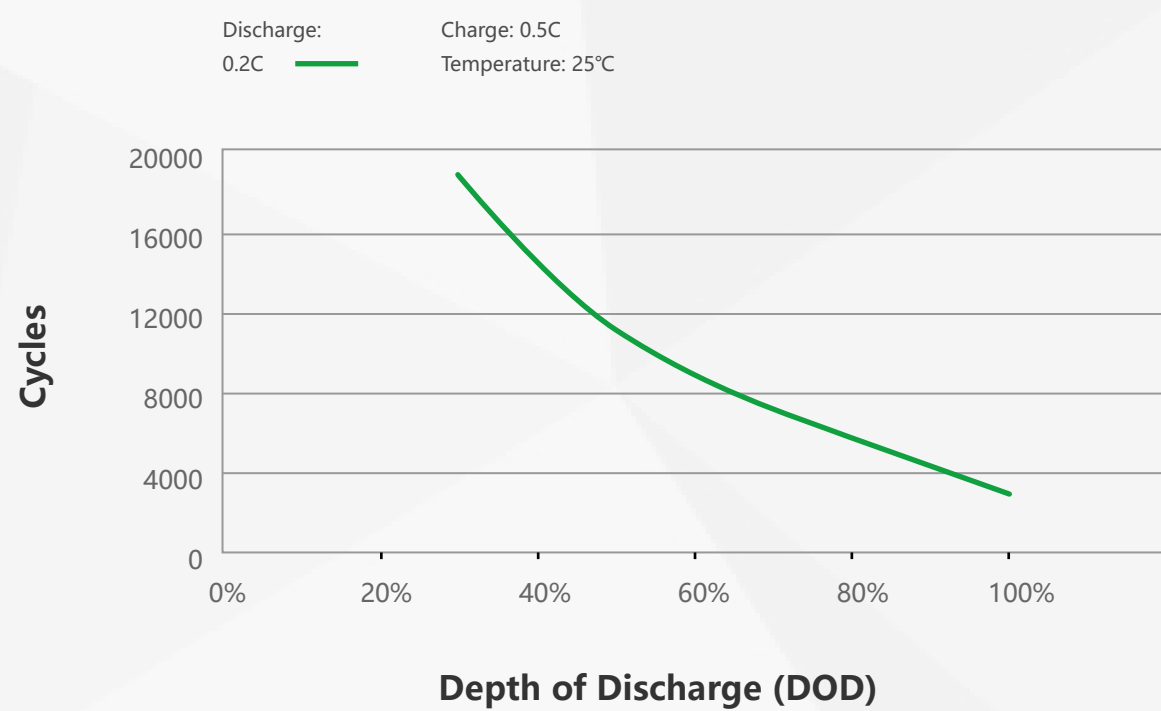
Typical Charge Time Curve



Different Temperature Self Discharge Curve



Different DOD Discharge Cycle Life Curve



12V 200Ah

12V 260Ah

24V 100Ah

24V 125Ah

48V 60Ah

Key Benefits:

- **Higher qualified cylindrical cell:**
UL1642, IEC62619, IEC62133 listed with Cycle life more than 3000times and excellent consistency.
- **Stronger BMS:**
Can support the batteries in parallel and series connection
- **More stable and firm internal structure:**
Cell holders can well protect and separate the cells to avoid any circuit short risk caused by vibration or impact or over current, and improve the heat dissipation.
- **Smaller size and less weight:**
The size of our battery is just 3/4 size of the standard 12V 200Ah battery from other suppliers.

Market Applications:



RV



Marine



Golf cart



Light EV



Energy storage



Cleaning



Robotics



Lighting

Package:

20' Container=10Pallets=460Cartons=460Units;
40' Container=20Pallets=920Cartons=920Units;



Internal Package
Forming pearl foam



1Carton=1Unit

Weight: 21Kg/carton
Size(L×W×H): 570×250×330mm



1Pallet=46Cartons

Weight: 981Kg/pallet
Size(L×W×H)=1.2×1×2m ≈ 2.4CBM

Customized items:

- **Case color:** Customized case color is acceptable based on quantity more than 300pcs per batch.
- **Label design:** We can help you to design customized label on the battery.
- **Carton design:** Customized carton is acceptable based on quantity more than 200pcs per batch.
- **Certificates:** 50% discount on certificates cost for first bulk order and 100% reback for future orders.
- **NDA agreement:** NDA agreement is allowed and necessary to protect your benifits.