

HCG-8D Series / Data sheet



12V 300Ah

12V 350Ah

12V380Ah

24V 150Ah

24V 190Ah

48V 105Ah



Model Included:

- HCG8D-12300** 12V 300Ah LiFePO4 Battery
- HCG8D-12350** 12V 350Ah LiFePO4 Battery
- HCG8D-12380** 12V 380Ah LiFePO4 Battery
- HCG8D-24150** 24V 150Ah LiFePO4 Battery
- HCG8D-24190** 24V 190Ah LiFePO4 Battery
- HCG8D-48105** 48V 105Ah LiFePO4 Battery

Haicen Advanced Lithium Batteries		Model					
		HCG8D-12300	HCG8D-12350	HCG8D-12380	HCG8D-24150	HCG8D-24190	HCG8D-48105
Electrical Specifications	Nominal Voltage	12.8V	12.8V	12.8V	24V	24V	48V
	Nominal Capacity	300Ah	350Ah	380Ah	150Ah	190Ah	105Ah
	Parallel Connection	Max. 6units	Max. 6units	Max. 6units	Max. 6units	Max. 6units	Max. 6units
	Serial Connection	Max. 4units	Max. 4units	Max. 4units	Max. 2units	Max. 2units	No
	BMS	4S200A	4S200A	4S200A	8S150A	8S150A	16S100A
	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	14.4±0.2V	28.8±0.4V	28.8±0.4V	57.6±0.8V
	Standard Current	60A	70A	76A	30A	38A	21A
	Fast Current	150A	175A	190A	75A	95A	52A
Discharge Specifications	Standard Current	60A	70A	76A	30A	38A	21A
	Max. Con. Current	200A	200A	200A	150A	150A	100A
	Peak Current	800A(300ms)	800A(300ms)	800A(300ms)	600A(300ms)	600A(300ms)	500A(300ms)
	Cut-off Voltage	10V	10V	10V	20V	20V	40V
Mechanical Specifications	Dimensions (mm)	521×267×220mm (Group 8D)					
	Approx Weight(KG)	33	34.5	34.5	33.5	34.5	38
	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)			

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Key Points for Quality control:

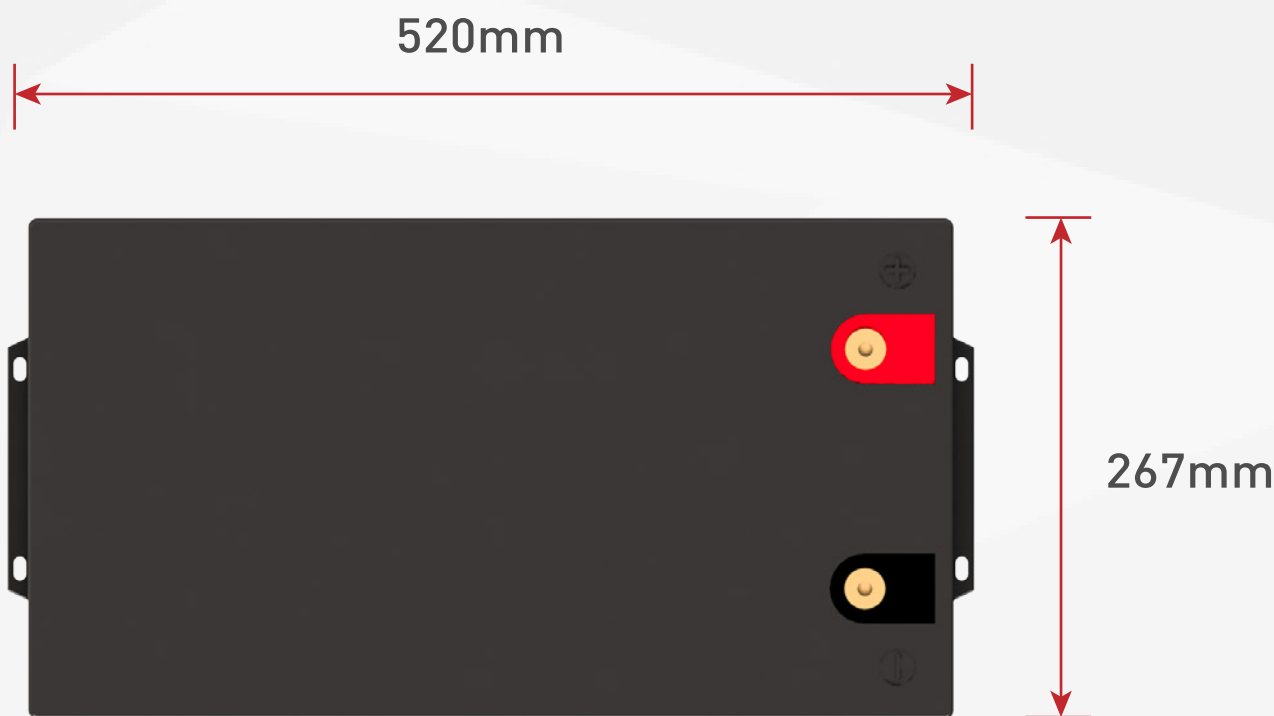
- **Cell match:**
More strict cell matching standard, the difference of Internal resistance is 1mΩ and voltage is 5mV.
- **Automatic cells welding:**
Cells are assembled by Automatic welding equipments to ensure the quality reliability and consistency.
- **100% Cycle test:**
All battery packs are 100% 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:



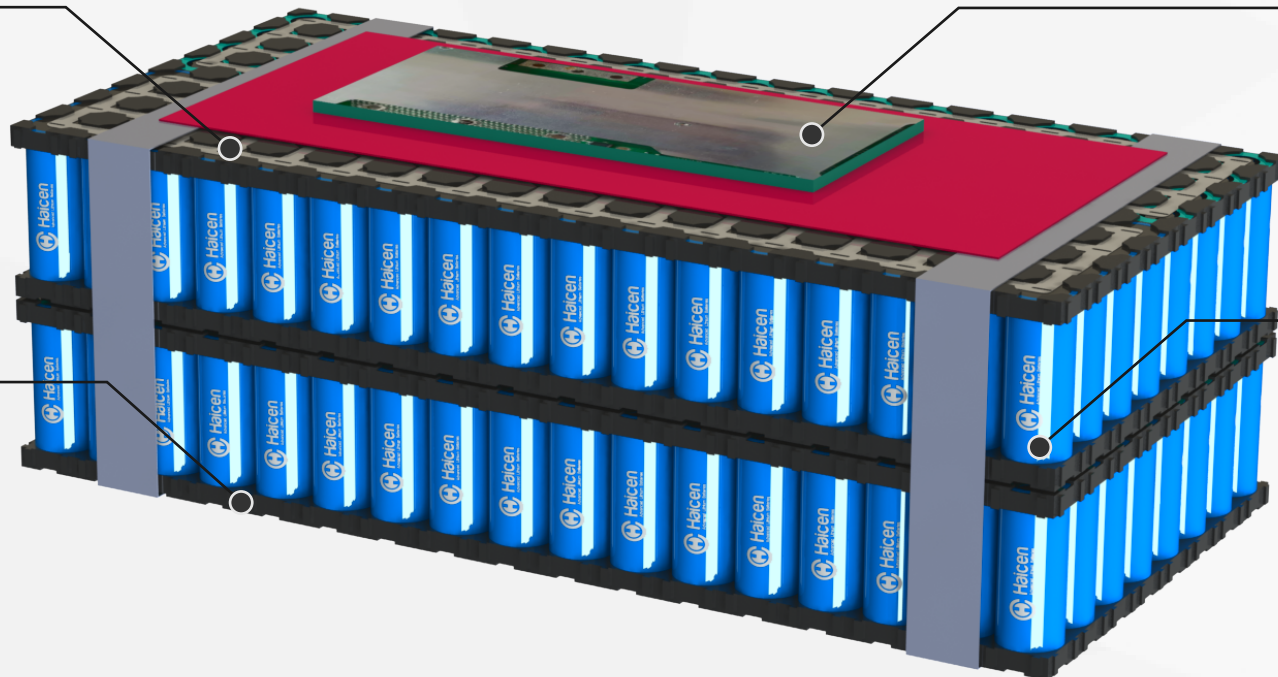
Internal Structure:

Molded Nickel sheet

Molded Plastic cell holder

BMS

Cell



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12V380Ah

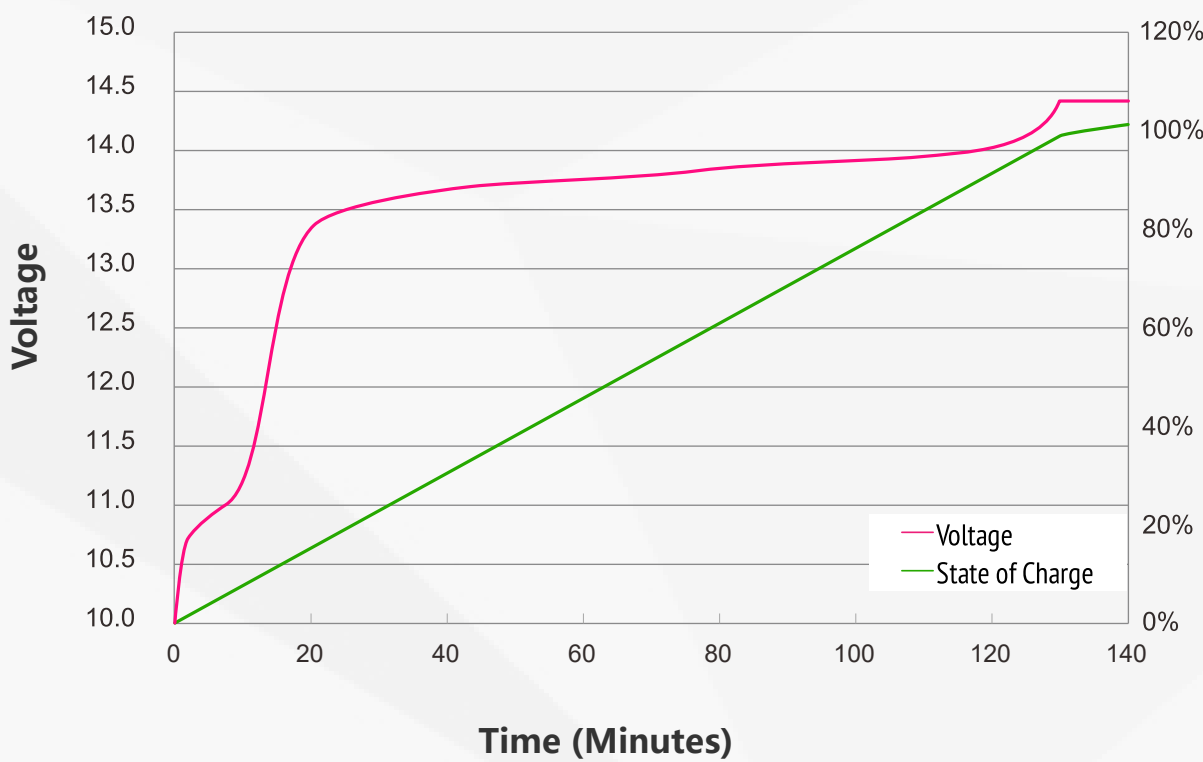
24V 150Ah

24V 190Ah

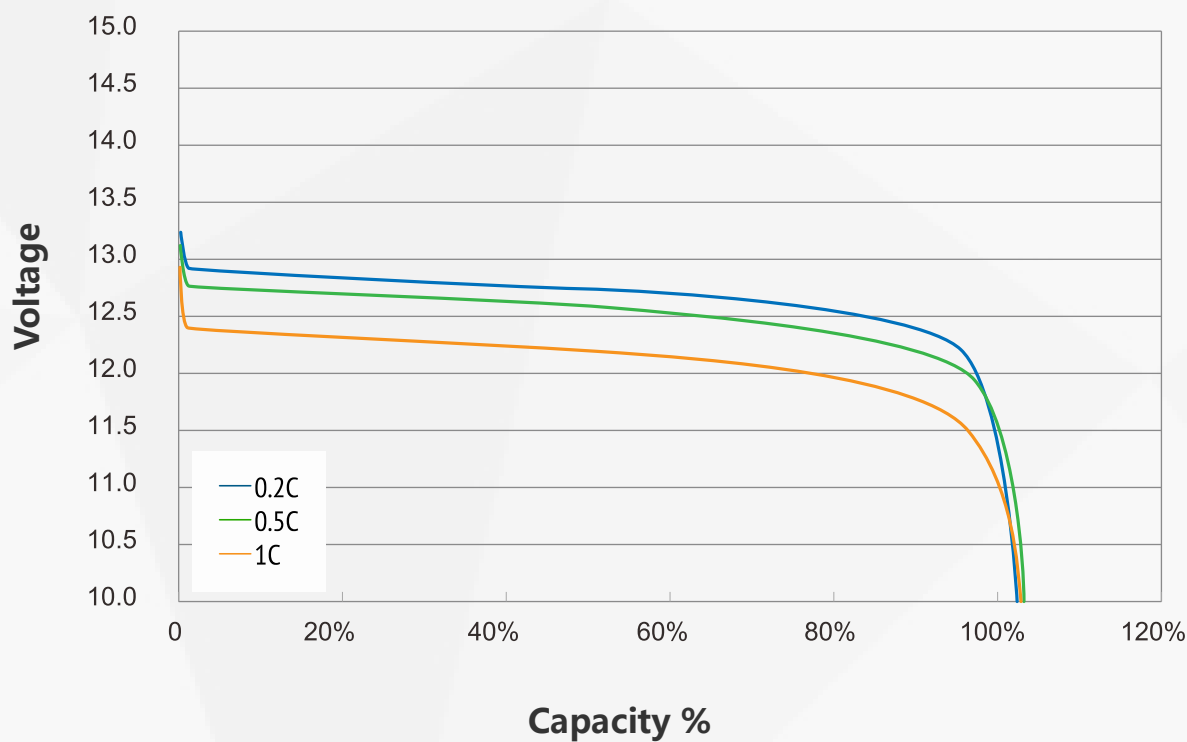
48V 105Ah

Characteristics Curve:

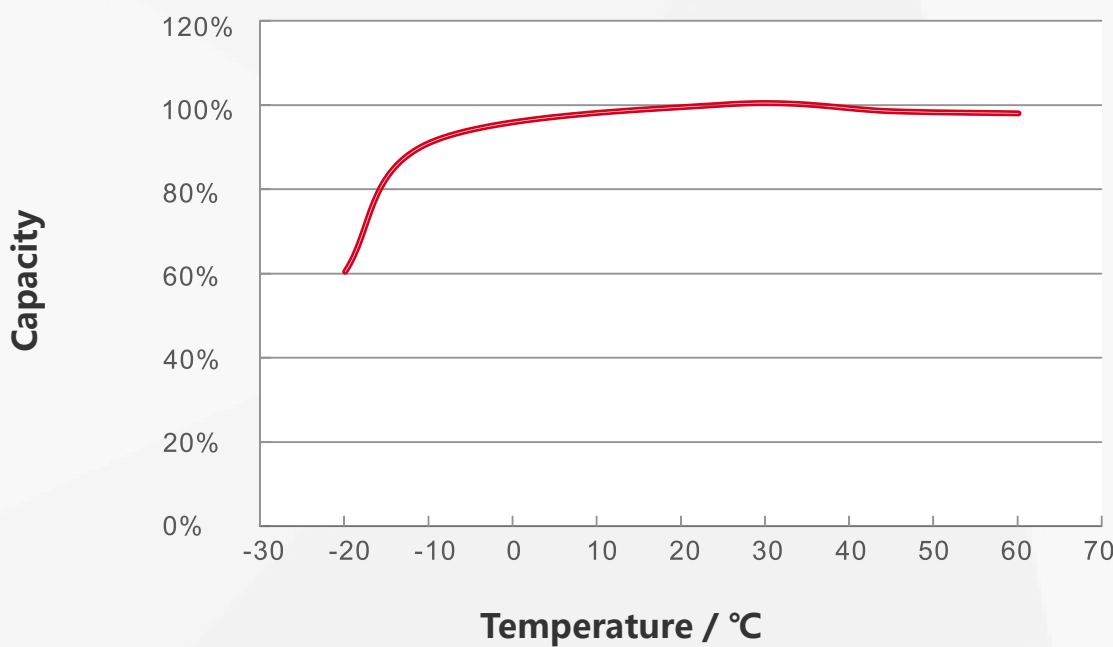
Charging Characteristics (0.5C @25°C)



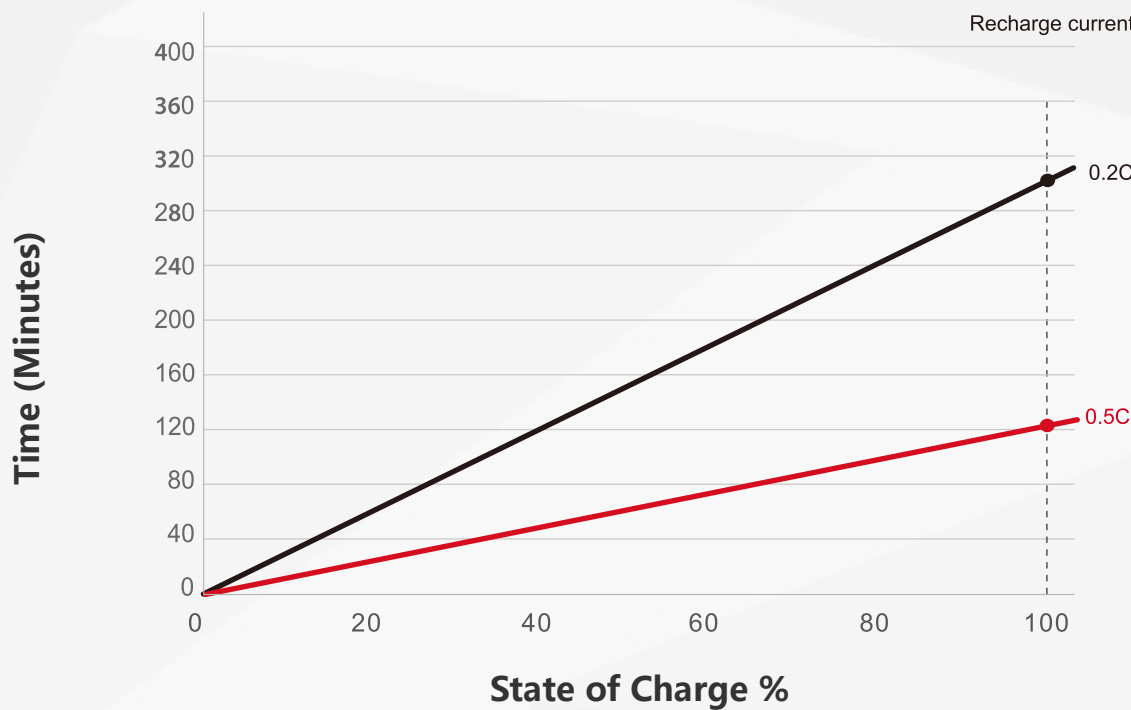
Discharging Characteristics (0.2C, 0.5C, 1C @25°C)



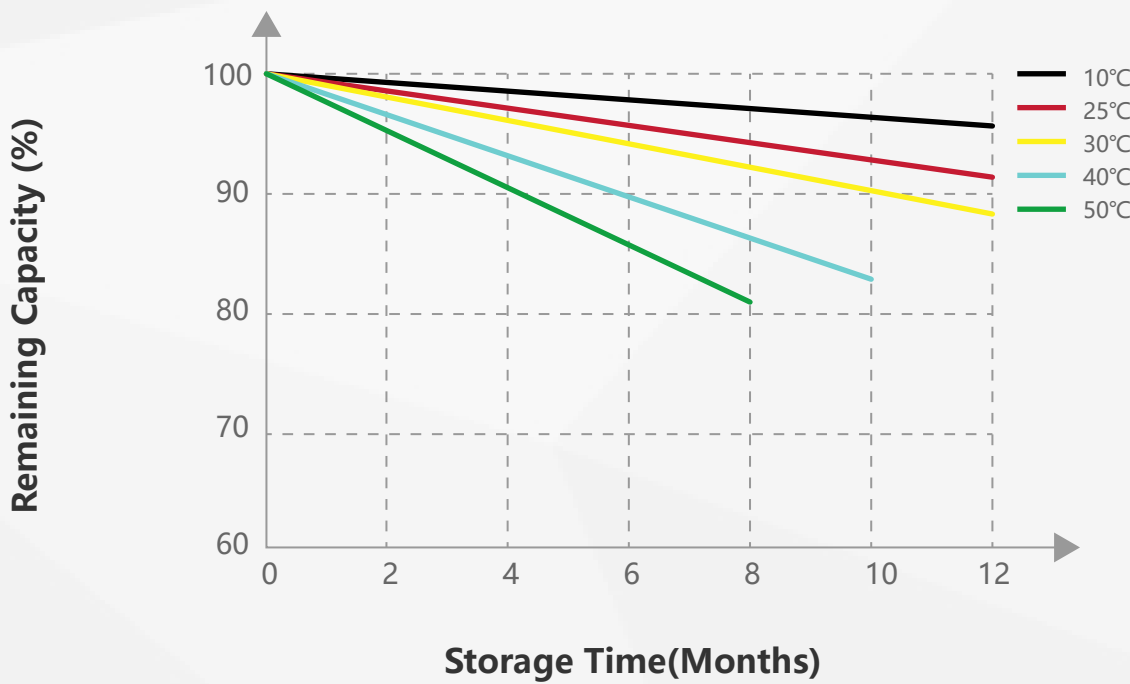
Different Temperature Capacity Curve



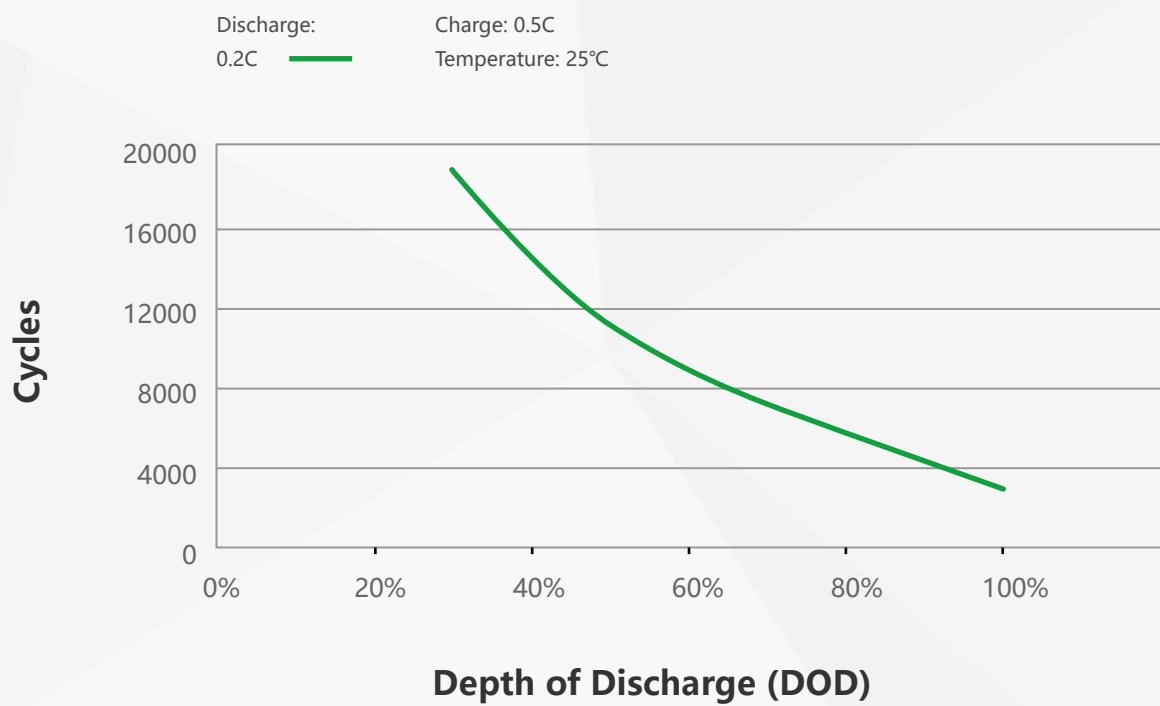
Typical Charge Time Curve



Different Temperature Self Discharge Curve



Different DOD Discharge Cycle Life Curve



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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 300Ah battery from other suppliers.

Market Applications:



RV



Marine



Golf cart



Light EV



Energy storage



Cleaning



Robotics



Lighting

Package:

20' Container=10Pallets=300Cartons=300Units;
40' Container=20Pallets=600Cartons=600Units;



Internal Package
Forming pearl foam



1Carton=1Unit

Weight: 35Kg/carton
Size(L×W×H): 600×350×310mm



1Pallet=30Cartons

Weight: 1065Kg/pallet
Size(L×W×H)=1.2×1×1.9m ≈ 2.3CBM

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.