

HCG-24S Series

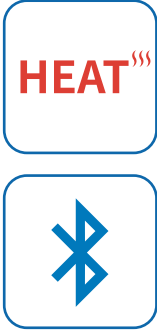
/ Data sheet



12V 105Ah

Bluetooth

HEAT



Model Included:

- HCG24S-12105BH

12V 105Ah LiFePO4 Battery with Bluetooth and Heat (cold-weather performance battery)

Haicen Advanced Lithium Batteries		HCG24S-12105BH	
Electrical Specifications	Nominal Voltage	12.8V	
	Nominal Capacity	105Ah	
	Parallel Connection	Max. 6units	
	Serial Connection	Max. 4units	
	BMS	4S100A	
	Bluetooth	Android/IOS	
	Heat	Yes	
	Circuit Protection	Over charge, Over discharge, Over current, Over temp, Short, Balance,Low temp	
	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	
	Standard Current	21A	
	Fast Current	62.5A	
Discharge Specifications	Standard Current	21A	
	Max. Con. Current	100A	
	Cut-off Voltage	10V	
Mechanical Specifications	Dimensions (mm)	260×170×208mm (Group 24)	
	Approx Weight(KG)	10.5	
	Terminal Type	M8	
	Case Color/material	Black Plastic case (ABS)	
	IP Rating	IP65	
	Cell Type	3.2V105Ah prismatic 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-24S Series / Data sheet



12V 105Ah Bluetooth HEAT[™]

Key Points for Quality control:

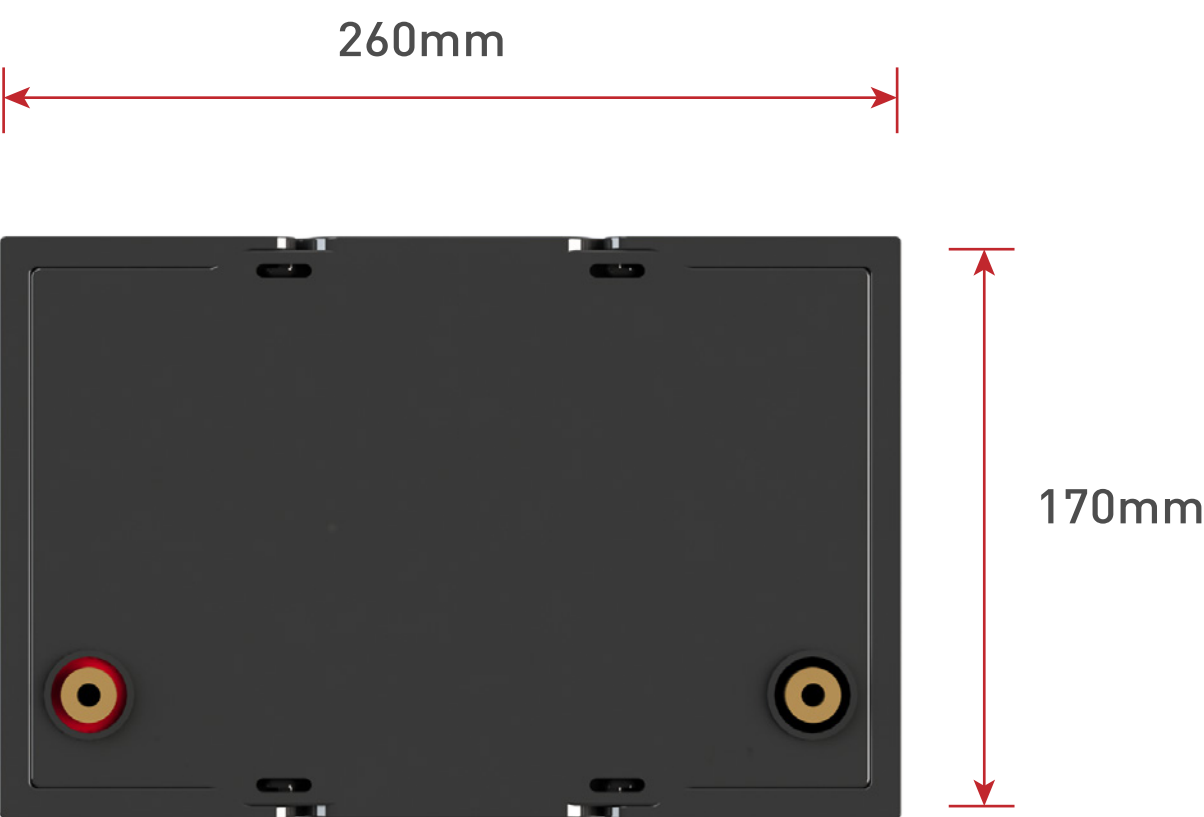
- **Cell match:**
More strict cell matching standard, the difference of Internal resistance is 1mΩ and voltage is 5mV.
- **Automatic cells welding:**
Cells are assembled by Automatic welding equipments to ensure the quality reliability and consistency.
- **100% Cycle test:**
All battery packs are 100%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

- UL1973 (Cell)
- UL2580 (Cell)
- UL9540A (Cell)
- CE (Cell / Pack)
- IEC62660 (Cell)
- UN38.3 (Cell / Pack)
- IEC62619 (Cell)
- ROHS (Cell)

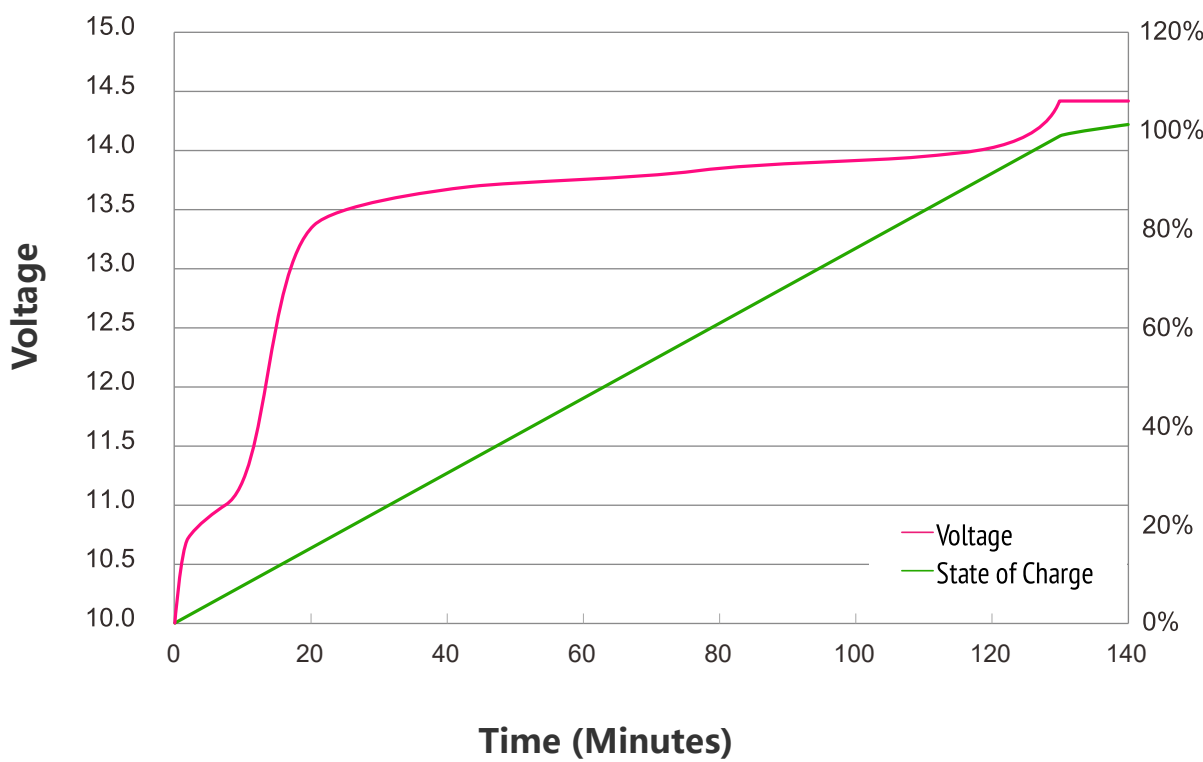


Dimensions:

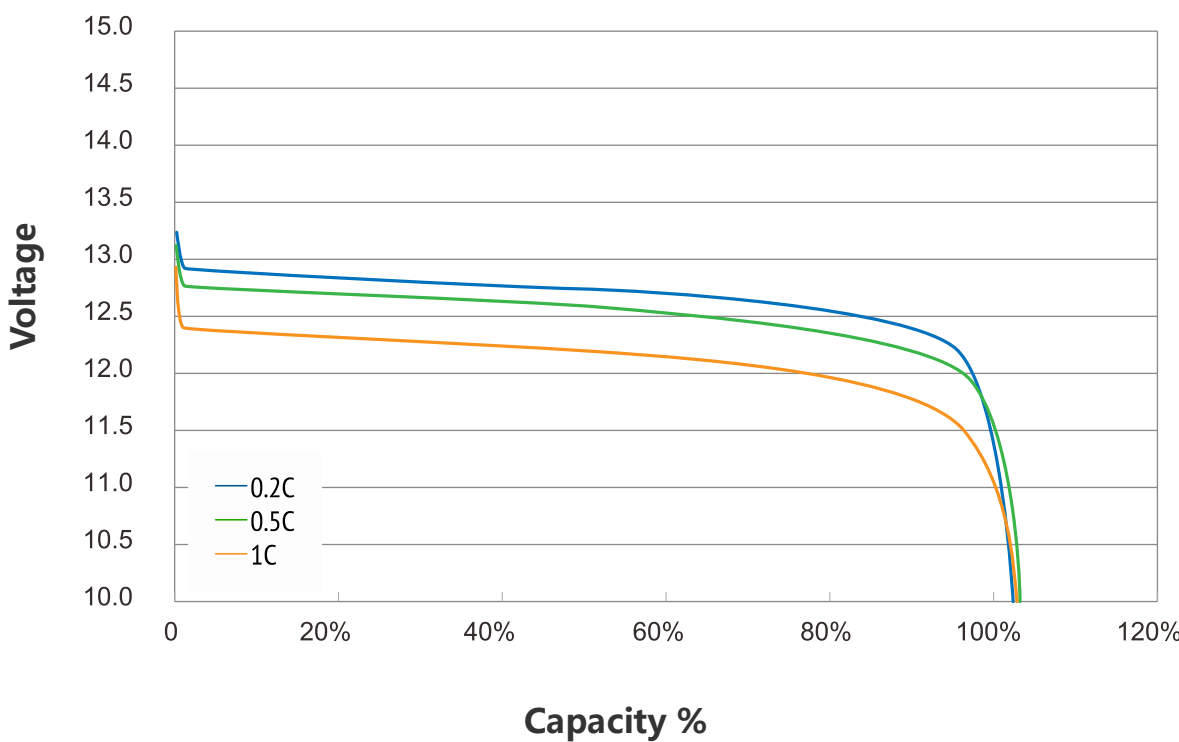


Characteristics Curve:

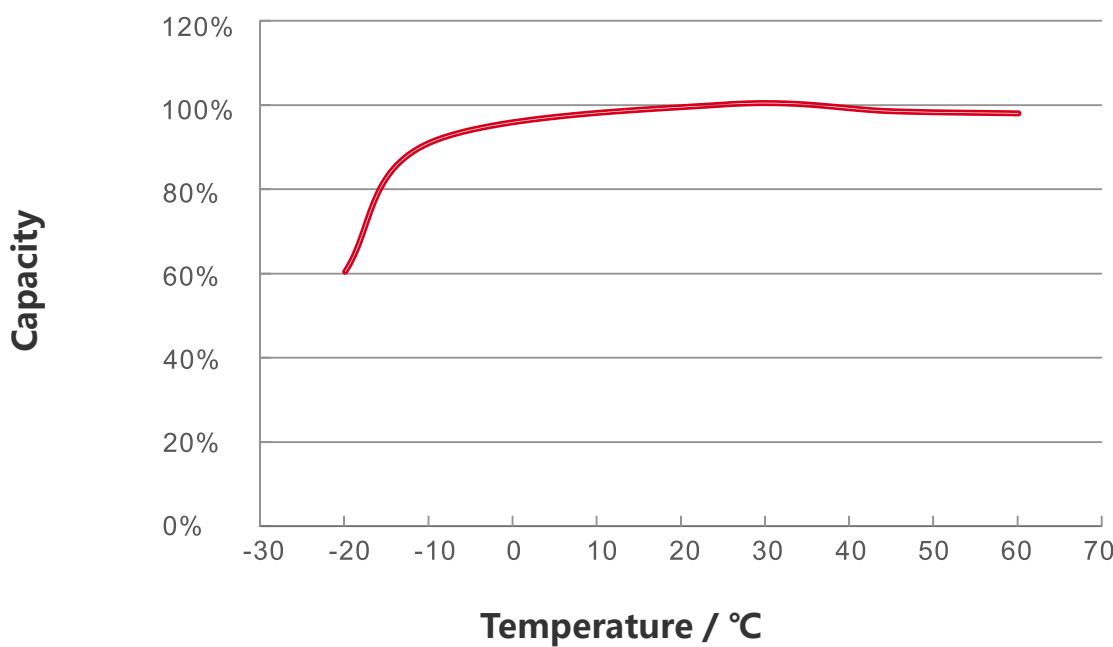
Charging Characteristics (0.5C @25°C)



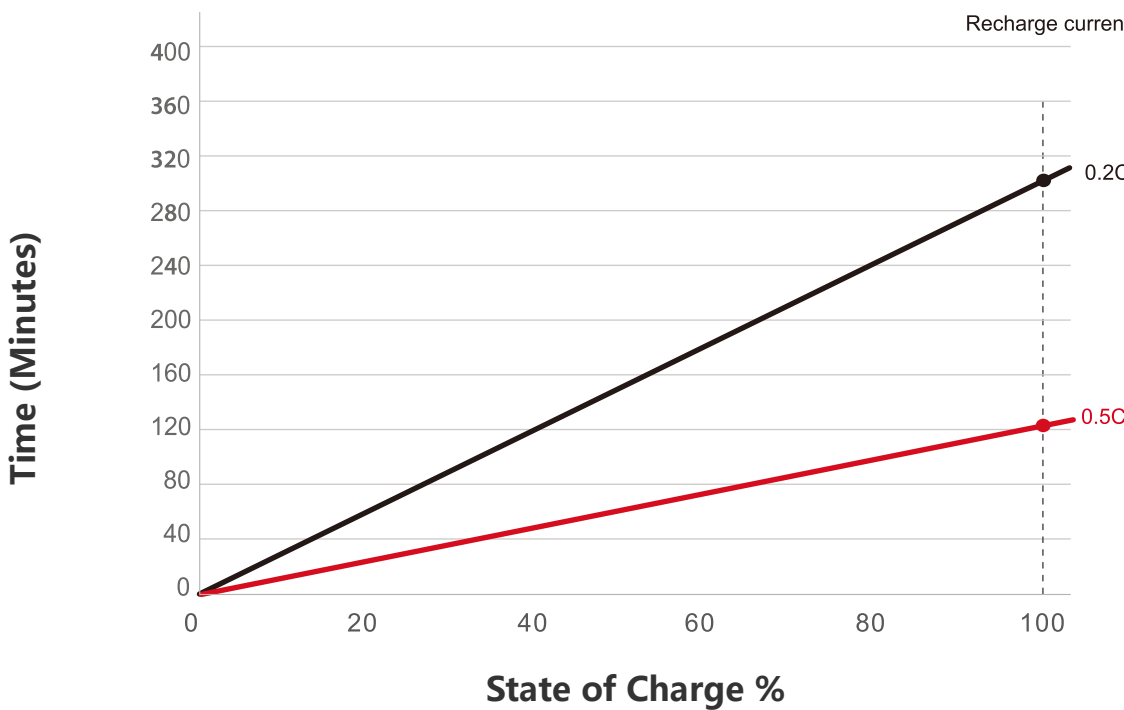
Discharging Characteristics (0.2C, 0.5C, 1C @25°C)



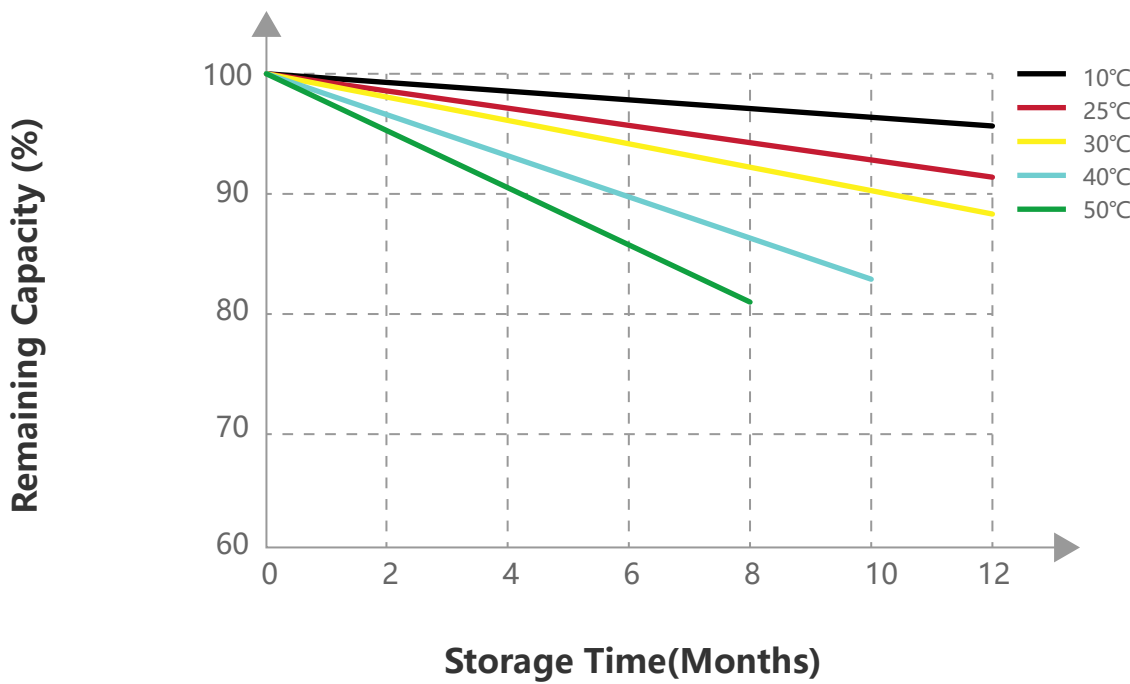
Different Temperature Capacity Curve



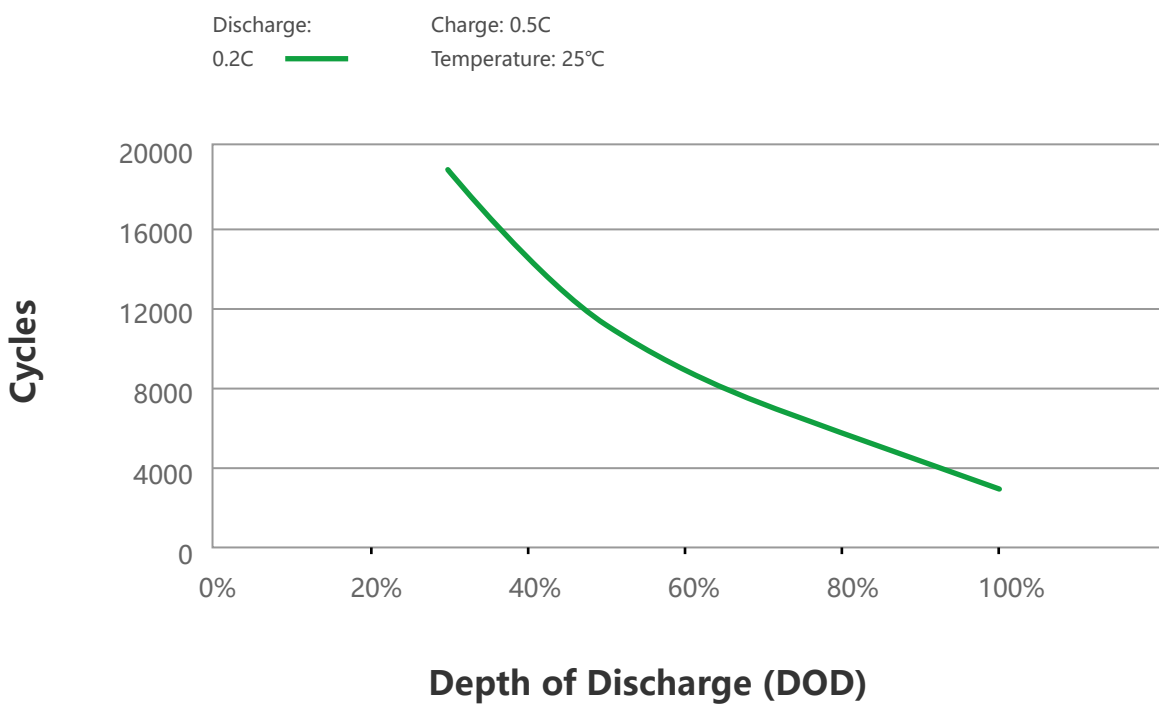
Typical Charge Time Curve



Different Temperature Self Discharge Curve



Different DOD Discharge Cycle Life Curve



12V 105Ah

Bluetooth

HEAT[™]

Key Benefits:

- Higher qualified cylindrical cell:**
UL1973, UL9540, IEC62133, IEC62619 listed with Cycle life more than 3000times and excellent consistency.
- Bluetooth:**
Can monitor the battery status(charge, discharge, current, temperature, cycle life and so on) and change the data for different applications.
- Heat:**
Uniform internal heating is an important feature of our cold-weather performance batteries, as many external heating blanket options currently available cannot sense the internal temperature of the cells and may not be completely effective at heating the battery throughout. The system features proprietary technology that draws power from the charger itself, requiring no additional components. The entire process of heating and charging is completely seamless. Simply plug the battery into the regular lithium charger and the internal heating and monitoring system takes care of the rest.
- Higher energy density with less weight:**
The energy density of cell is higher about 15% than others, which bring less weight.

Market Applications:



RV



Marine



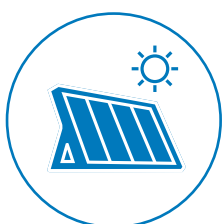
Golf cart



Cleaning



Light EV



Energy storage



Robotics



Lighting

Package:

20' Container=10Pallets=900Cartons=900Units;
40' Container=20Pallets=1800Cartons=1800Units;

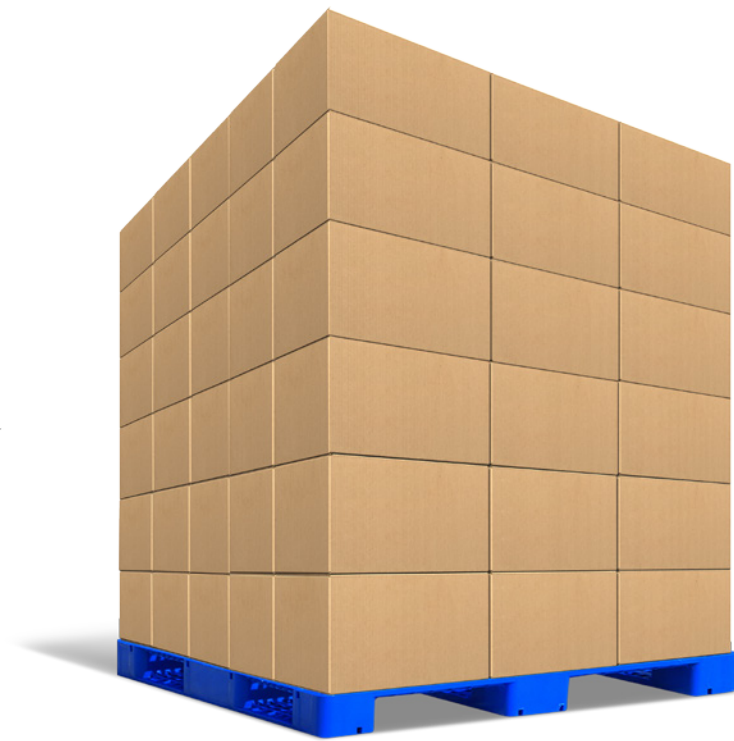


Internal Package
Forming pearl foam



1Carton=1Unit

Weight: 11Kg/carton
Size(L×W×H): 320×230×282mm



1Pallet=90Cartons

Weight: 1005Kg/pallet
Size(L×W×H)=1.2×1×1.8m ≈ 2.2BM

Customized items:

- Bluetooth App design:** Help you to design and upload customized App.
- 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.