# HCG-24 Series Data sheet

12V 100Ah

12V 120Ah ] 24V 50Ah

48V 25Ah





## Model Included:

HCG24-12100 12V 100Ah LiFePO4 Battery

HCG24-12120 12V 120Ah LiFePO4 Battery

HCG24-2450 24V 50Ah LiFePO4 Battery

HCG24-3636 36V 36Ah LiFePO4 Battery

HCG24-4825 48V 25Ah LiFePO4 Battery

(H) Haic	en	Model				
Advanced Lithium	Batteries	HCG24-12100	HCG24-12120	HCG24-2450	HCG24-3636	HCG24-4825
Electrical Specifications	Nominal Voltage	12.8V	12.8V	24V	36V	48V
	Nominal Capacity	100Ah	120Ah	50Ah	36Ah	25Ah
	Parallel Connection	Max. 6units	Max. 6units	Max. 6units	Max. 6units	Max. 6units
	Serial Connection	Max. 6units	Max. 6units	Max. 2units	No	No
	BMS	4S100A	4S150A	8S50A	12S50A	16S45A
	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	43.2±0.6V	57.6±0.8V
	Standard Current	20A	24A	10A	7A	5A
	Fast Current	50A	60A	25A	18A	12A
Discharge Specifications	Standard Current	20A	24A	10A	7A	5A
	Max. Con. Current	100A	120A	50A	36A	25A
	Peak Current	500A(300ms)	600A(300ms)	200A(300ms)	200A(300ms)	180A(300ms)
	Cut-off Voltage	10V	10V	20V	30V	40V
Mechanical Specifications	Dimensions (mm)	260×170×208mm (Group 24)				
	Approx Weight(KG)	11.5	13	12	12.5	11
	Terminal Type			M8		
	Case Color/material	Black Plastic case (ABS)				
	IP Rating	IP65				
	Cell Type	Cylindrical LiFePO4 cell				
	Cell holder	Yes				
Temperature Specifications	Charge Temp		0°C t	o 55℃ (32°F 1	to 131°F)	
	Discharge Temp	-20°C to 60°C (-4°F to 140°F)				
	Storage Temp		-5°C t	o 45°C (23°F 1	to 113°F)	



48V 25Ah



# **Key Points for Quality control:**

#### Cell match:

12V 100Ah

More strict cell matching standard, the difference of Internal resistance is  $1m\Omega$  and voltage is 5mV.

12V 120Ah | 24V 50Ah

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















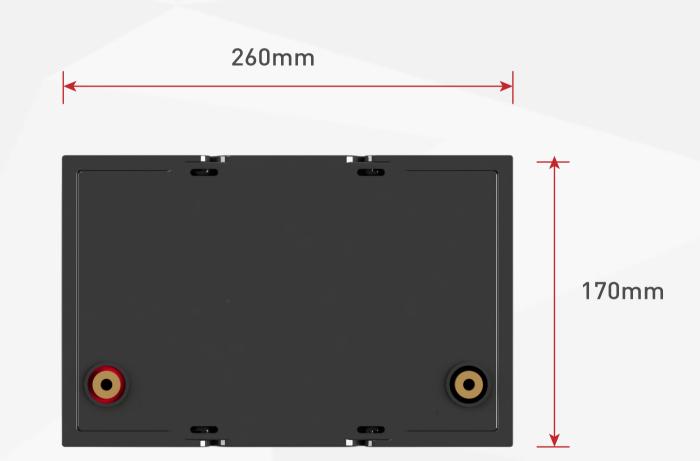




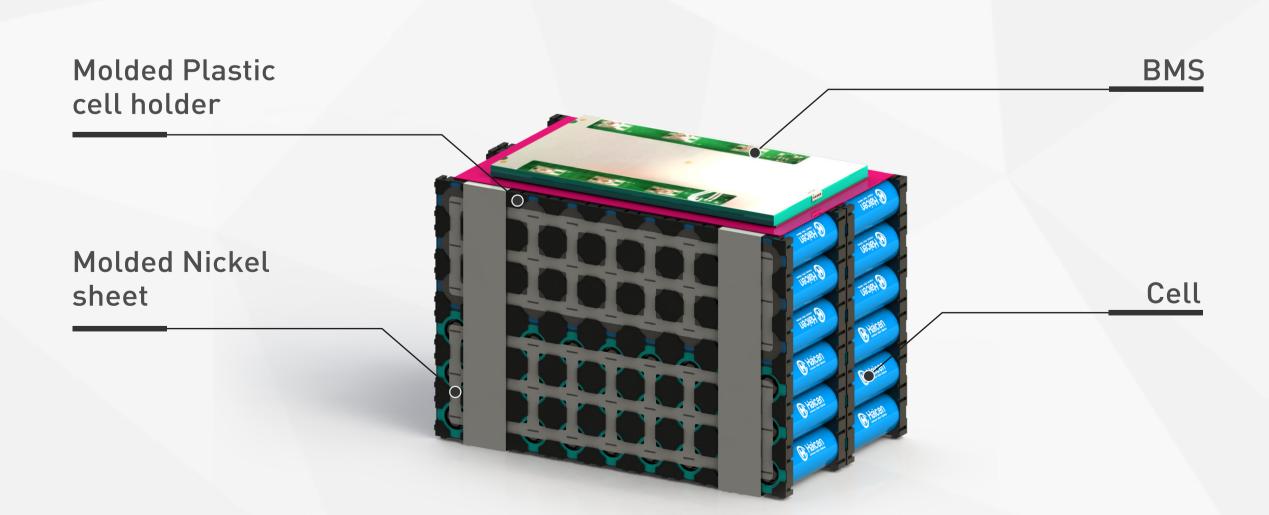


## **Dimensions:**





## **Internal Structure:**





# HCG-24 Series Data sheet

12V 100Ah

12V 120Ah | 24V 50Ah

24V 50Ah 48V





## **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 100Ah battery from other suppliers.

## **Market Applications:**







Marine



Golf cart



Light EV



Energy storage



e Cleaning





## Package:

20' Container=10Pallets=750Cartons=750Units;

40' Container=20Pallets=1500Cartons=1500Units;



## **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.

