# HCG-31 Series Data sheet

12V 150Ah

12V 130Ah ] 24V 72Ah

48V 36Ah





## Model Included:

HCG31-12130 12V 130Ah LiFePO4 Battery

HCG31-12150 12V 150Ah LiFePO4 Battery

HCG31-2472 24V 72Ah LiFePO4 Battery

HCG31-3650 36V 50Ah LiFePO4 Battery

HCG31-4836 48V 36Ah LiFePO4 Battery

(H) Haic	en	Model				
Advanced Lithium	Batteries	HCG31-12130	HCG31-12150	HCG31-2472	HCG31-3650	HCG31-4836
Electrical Specifications	Nominal Voltage	12.8V	12.8V	24V	36V	48V
	Nominal Capacity	130Ah	150Ah	72Ah	50Ah	36Ah
	Parallel Connection	Max. 6units	Max. 6units	Max. 6units	Max. 6units	Max. 6units
	Serial Connection	Max. 6units	Max. 6units	Max. 2units	No	No
	BMS	4S150A	4S150A	8S80A	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	26A	30A	14A	10A	7A
	Fast Current	65A	75A	36A	25A	18A
Discharge Specifications	Standard Current	26A	30A	14A	10A	7A
	Max. Con. Current	130A	150A	72A	50A	36A
	Peak Current	600A(300ms)	600A(300ms)	400A(300ms)	200A(300ms)	180A(300ms)
	Cut-off Voltage	10V	10V	20V	30V	40V
Mechanical Specifications	Dimensions (mm)	330×173×216mm (Group 31)				
	Approx Weight(KG)	15	15.5	14.5	15	14.5
	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 to	o 55°C (32°F t	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  $1m\Omega$  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)
- CE (Pack)
- IEC62133 (Cell)
- UN38.3 (Cell / Pack)
- IEC62619 (Cell)
- ROHS (Cell)















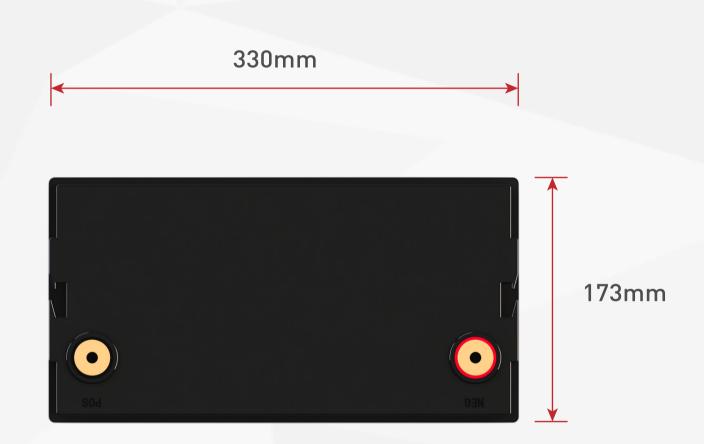






## **Dimensions:**





## **Internal Structure:**





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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 100Ah battery from other suppliers.

## **Market Applications:**







Marine



Golf cart



Light EV





**Energy storage** Cleaning





## Package:

20' Container=10Pallets=600Cartons=600Units:

40' Container=20Pallets=1200Cartons=1200Units;



## **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.

