

HCG-27 Series / Data sheet



12V 120Ah

12V 135Ah

24V 60Ah

48V 32Ah



Model Included:

- **HCG27-12120** 12V 120Ah LiFePO4 Battery
- **HCG27-12135** 12V 135Ah LiFePO4 Battery
- **HCG27-2460** 24V 60Ah LiFePO4 Battery
- **HCG27-3640** 36V 40Ah LiFePO4 Battery
- **HCG27-4832** 48V 32Ah LiFePO4 Battery

		Model				
		HCG27-12120	HCG27-12135	HCG27-2460	HCG27-3640	HCG27-4832
Electrical Specifications	Nominal Voltage	12.8V	12.8V	24V	36V	48V
	Nominal Capacity	120Ah	135Ah	60Ah	40Ah	32Ah
	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	8S60A	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	27A	12A	8A	6A
	Fast Current	60A	67A	30A	20A	16A
Discharge Specifications	Standard Current	24A	27A	12A	8A	6A
	Max. Con. Current	120A	135A	60A	40A	32A
	Peak Current	600A(300ms)	600A(300ms)	200A(300ms)	200A(300ms)	180A(300ms)
	Cut-off Voltage	10V	10V	20V	30V	40V
Mechanical Specifications	Dimensions (mm)	305×169×210mm (Group 27)				
	Approx Weight(KG)	13.5	14	13.5	13.5	13
	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 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)

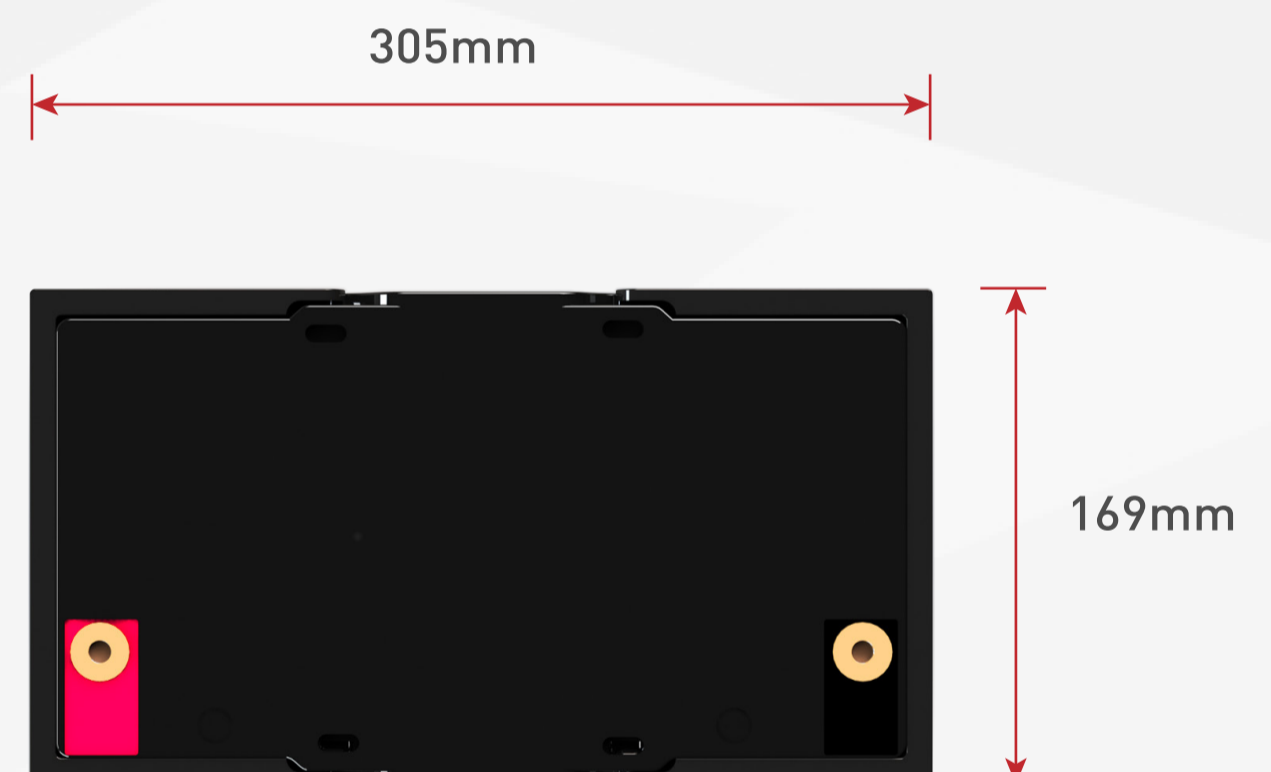
MSDS



UN38.3



Dimensions:



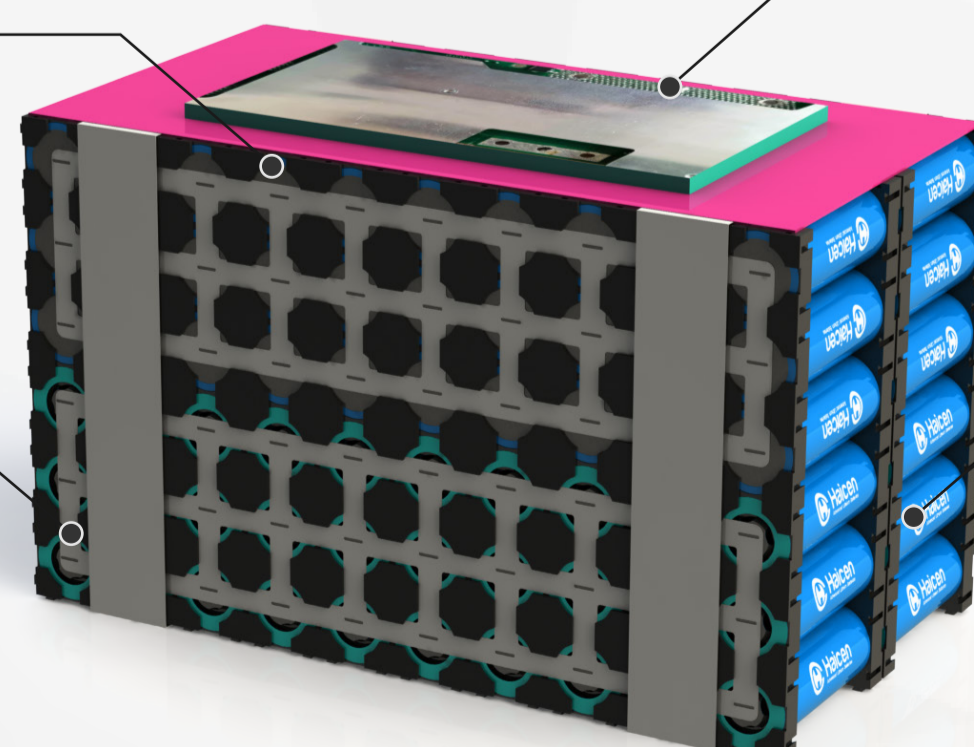
Internal Structure:

Molded Plastic cell holder

Molded Nickel sheet

BMS

Cell



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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 120Ah battery from other suppliers.

Market Applications:



RV



Marine



Golf cart



Light EV



Energy storage



Cleaning



Robotics



Lighting

Package:

20' Container=10Pallets=650Cartons=650Units;
 40' Container=20Pallets=1300Cartons=1300Units;



Internal Package
Forming pearl foam

1Carton=1Unit



Weight: 14.5Kg/carton
 Size(L×W×H): 365×230×285mm

1Pallet=65Cartons



Weight: 952Kg/pallet
 Size(L×W×H)=1.2×1×1.85m ≈ 2.2CBM

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 benefits.