24V80Ah LiFePO4 Battery / Data sheet



Model

24V 80Ah LiFePO4 Battery

Model		24V 80Ah LiFePO4 Battery
Electrical Specifications	Nominal Voltage	24V
	Nominal Capacity	80Ah
	Parallel Connection	Max. 6units
	Serial Connection	Max. 2units
	BMS	8S100A
	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	28.8±0.4V
	Standard Current	16A
	Fast Current	40A
Discharge Specifications	Standard Current	16A
	Max. Con. Current	80A
	Peak Current	400A(300ms)
	Cut-off Voltage	20V
Mechanical Specifications	Dimensions (mm)	330×173×216mm (Group 31)
	Approx Weight(KG)	15
	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℃ to 55℃ (32℉ to 131℉)
	Discharge Temp	-20℃ to 60℃ (-4℉ to 140℉)
	Storage Temp	-5℃ to 45℃ (23℉ to 113℉)

24V80Ah LiFePO4 Battery / Data sheet

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:**

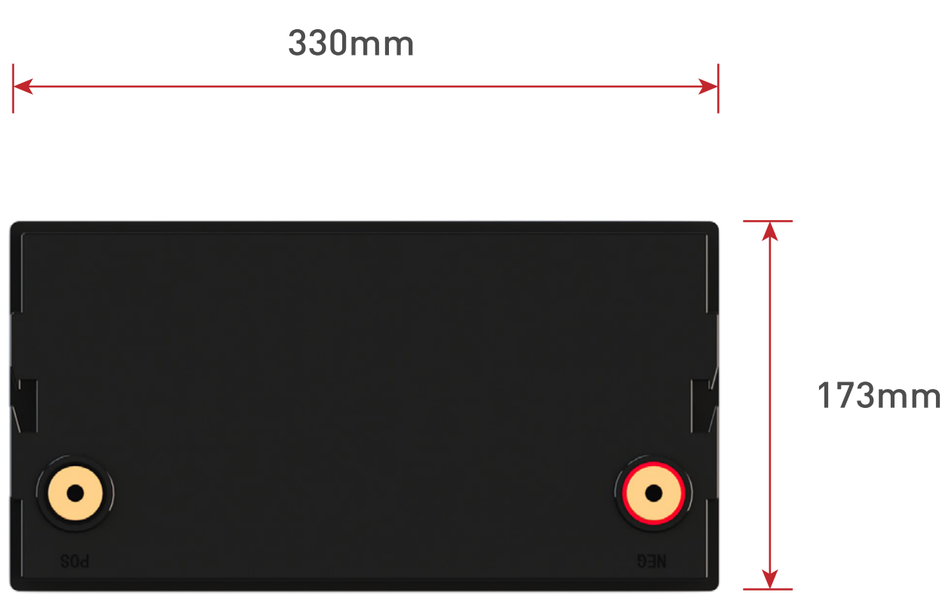
  All battery packs are lasered an unique number on the case side for quality tracking.

Certifications:

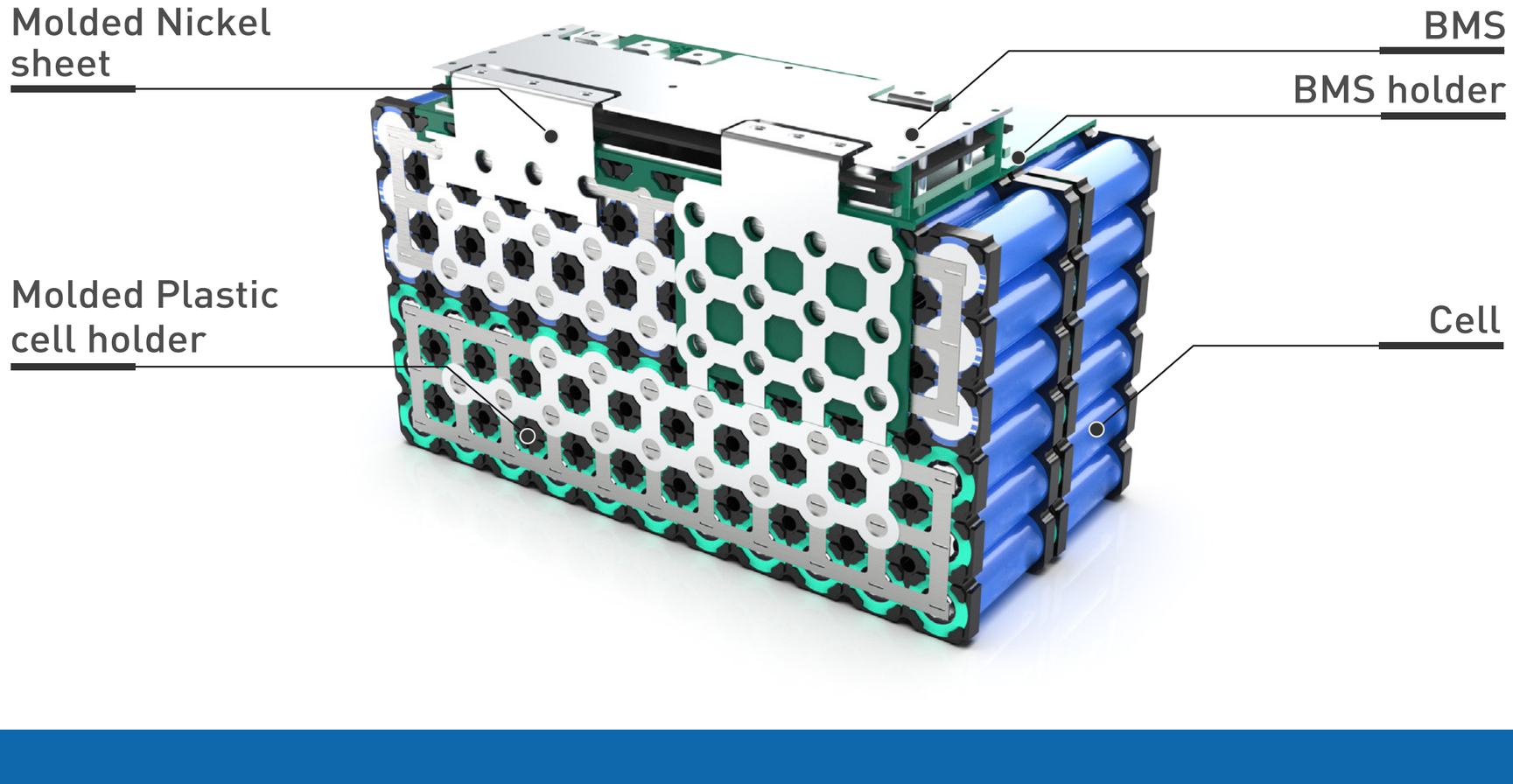
- **UL1642 (Cell)**
- **IEC62133 (Cell)**
- **IEC62619 (Cell)**
- **CE (Pack)**
- **UN38.3 (Cell / Pack)**
- **ROHS (Cell)**

Dimensions:





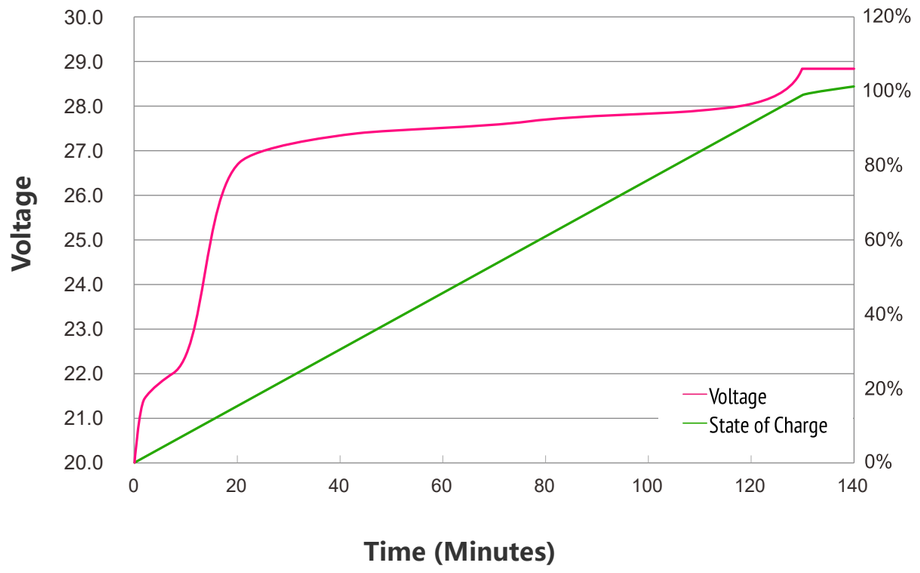
Internal Structure:



24V80Ah LiFePO4 Battery / Data sheet

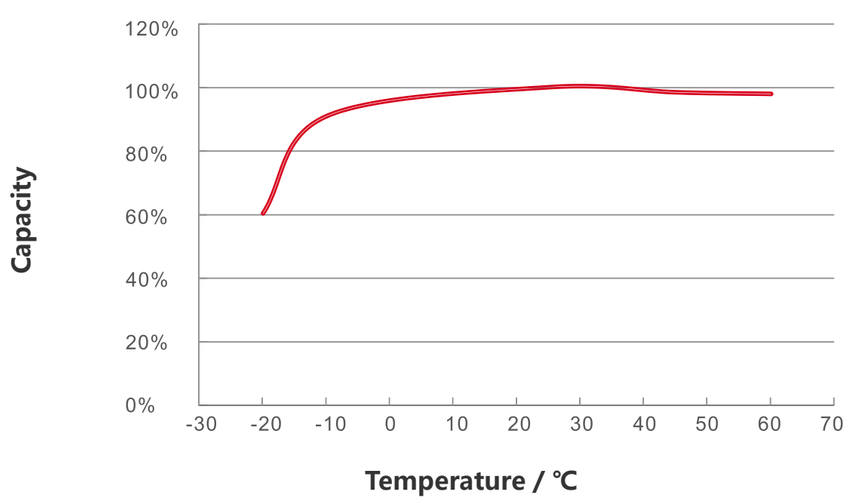
Characteristics Curve:

Charging Characteristics (0.5C @25℃)

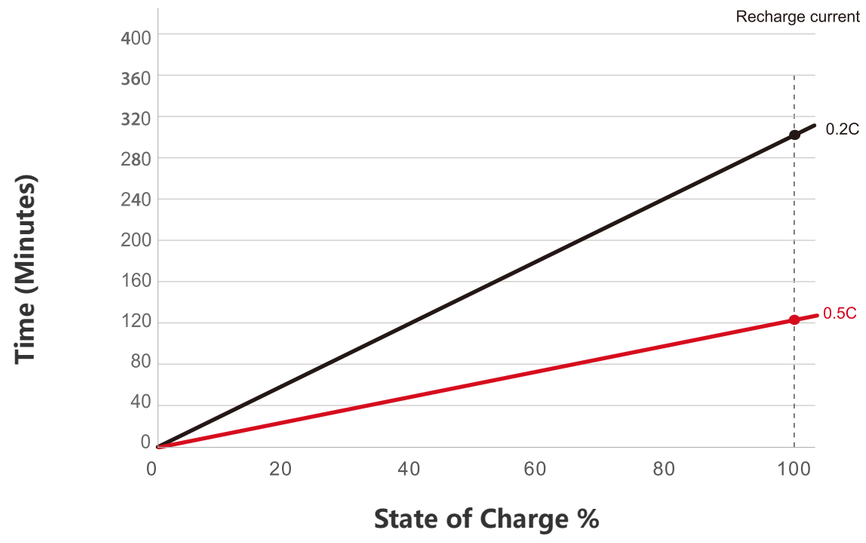


Discharging Characteristics (0.2C, 0.5C, 1C @25℃)

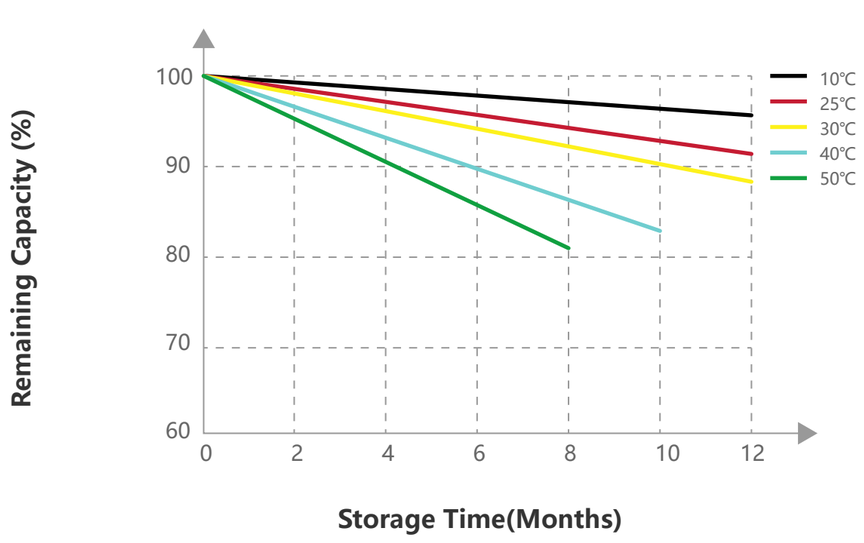
Different Temperature Capacity Curve



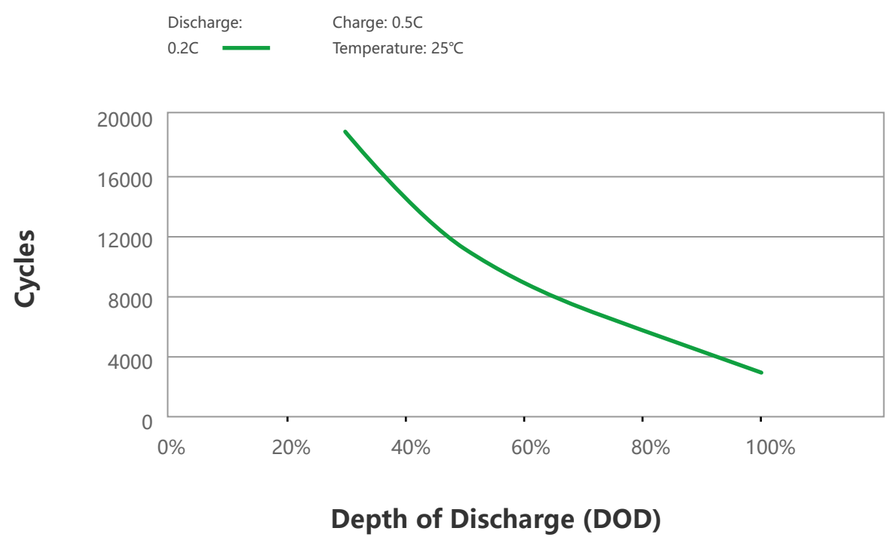
Typical Charge Time Curve



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 24V 80Ah battery from other suppliers.

Market Applications:


RV


Marine


Golf cart


Light EV


Energy storage


Cleaning


Robotics


Lighting

Package:

20’ Container=10Pallets=720Cartons=720Units;
40’ Container=20Pallets=1440Cartons=1440Units;



Internal Package
Forming pearl foam



1Carton=1Unit

Weight: 16Kg/carton
Size(L×W×H): 410×250×310mm



1Pallet=72Cartons

Weight: 1167Kg/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.