

# 12.8V LiFePO4 Battery



• HW12200 E

## Functions of BMS

- Over charge detection function
- Over discharge detection function
- Over current detection function
- Temperature protection function
- Short circuit detection function
- Balance function

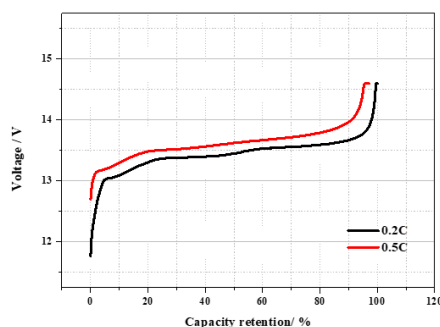
## Application

- Household
- Solar light
- RV
- Fishing boat

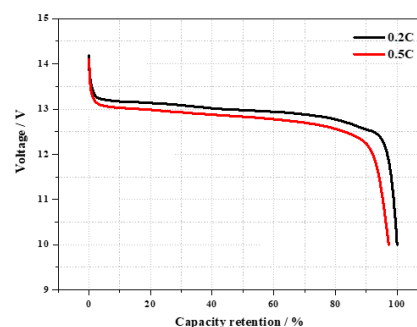
## Features of LiFePO4 Battery

- **Longer Cycle Life:** Offers up to 10 times longer cycle life and 5 times longer float/calendar life than lead acid battery. Helping to minimize replacement cost and reduce total cost of ownership.
- **Lighter Weight:** About 40% of the weight of a comparable lead acid battery. A "drop in" replacement for lead acid battery.
- **Higher Power:** Delivers twice power of lead acid battery, even high discharge rate, while maintain high energy capacity.
- **Wider Temperature Range:** -10°C~60°C
- **Superior Safety:** Lithium iron phosphate chemistry eliminates the risk of explosion or combustion due to high impact, over charging or short circuit situation.
- **No Memory Effect:** Support unstable partial state of charge (UPSOC) (charge/discharge) utilization.

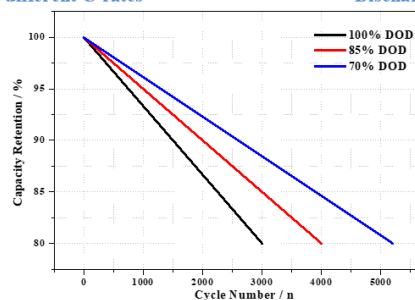
### • Balance function



Charge curves at different C-rates



Discharge curves at different C-rates



Life cycle at different DOD

## Specification

Model		HW12200 E
Electrical	Nominal Voltage	12.8V
	Nominal Capacity	200Ah
	Energy	2560Wh
	Internal Resistance	≤20mΩ (without BMS)
	Cycle Life	≥3000 cycles
	Design Life	10 years @25℃
	Self-Discharge (30 days)	≤5%, @25℃
	Efficiency of Charge	≥98%
	Efficiency of Discharge	≥100% @ 0.2C ≥96% @ 0.5C
Charge	Charge Voltage	14.2-14.6V
	Charge Mode	0.2C to 14.6V, then 14.6V charge current
		to 0.02C (CC/CV)
	Max. Charge Current	100A
Discharge	Max. Continuous Discharge Current	100A
	Discharge Cut-off Voltage	9.5-10.5V
Environmental	Charge Temperature Range	0℃~60℃
	Discharge Temperature Range	-10℃~60℃
	Optimum Operation Temperature	10℃~35℃
	Storage Temperature	-20℃~55℃
		≤85% Relative Humidity
	Water Dust Resistance	IP65
Mechanical	Case	ABS
	Terminals	M8
	Dimensions	483*170*240mm
	Max. Weight	23kg
	Min. Gravimetric Specific energy	110Wh/kg
Others	Communication port	Not available
	Parallel in maximum	4pcs
	Serial in maximum	Not available

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