

LIFEPO4 BATTERY

12V/24V LIFEPO4 BATTERY

12.8V - 300AH (3840Wh)

12V/24V LiFePO4 Battery series of batteries are designed based on Lithium Iron Phosphate battery technology and aimed to replace VRLA and GEL technology batteries for deep discharge applications. Designed to meet the world's most stringent safety, performance, and quality standards. These batteries come with a range of interesting options and protection features. It includes a hardware BMS for control and protection of the battery. Optionally, allows communication with a WiFi or Bluetooth configure and control the battery, in addition, it has an ON/OFF button and LED to notify the charge status (SOC) of the battery. Thanks to its internal BMS, the battery implements protection systems for overloads, over-discharge, over-current, short circuits, and out of working temperature range (high and low).

The Lithium Iron Phosphate battery technology allows maintenance-free operation in a temperature range from -15°C to +50°C and supports up to 3,500 charge-discharge cycles at 100% depth (at 25°C, 0.5C/0.5C, EOL up to 80%). This battery has UN38.3 and CE certifications.





APLICACIONES

RV



HOME APPLIANCES



YACHT



OUTDOOR STALL





LIFEPO4 - MAINTENANCE-FREE BATTERY 12.8V - 300AH (3840WH)



TECHNICAL SPECIFICATIONS

Nominal Voltage **Nominal Capacity** Total Energy Size/mm Weight End-of-charge Voltage End-of-discharge Voltage Standard Charge Current Max. Charge Current Standard Discharge Current Max. Discharge Current Max. Peak Current Communication Charge/Discharge Interface Communication Interface Shell Material/Color

12.8V 300Ah 3840Wh 525*270*220 29.5kg(about) 14.6V 10.0V 100A 100A150A 100A 100A/200A 200A/300A BT/RS485/ (optional) M6 Terminal/M8 Terminal Aviation Socket (optional) Plastic/Black (color optional) Charge:0°C-50°C Discharge: -15°C-60°C



APPLICATIONS

Toys, power tools, household appliances, consumer electronics, boats, golf carts, submarines, electric bicycles/scooters, electric cars, electric wheelchairs, power systems, solar energy storage systems, uninterruptible power supplies, electric forklifts

BMS: BATTERY MANAGEMENT SYSTEM

BMS

Human Interface

Protections

Connection Capabilities

Work Temperature Range

Hardware BMS integration Supports Bluetooth or WiFi internal modules (optional)

ON/OFF push button LED: Battery Level (25%/50% /75%/100%); ON/OFF; ALARM

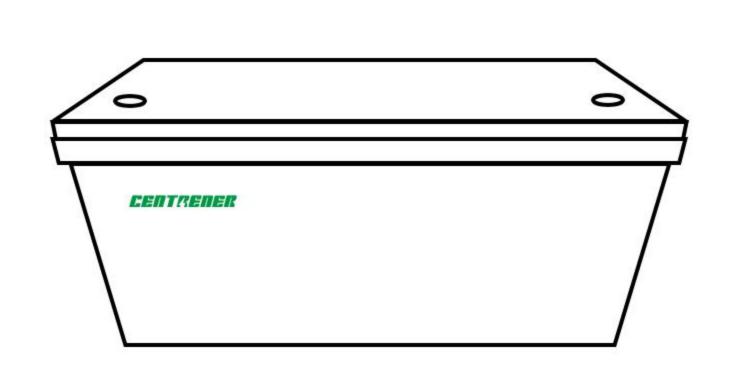
Over-charge, Over-discharge, Over-current, Short-circuit High-temperature, Low-temperat

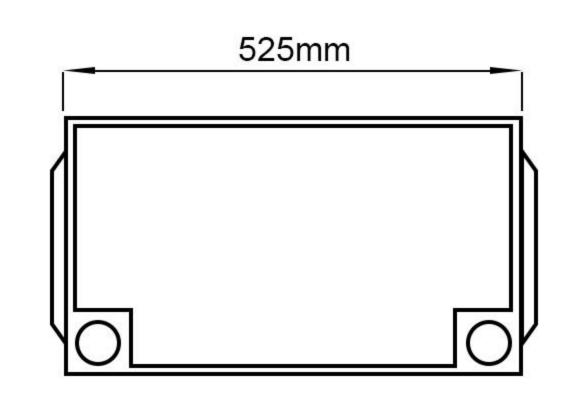
Up to 4 sets in parallel Up to 4 units in series

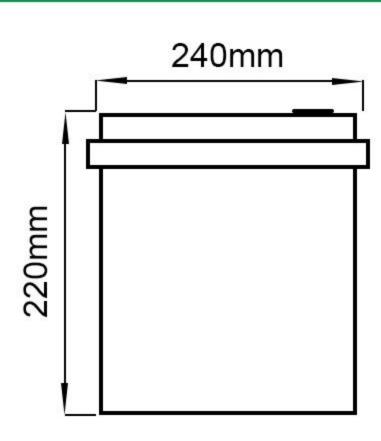
Low Temperature Self-heating



BMS: BATTERY MANAGEMENT SYSTEM





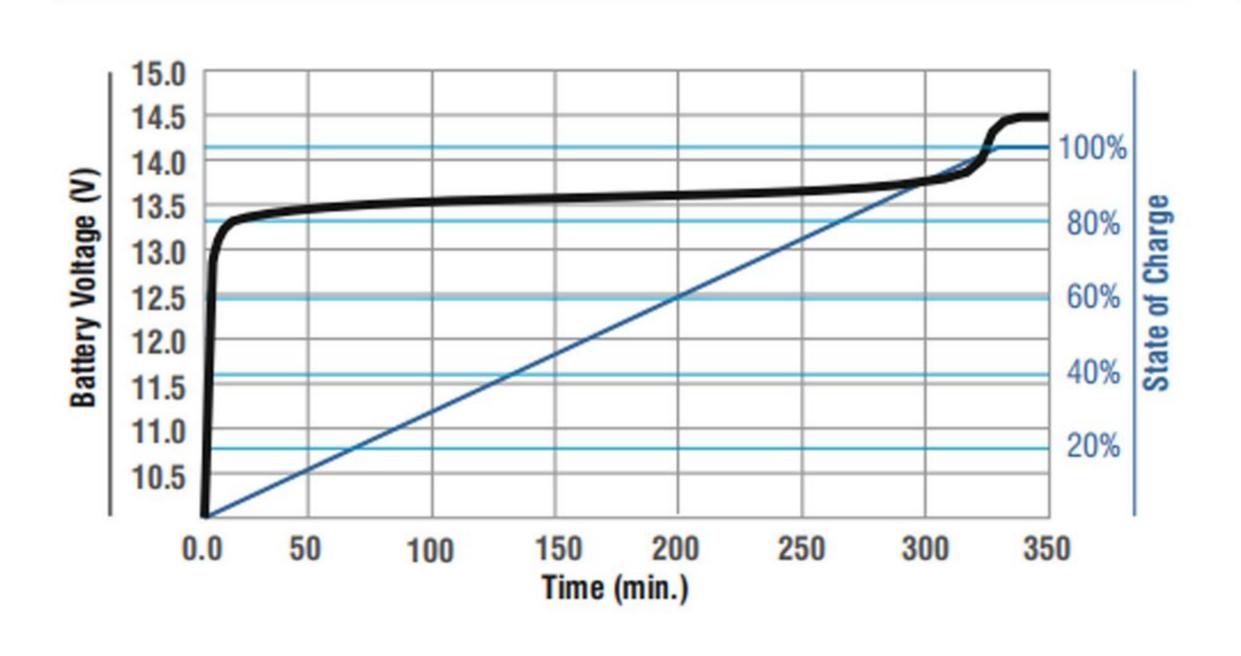


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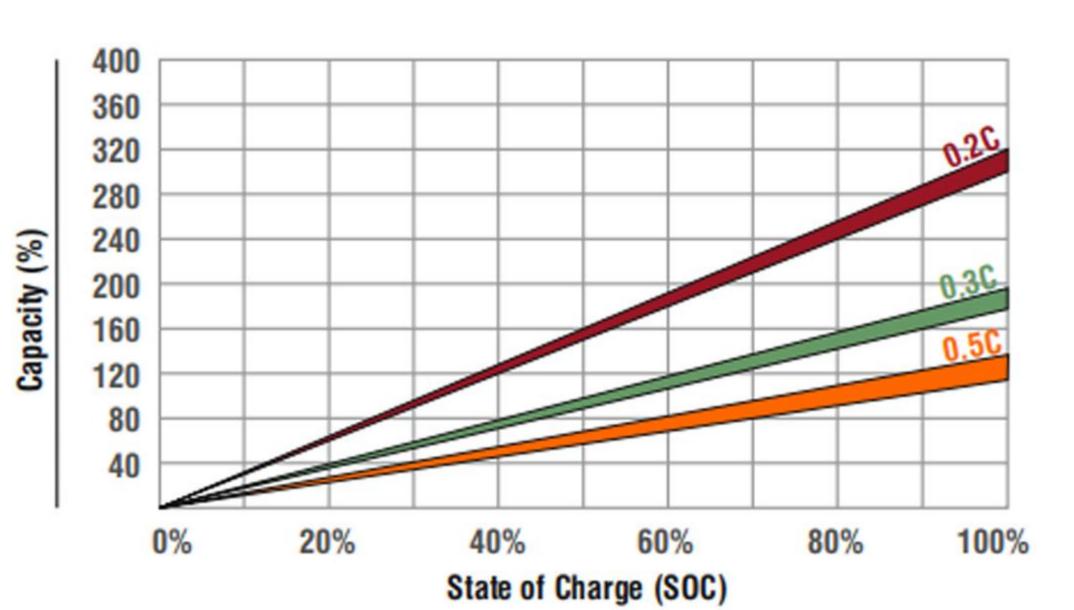


CHARGING & DISCHARGING INFORMATION

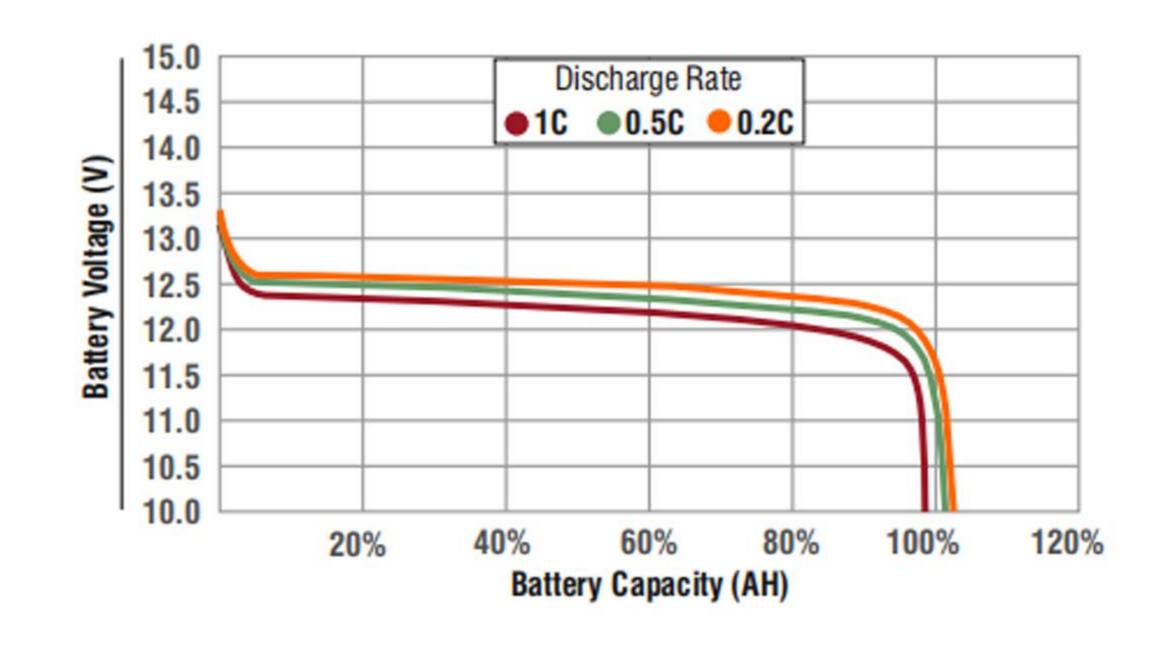
Charging Voltage(25°C / 0.2C)



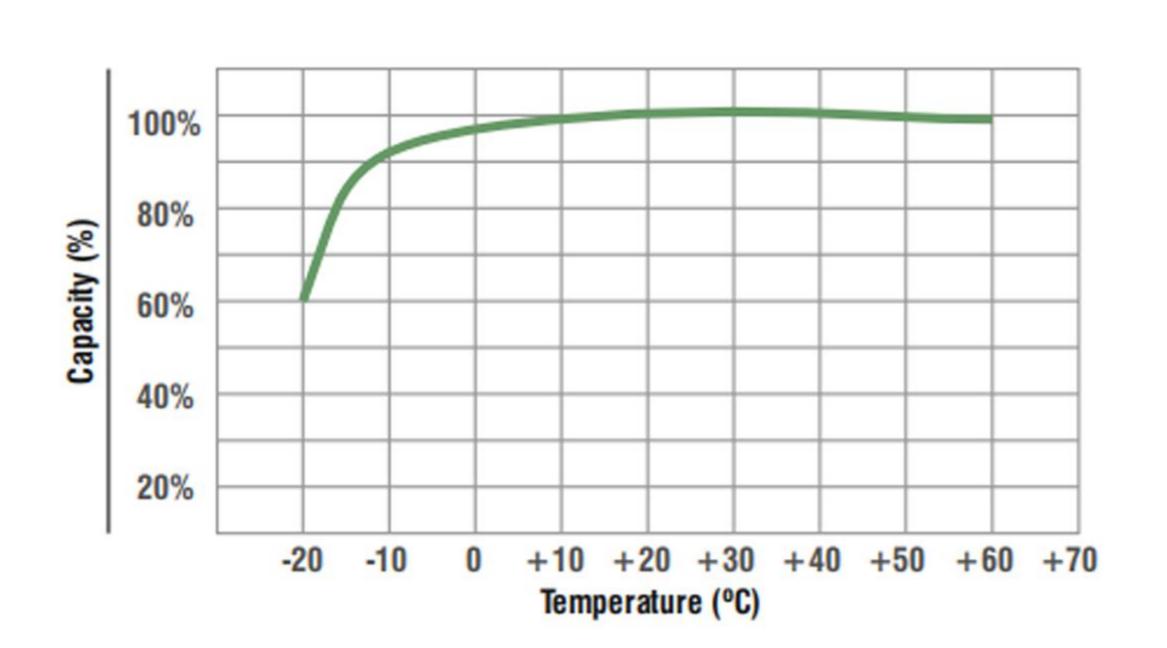
Recharging Time



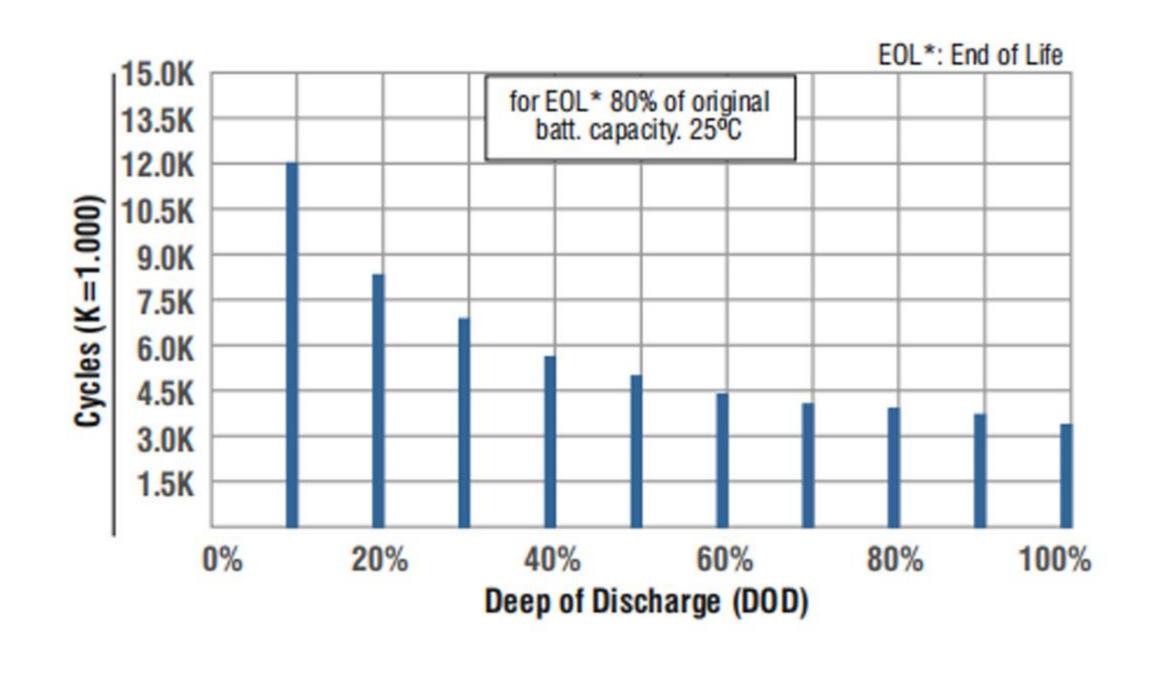
Discharging (vs discharge rates @ 25°C)



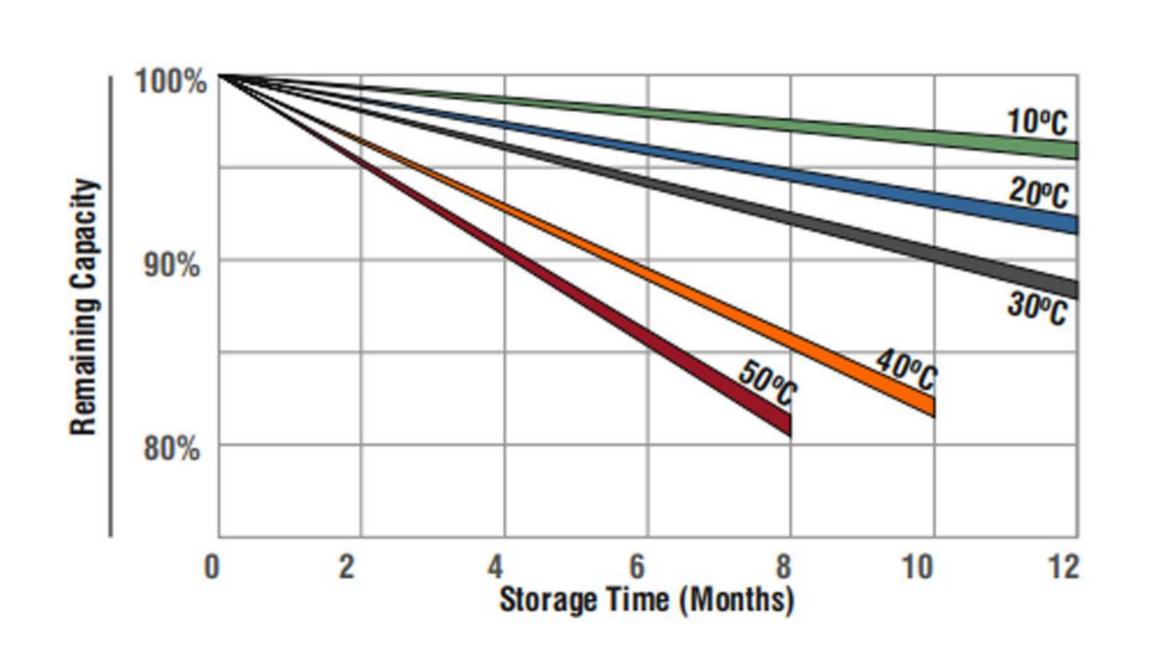
Capacity vs Temperature



Lifespan in Cycles (vs DOD)



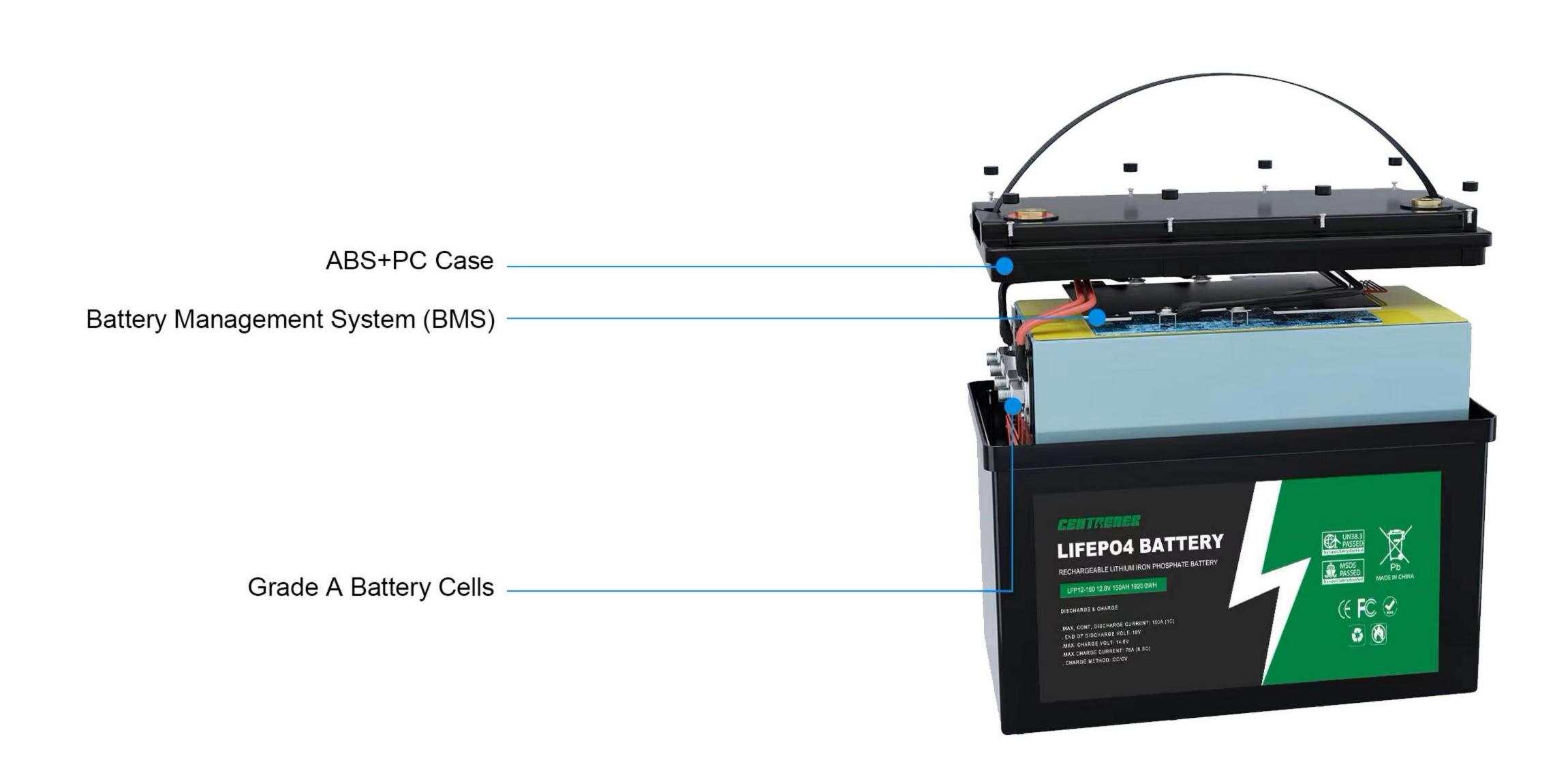
Self Discharge (vs Temp. °C)



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BATTERY STRUCTURE



SERIAL CONNECTION



PARALLEL CONNECTION

