

Iron-V Lithium
Iron Phosphate Battery



Features

Cost Effectiveness



Smart Management



Longer Service Life



Guaranteed Safety



Fast Charge



Drop-in Replacement



Technical Characteristics

NOMINAL CHARACTERISTICS

Nominal Voltage	12.8V
Nominal Capacity	60Ah
Energy	768Wh
IR	≤ 10m Ω @100%SOC
Efficiency	≥ 99.5%
Maximum Modules in Series Connection	1 (Single Use)

CHARGE & DISCHARGE CHARACTERISTICS

Voltage Window	10.8-14.6V
Max. Continuous Charge Current	60A
Max. Continuous Discharge Current	60A
Peak Discharge Current	105A (15s±1s)

OPERATING CONDITIONS

Cycle Life	≥ 3,000
Operating Temperature	Charge: 0°C ~ 60°C Discharge: -30°C ~ 60°C
Storage Temperature	0°C ~ 30°C
Storage Duration	12months at 25°C
Heating Function	Optional

MECHANICAL CHARACTERISTICS

Case Material	ABS
Dimension (L*W*H)	229*138*213
Weight	9.3KG
Terminal Type	F11
IP grade	/
BCI Group NO.	/
Cell Type-Chemistry	Prismatic LiFePO4

BMS CHARACTERISTICS

Primary Charging Protection	Current:75-85A Delaytime:13-17S
Secondary Charging Protection	Current: ≥ 85A Delay time:1-5S
Primary Discharging Protection	Current:75A-105A Delay time:15S
Secondary Discharging Protection	Current: ≥ 170A-400A Delay time:500mS
Overcharge Voltage Protection	Voltage: 14.8V Delay time: ≤ 3S
Over-discharge Voltage Protection	Voltage: 9.6V Delay time: ≤ 3S
Temperature Protection	PCB temperature ≥ 90°C Recover ≤ 65°C
Communicating Function	Bluetooth (optional)



Iron-V

LFP12-60EV (12V 60Ah) Specification

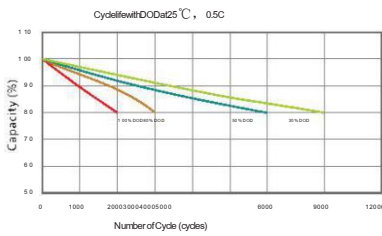
Constant Current Discharge Data (Amperes @ 25 °C)

	1h	2h	3h	5h	10h
Cut-off Voltage(10.8V)	60A	30A	20A	12A	6A

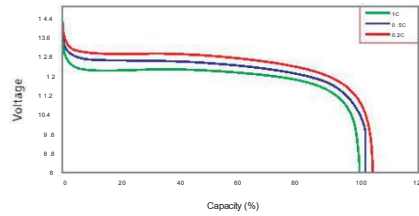
Constant Power Discharge Data (Watts @ 25 °C)

	1h	2h	3h	5h	10h
Cut-off Voltage(10.8V)	690w	348W	234W	142W	72W

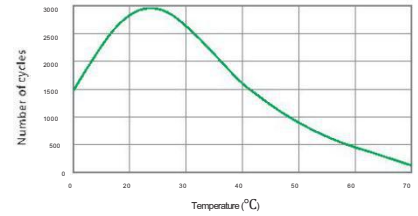
Number of Cycles Vs. DOD



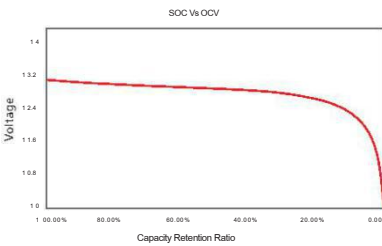
Discharge Performance at R.T.



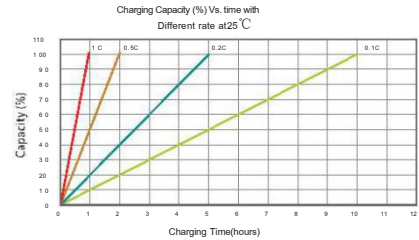
Cycle Life in Relation to Temperature



Battery Capacity (C) Vs. Open Circuit Voltage (OCV)



Battery Capacity Vs. Charging Time



Temperature Effects on Capacity

