

Iron-V Lithium  
Iron Phosphate Battery



## FEATURES

Cost  
Effectiveness



Smart  
Management



Longer  
Service Life



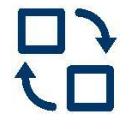
Guaranteed  
Safety



Fast Charge



Drop-in  
Replacement



## Technical Characteristics

NOMINAL CHARACTERISTICS	
Nominal Voltage	25.6V
Nominal Capacity	50Ah
Energy	1280Wh
IR	≤10mΩ@100%SOC
Efficiency	≥99.5%
Maximum Modules in Series	1 (Single Use)

CHARGE & DISCHARGE CHARACTERISTICS	
Voltage Window	20-29.2V
Max. Continuous Charge Current	50A
Max. Continuous Discharge Current	50A
Peak Discharge Current	100A (10s/2s)

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	12 months at 25°C
Heating Function	Optional

MECHANICAL CHARACTERISTICS	
Case Material	ABS
Dimension (L*W*H)	325*170*225 mm
Weight	12.5Kg
Terminal Type	F12
IP grade	/
BCI Group NO.	/
Cell Type-Chemistry	Prismatic LiFePO4

BMS CHARACTERISTICS	
Primary Charging Protection	Current: 55-65A Delay time: 28-32S
Secondary Charging Protection	Current: ≥65A Delay time: 1-2S
Primary Discharging Protection	Current: 50A-100A Delay time: 10S
Secondary Discharging Protection	Current: ≥100A-400A Delay time: 500mS
Overcharge Voltage Protection	Voltage: 30.8V Delay time: 1-2S
Over-discharge Voltage Protection	Voltage: 18.4V Delay time: 1-2S
Temperature Protection	PCB temperature: ≥90°C Recover temperature: ≤75°C
Communicating Function	Bluetooth (optional)



# Iron-V

LFP24-50EV (24V 50Ah) Specification



## Constant Current Discharge Data (Amperes @25°C)

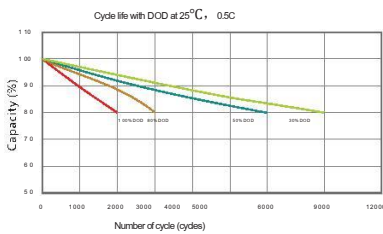
	1h	2h	3h	5h	10h
Cut-off voltage (20V)	50A	25A	16A	10A	5A

## Constant Power Discharge Data (Watts & @25°C)

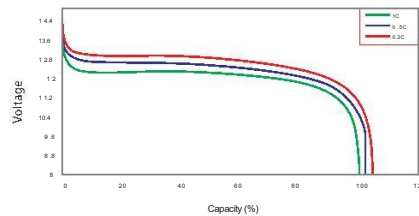
	1h	2h	3h	5h	10h
Cut-off voltage (20V)	1130W	614W	415W	251W	126W

## Cycle No. Vs DOD%

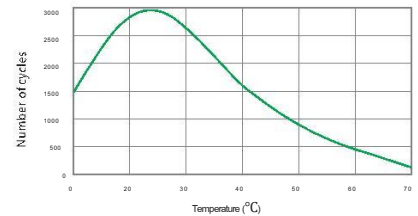
Number of Cycles Vs. DOD



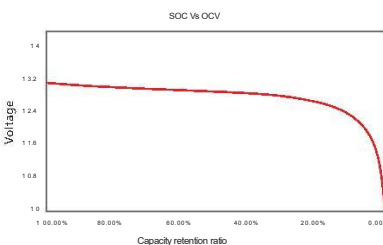
Discharge Performance at R.T.



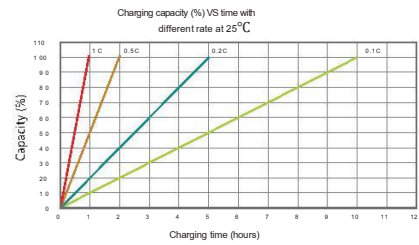
Cycle Life in Relation to Temperature



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



Battery Capacity Vs. Charging Time



Temperature Effects on Capacity

