

Iron-V Lithium
Iron Phosphate Battery



FEATURES

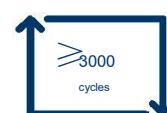
Cost Effectiveness



Smart Management



Longer Service Life



Guaranteed Safety



Fast Charge



Drop-in Replacement



Technical Characteristics

NOMINAL CHARACTERISTICS	
Nominal Voltage	25.6V
Nominal Capacity	40Ah
Energy	1024Wh
IR	$\leq 10m\Omega$ @100%SOC
Efficiency	$\geq 99.5\%$
Maximum Modules in Series	1 (Single Use)

CHARGE & DISCHARGE CHARACTERISTICS	
Voltage Window	20-29.2V
Max. Continuous Charge Current	40A
Max. Continuous Discharge Current	40A
Peak Discharge Current	100A (10s/2s)

OPERATING CONDITIONS	
Cycle Life	$\geq 3,000$
Operating Temperature	Charge: $0^{\circ}C$ ~ $-60^{\circ}C$ Discharge: $-30^{\circ}C$ ~ $-60^{\circ}C$
Storage Temperature	$0^{\circ}C$ ~ $-30^{\circ}C$
Storage Duration	12 months at $25^{\circ}C$
Heating Function	Optional

MECHANICAL CHARACTERISTICS	
Case Material	ABS
Dimension (L*W*H)	258*166*215 mm
Weight	10.5Kg
Terminal Type	F12(M8)
IP Grade	IP65
BCI Group NO.	24
Cell Type-Chemistry	Prismatic LiFePO4

BMS CHARACTERISTICS	
Primary Charging Protection	Current: 55-65A Delay time: 28-32S
Secondary Charging Protection	Current: $\geq 65A$ Delay time: 1-2S
Primary Discharging Protection	Current: 50A-100A Delay time: 10S
Secondary Discharging Protection	Current: $\geq 100A-400A$ 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 $\geq 90^{\circ}C$ Recover temperature $\leq 75^{\circ}C$
Communicating Function	Bluetooth (optional)



Iron-V

LFP24-40EV (24V 40Ah) Specification

IEEE/UL Battery
Sizing by
MooreU
610-952-6067
www.mooreu.com

Constant Current Discharge Data (Amperes @ 25 °C)

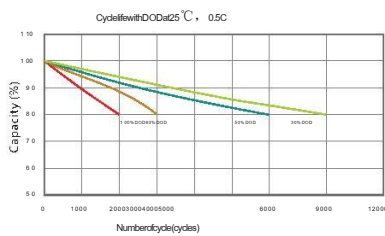
	1h	2h	3h	5h	10h
Cut-off voltage (20V)	40A	20A	13.3A	8A	4A

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

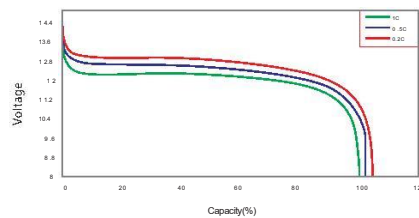
	1h	2h	3h	5h	10h
Cut-off voltage (21.6V)	925W	473W	324W	195W	104W

Cycle No. Vs DOD%

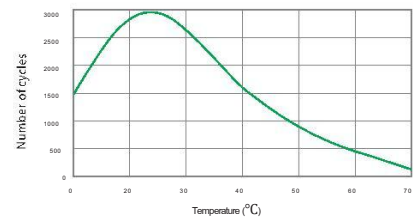
Number of Cycles Vs. DOD



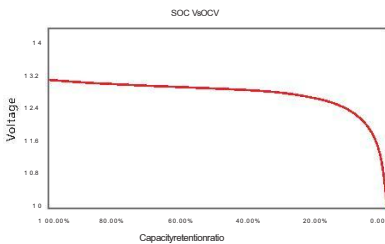
Discharge Performance at R.T.



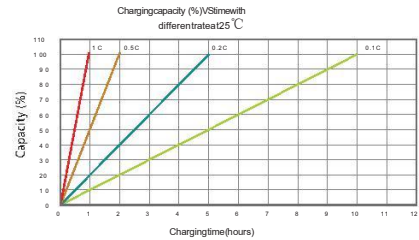
Cycle Life in Relation to Temperature



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



Battery Capacity vs. Charging Time



Temperature Effect on Capacity

