VISION

Iron-V

Specification:LFP12-30EV (12V 30Ah)

Iron-V Lithium
Iron Phosphate Battery

Features

Cost Effectiveness

Lithium
VRLA

Smart Management

Longer Service Life

≥ 3000 cycles

Guaranteed Safety

BMS

Fast Charge

Drop-in Replacement

Technical Characteristics

NORMINAL CHARACTERISTICS	
Nominal Voltage	12.8 V
Nominal Capacity	30Ah
Energy	384Wh
IR	≤10mΩ@100%SOC
Efficiency	≥99.5%
Maximum Modules in Series	2（Single Use）

CHARGE & DISCHARGE CHARACTERISTICS	
Voltage Window	9.6-14.6V
Max. Continuous Charge Current	30A
Max. Continuous Discharge Current	30A
Peak Discharge Current	45-80A（15s±2s）

OPERATING CONDITIONS	
Cycle Life	≥2000
Operating Temperature	Charge: 0℃~60℃
	Discharge:-20℃~60℃
Storage Temperature	-20℃~ 30℃
Storage Duration	12 months at 25℃
Heating Function	/

MECHANICAL CHARACTERISTICS	
Case Material	ABS
Dimension（L*W*H）	166*175*125
Weight	4.7Kg
Terminal Type	F13
IP Grade	/
BCI Group NO.	/
Cell Type-Chemistry	Prismatic $LiFePO_4$

BMS CHARACTERISTICS	
Primary Charging Protection	Current:40~60A
	Delaytime:13~17s
Secondary Charging Protection	Current:⩾60A
	Delaytime:1~4s
Primary Discharging Protection	Current: 45A~80A
	Delaytime:15s
Secondary Discharging Protection	Current: ⩾133A
	Delaytime:150mS
Over-charge Voltage Protection	Voltage:14.8V
	Delaytime:⩽3s
Over-discharge voltage protection	Voltage:9.6V
	Delaytime:⩽3s
Temperature Protection	PCB temperature≥90℃
	Recover≤65℃
Communicating Function	/

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Constant Current Discharge Data（Amperes@25℃）

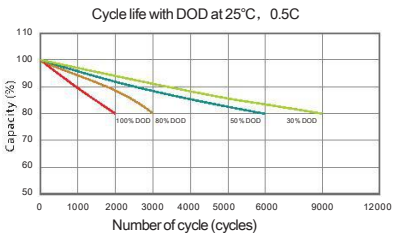
	1h	2h	3h	5h	10h
Cut-off voltage (10.8V)	30A	15A	10A	6A	3A

Constant Power Discharge Data（Watt@25℃）

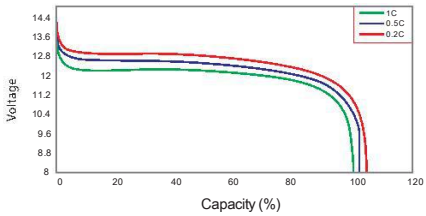
	1h	2h	3h	5h	10h
Cut-off voltage (10.8V)	368W	186W	125W	76W	38.4W

Cycle No.Vs DOD%

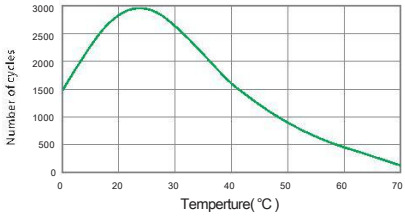
Number of Cycles Vs. DOD



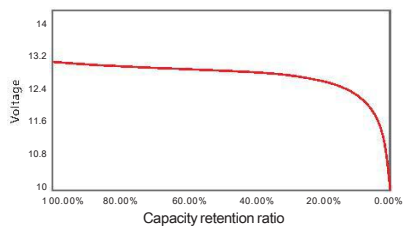
Discharge Performance at R.T.



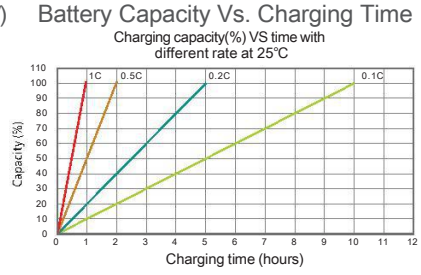
Cycle Life in Relation to Temperature



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



Battery Capacity Vs. Charging Time



Temperature Effects on Capacity