



# V-LFP-36-120EV

# LITHIUM IRON PHOSPHATE BATTERY

#### **PERFORMANCE**

- o Long Cycle Life>2000cycles @100% DOD.
- o High Density, High Discharge Current, High Temperature Range.
- Light Weight, Maintenance Free.
- o Fast Charging.
- Environment Friendly.

# FEATURES

- o Lithium Iron Phosphate (LiFePO4).
- o Integrated Battery Management System(BMS).
- o BMS with Intelligent Cell Balancing.
- Sealed ABS Plastic Housing.
- o Bluetooth

#### **BATTERY DATA SHEET**

Electrical Parameters		
Nominal Voltage	38.4V	
Rated Capacity	120Ah	
Energy	4608Wh	
Resistance	<b>≤30m</b> Ω	
Efficiency	99%	
Cycle Life	>2000cycles @1C,100% DOD	
Self Discharge	2% per Month	
Max. Battery connected in Series	4PCS	
Max. Battery connected in Parallel	20PCS	

Discharge Parameters		
Continuous Discharge Current	150A	
Peak Discharge Current	450A(5 seconds)	
Recommended Volt. Disconnect	30V	
BMS Discharge Cut-off Voltage	24V	
Reconnect Voltage	27.6V	
Short Circuit Protection	200~600 us	

Compliance Certificate		
Certifications	UL1642(CELL)	
	CE	
	IEC62133 & CB	
	KC	
	BIS	
Shipping Classification	UN3480, Class 9, UN38.3	

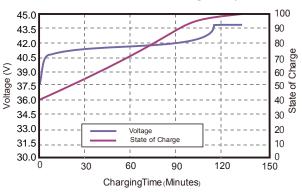
Mechanical Parameters	
Dimension(L x W x H)	522 x268 x 224 mm
	20.55 x10.55x 8.82"
Weight	36kg(79.37lbs)
Terminal Type	M8 (Torque: 10-12N.m)
Battery Housing	ABS, UL-94 V-0
Housing Protection	IP65
Cell Type-Chemistry	LiFePO4 Cell
SOC Display(Optional)	None

Charge Parameters		
Charge Method	CC-CV	
Charge Voltage	43.2~44.4V	
Recommended Float Voltage	41.4V	
Recommended Charge Current	25A	
Maximum Charge Current	130A	
Minimum Charge Current	13A	
BMS Charge Cut-off Voltage	46.8V	

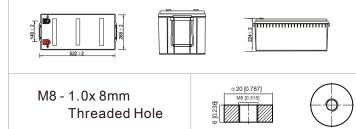
Temperature Parameters	
Discharge Temperature	-20 to 60°C (-4 to 140°F)
Charge Temperature	0 to 45°C (32 to 113°F)
Storage Temperature	-25 to 60°C(-13 to 140°F)
BMS Low Temperature Cut-off	-10°C(14°F)
BMS Low Temperature Turn-On	0°C (32°F)
BMS High Temperature Cut-off	65°C(149°F)
BMS High Temperature Turn-On	55°C (131°F)

# CYCLE LIFE vs.DEPTH OF DISCHARGE(DOD) DISCHARGE@1C, 25°C 100 Remaining Capacity (%) 30% 50% 1009 70 4000 5000 6000 7000 8000 1000 2000 3000 Number of Cycles

# STATE OF CHARGE CURVE @0.5C, 25 °C



## **Battery Dimension**





View live data with the intelligent Fusion Lithium Bluetooth 4.0 BLE technology.

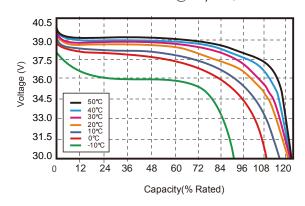
Find the identification code on top of Fusion Lithium battery. Open the Fusion Lithium App and click relevant code to connect.

- Access your BMS independently with multiple batteries
- Monitor the status of your lithium battery: State Of Charge (SOC), temperature, charging or discharging current, etc
- Track the Cycle Life of your Lithium Battery
- Assess what protections have been triggered

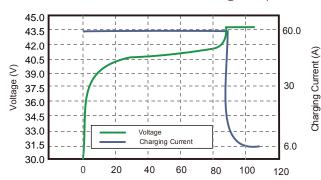




## DISCHARGE CAPACITY at VARIOUS TEMPERATURES DISCHARGE @1C, 25°C



### CHARGING CHARACTERISTICS @0.5C, 25℃



### **Battery Applications**

- Flectric Motors
- + Electric Trolling Motors
- + RV (Camping / Automotive)
- + Data Center UPS
- + Telecom Backup Power
- + Military Power Supply
- + Solar Energy Storage System
- + Solar Street LED Lightings
- + Industrial Robotics & Handling Equipment
- + Floor Cleaning Machines
- + Electric Bike & Motorcycles
- + Electric Mobilities( E-scooters / Wheelchair)
- + Golf Trolley & Golf Carts
- + Medical Devices
- + Electric Boats















Do Not Mix With Sealed Lead Acid Batteries When Recycling, See FUSION User's Manual for Proper Operation. Fusion Lithium BATTERIES. All Rights Reserved.











