

Customer :

File No. : Q/WMDCD03094-2009

V e r . : 1.0

LiFePO4 Battery Pack for EV

SPECIFICATION

Model	EB-LFPB36V9Ah
Type	9Ah/36V
Prepared	
Checked	
Approved	

Customer Confirmation	
Checked/Date	Approved/Date

1 Scope

This product specification describes LiFePO₄ battery. Please use the test methods that recommended in this specification. If you have any query, please contact us. Please read the cautions mentioned in the specifications carefully at first.

If the cells should be used at the environment that not preferred in this document, please contact our local supplier for help and get authorization.

It is claimed that we are free of any responsibility with the contingency and loss due to the cells' wrong usage (not preferred in the product specification)

For the reason of stable performance and better safety, battery pack with more than 2 cells connected in serial way should be charged with a balance charger.

2 Description

2.1 Product: LiFePO₄ Pack and its PCM

2.2 Model : EB-LFPB36V9Ah

2.3 Type : LiFePO₄ 9Ah/36V 12S

2.4 Inner cell: LiFePO₄ PL8490150L 3.3V/9Ah

3 Specification

3-1 General

No	Item	Specifications	Remark
1	Nominal Capacity	9Ah \pm 5%	0.2C ₅ A discharge at 25
2	Nominal Voltage	36V	OCV
3	Charge Current	Standard : 2A ; Max : 4A	Working temperature : 0 ~ 45
4	Charge cut-off Voltage	44.6 \pm 0.3V	
5	Discharge Current	9A Cont, 15A Max < 30 Sec	Working temperature:-20~50
6	Discharge cut-off Voltage	24V	
7	Pack Voltage	38V~40.8V	Shipment status
8	Pack Impedance	< 120 m	50% SOC at 25
9	Weight	Approx: <u>3.94</u> kg	

10	Dimension (LxWxH)	414mm x 112mm x 80mm	
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3-2 General Performance

Standard charge:

Charge battery pack with specific charger, 0.2 C₅A constant Current/constant voltage to 44.6V.

Environment temperature : 23±2°C

Relative Humidity : 65±20%RH

Pressure : 86kPa ~ 106kPa_o

Item		Test Methods	Performance
1	0.2C Capacity	After standard charging, laying the battery 0.5h, then discharging at 0.2C ₅ A to voltage 30.0V, recording the discharging time.	300min
2	1C Capacity	After standard charging, laying the battery 0.5h, then discharging at 1C ₅ A to voltage 30.0V, recording the discharging time.	51min
3	Capacity	After standard charging, laying the battery in -10 more than 4h, then discharging at 0.2C ₅ A to voltage 30.0V recording the discharging time.	225min
4	Cycle Life	Constant current 2A charge to 44.6V, then constant voltage charge to current declines to 0.05C ₅ A, rest 5min , constant current 0.5C ₅ A discharge to 30.0 V , rest 5min. Repeat above steps till continuously discharging time less than 72min.	500times

3 Data for Single cell

Item	Detail	Standard
Over Charge	Protect Voltage	3.9 ± 0.03V
	Delay time	<1.3 s
Over Discharge	Protect Voltage	2.0 ± 0.05V
	Delay time	< 150 ms
	Release Voltage	Charge to (2.5 ± 0.15V)

	Over Current	Protect Current	>40A ± 20%
		Release condition	Charging battery
	Short Circuit Protect	On Condition	External short circuit
		Delay time	< 1 ms
		Release condition	Charging battery

5 Storage of LiFeP04 batteries

Storage temperature

1 个月 1month -20 ~ 45

3 个月 3month 0 ~ 30

6 个月 6month 20 ± 5

Humidity: 45-85%;

Batteries were 40 ~ 60% charged.

In case of over-discharge, batteries should be charged for one time every 3 months while storing. Batteries should be discharged and charged after being stored more than a year in order to activate it and restore energy.

Batteries should be charged immediately after work in case of over-discharge

6 Handling Instructions

Read and observe the following warnings and precautions to ensure correct and safe use of Li-ion batteries. It is claimed that we are free of any responsibility with the contingency and loss due to the cells' wrong usage (not preferred in the product specification)

Danger!

— — Do not immerse the battery in water or allow it to get wet.

— Do not use or store the battery near sources of heat such as a fire or heater.

- Do not use any chargers other than those recommended by AAPP.
- Do not reverse the positive(+) and negative(-) terminals.
- Do not connect the battery directly to wall outlets or car cigarette-lighter sockets.
- Do not put the battery into a fire or apply direct heat to it.
- Do not short-circuit the battery by connecting wires or other metal objects to the positive(+) and negative(-) terminals.
- Do not pierce the battery casing with a nail or other sharp object, break it open with a hammer, or step on
- Do not strike, throw or subject the battery to sever physical shock.
- Do not directly solder the battery terminals.
- Do not attempt to disassemble or modify the battery in any way.
- Do not place the battery in a microwave oven or pressurized container.
- Do not use the battery in combination with primary batteries(such as dry-cell batteries) or batteries of different capacity, type or brand.
- Do not use the battery if it gives off an odor, generates heat, becomes discolored or deformed, or appears abnormal in any way. If the battery is in use or being recharged, remove it from the device or charger immediately and discontinue use.

Caution!

Do not use or store the battery where is exposed to extremely hot, such as under window of a car in direct sunlight in a hot day. Otherwise, the battery may be overheated. This can also reduce battery performance and/or shorten service life.

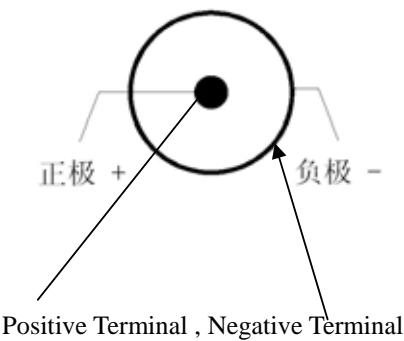
If the battery leaks and electrolyte gets in your eyes, do not rub them. Instead, rinse them with clean running water and immediately seek medical attention. If left as is, electrolyte can cause eye injury.

Shape picture



Connection

Charge Terminal



Discharge Terminal

