Specifications

12.8V 78AH

12.8V 78AH LiFePO4 Battery

1./ Preface

This product specification describes the technique requirements, test procedure and precaution notes of battery to be supplied to customer by Guangzhou VIPOW Co., Ltd..

2. / Description

2.1 Product:/ Rechargeable Storage batteries

2.2/ Model (Type):12.8v 78AH(998.4WH)

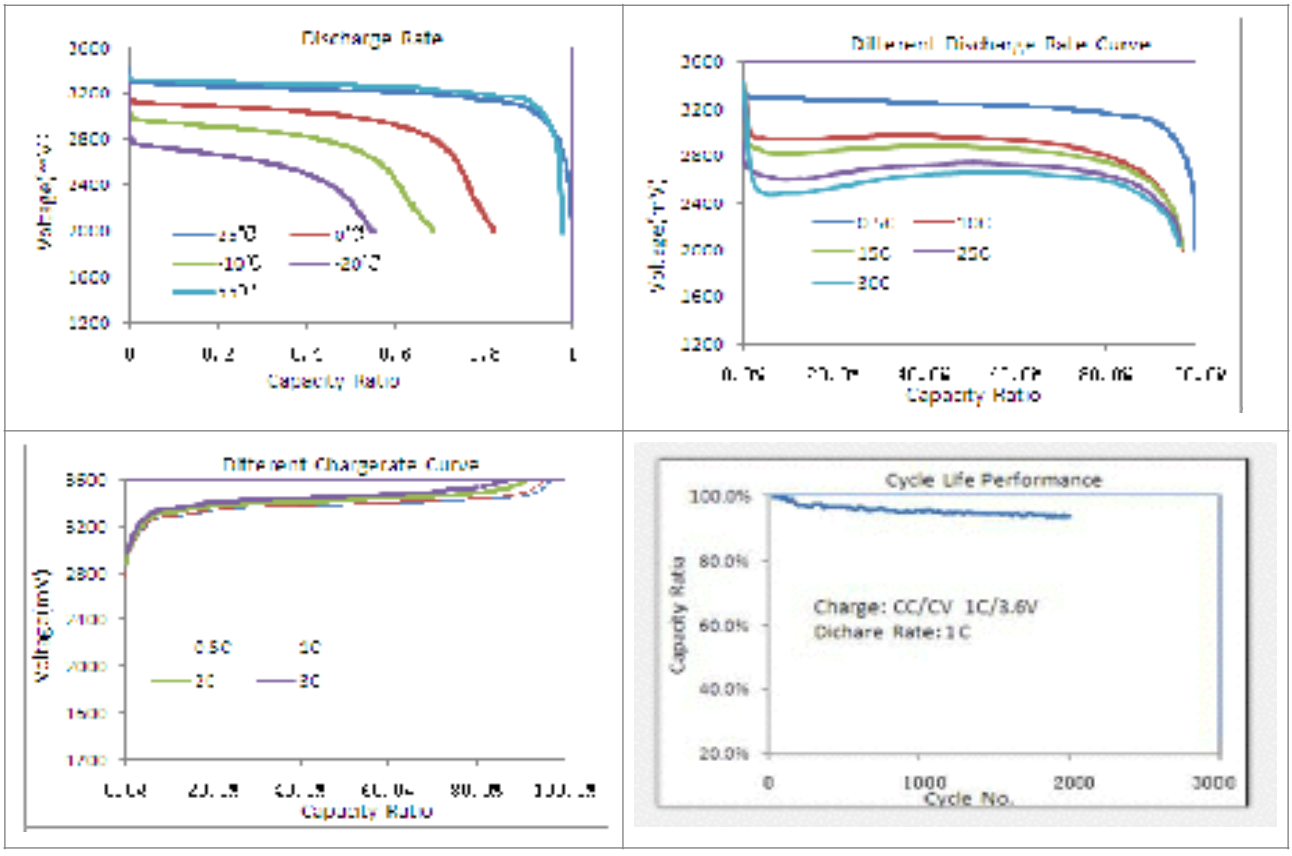
2.3/Dimension: 330x173x216 mm

3./ Cell :

LiFePO4 32650-6000mAH 3.2v

/Link :414/4S13P

4./Cell Characteristics diagram



5./ Battery Pack Specification

Item		Specification		Remark
5.1 Typical capacity		78Ah		0.2C rate discharge capacity
5.2 Nominal voltage		12.8V		
5.3 Discharge				
5.3.1 Max continuous discharge current		45A		
5.3.2 Peak discharge current		100A		
5.3.3 BMS Discharge Current Cut Off		120±10A		
5.3.4 BMS Discharge Voltage Cut Off		10v		
5.3.5 Reconnect Voltage		10v		
5.4 Charge				Charge mode: CC/CV， Use a constant current, constant voltage(CC/CV) please use special LiFePO4 charger.
5.4.1 Recommanded charged current		15A		
5.4.2 Max continuous charge current		45A		
5.4.3 Charge voltage		14.4v		
5.4.5 BMS charge Voltage Cut Off		14.6v		
5.4.5 Reconnect Voltage		14.4v		
5.4.5 Balancing Voltage		14.4v		
5.5 Cycle life		over 2000 cycles		0.2C continual discharge (100% DOD)
5.6 Operating temperature	Charging ambient temperature	0 ~ 45°C		Cell skin temperature should not exceed 65°C.
	Discharging ambient temperature	-20 ~ 60°C		Cell skin temperature should not exceed 80°C
	Storage temperature	1 year	0 ~ 30°C	Note:If the cell is kept as ex-factory status (50％ of charge)
		3 months	-20 ~ 35°C	
		1 month	-20 ~ 45°C	
5.7 Humidity		5%<RH>85%		
5.8 Shell material		ABS		
5.9 Weight		10 KG		

5.10 Dimension (L.W.H)	330x173x216 mm	

6. Battery Electrical Characteristics Test

Test Item	Test Method	Criteria
6.1Charge(Capacity) retention	A cell is charged using standard charge method (spec. 5.4), and stored at 20°C±5°C for 28days, then discharged to cut off voltage at a constant current of 0.2C.	85% Capacity retention:85%Ch
6.2Cycle life	A cell is charged using standard charge method (spec. 5.4),and stored for 0.5h ~ 1h,then discharged to cut-off voltage, after that, stored 0.5h ~ 1h prior to next charge-discharge cycle. The cell shall be continuously charged and discharged for 2000 times.	≥80% Capacity retention≥80%

7./ Shipment

The Battery shall be shipped in voltage range of >12.8V or in accordance with customers' requirement. The remaining capacity before charging shall be changed depending on the storage time and conditions.

8. Warranty

The Warranty period of cell is made according to business contract. However, even though the problem occurs within this period, VIPOW won't replace a new cell for free as long as the problem is not due to the failure of VIPOW manufacturing process or is due to customer's abuse or misuse.

> VIPOW will not be responsible for trouble occurred by handling outside of the precautions in instructions.

> VIPOW will not be responsible for trouble occurred by matching electric circuit, cell pack and charger.

> VIPOW will be exempt from warrantee any defect cells during assembling after acceptance.

9. Precautions and safety instructions

9.1 According to the correct polarity to connect the positive and negative poles.

9.2 Follow the correct parameters and conditions.

9.3 Charge current and discharge current must not exceed the rated value

9.4 Operating within the specified temperature range to ensure the surrounding heat dissipation is good.

9.5 This product cannot be disassembled by consumer.

9.6 Do not put this battery in water.

10. Requirement for safety assurance

For the sake of safety assurance, please discuss the equipment design, its system and protection circuit of Lithium-ion cell with VIPOW in advance. And consult about the high rate current, rapid charge and special application in the same way.