PORFFOR®

SPECIFICATION

Battery charger

Model number : PF2000
DC Voltage : 40~88.2V
DC Current : 3~20A

PORFFOR®

1. Overview

PF2000 series, an aluminum casing charger measuring 235×116×70mm.

Main Parameters

Model	PF2000
Output Voltage	40-88.2V (Adjustable)
Output Current	3~20A (Adjustable)
Max Power	2000W
Input Voltage	110V

2. Environmental conditions

No.	Item	Technical specification	Remark
1	Humidity	5~95%	With package
2	Altitude	≤1000m	Work normally

3. Technical Characteristics

3.1 Input characteristic

No.	Item	Technical specification	Remark
1	Rated input voltage	☑110Vac □220Vac	
2	Input voltage range	☑110Vac	
3	AC input voltage frequency	50～60 Hz	

3.2 Output characteristic or charge stages

No.	Item		Technical specification			Remark
1	Nominal voltage		☑48V	☑60V	☑72V	
2	Max(Vout)	□Ni-MH	60V	75V	89V	
		☑Li-MnO2	54.6V	67.2V	84V	
		☑LiFePO4	58.4V	73.0V	87.6V	
	CC (constant current)		≤Vout	≤Vout	≤Vout	
			20A	20A	20A	
3	CV (constant voltage)		Vout, 20A↓	Vout, 20A↓	Vout, 20A↓	
4	Transition Current		Vout, 2A→0	Vout, 2A→0	Vout, 2A→0	5%CC
5	Power efficiency		≥90%	≥90%	≥90%	Vin=110Vac, Rated load

4. Protection characteristics

No.	Item	Technical specification	Remark
1	Software over voltage protection	The charger output voltage does not exceed set the maximum charging voltage of the battery.	

2	Thermal protection	Yes	
3	Current limiting protection	The charger output current does not exceed a set battery charge current.	At CC mode
4	Short circuit protection	Short circuit protection should be automatically recovery after remove the condition.	
5	Reverse polarity protection	When output wires are reversely connected to the battery the charger will not operate and will work normally when DC wires are correctly connected.	

5. Charging indicator

No.	Item	Status	Remark
1	Power on	Display screen shows status: Charging pending	
2	Charging	The display screen shows: Charging in progress	
3	Fully charged	The display screen shows: Full	
4	Charging Voltage Display	Yes	
5	Charging Current Display	Yes	

6. Safety & EMC

No.	Item		Standard (or test condition)	Remark
1	Electric strength test	Input-output	1500Vac/1min≤10mA	No breakdown
2	Isolation resistance	Input-ground	≥10Mohm@500Vdc	
		Output-ground	≥10Mohm@500Vdc	
3	Leakage current		＜3.5mA	
4	EMC		EN55022:1998+A1:2000+A2:2003 EN55024:1998+A1:2001+A2:2003 (EN61000-4-2:1995+A1:1998+A2:2001) EN61000-4-3:2002 EN6100-4-4:1995+A1:2000+A2:2001 EN61000-4-5:1995+A1:2000 EN61000-4-6:2001 EN61000-4-11:2001)	
5	LVD		EN60335-1:2002+EN60335-2-29:2002	

Remark: Discrimination A- Function OK under technical requirement range; Discrimination R- Physical damage or failure of equipment are not allowed, but damage of protection device (fuse) caused by interference signal of outside is allowed, and the whole equipment can work normally after replacement of protection device and reset of running parameter

7. Environmental testing requirements

No.	Item	Technical specification	Remark
1	Maximum environmental working temperature High environmental temperature ambient operating	+40℃	Features OK
2	Minimum ambient working temperature Low environmental temperature ambient operating	-20℃	Features OK
3	High temperature storage	+50℃	Work normally after recovery under normal temperature for 2 hours
4	Low temperature storage	-25℃	Work normally after recovery under normal temperature for 2 hours
5	Random vibration	20Hz to 500Hz Acceleration 0.49	
6	Repetitive shock	10Hz to 60Hz Amplitude 0.38	
7	Thermal shock	-35℃ to 75℃, ＜ 3min transition, 2.5hours dwell, 200cycle	
8	Drop test	BS EN60068-2-32:1993 TEST ED:free fall appendix B	

8. Mechanical characteristic:

Shell material: Aluminum
Input socket: meets IEC standard
AC wire length : 1.5m
DC wire length : 1m
Weight : 3kg (With package)

9. Product display: