

Specification of Battery Charger

(All Aluminium case)

36V /40A Lifepo4 BATTERY CHARGER



1. General

36V 40A Battery Charger can work normally under 43.2Vdc /40A 12s lifepo4 batteries

2. Electrical characteristics

2.1 Input characteristic

No.	Model	DL-2000W	Remark
1	Battery	<input type="checkbox"/> Li-ion <input checked="" type="checkbox"/> Lifepo4	
2	Max output voltage	43.2V \pm 0.2Vdc	According to the customer's requirements, the full charge voltage for a single lifepo4 is set to 3.6V.
3	Output current	40 \pm 0.3 A	
4	Max. Actual output power	1728W	
5	Input voltage	200-240 Vac	As customer requirement
6.	AC input voltage frequency	50/60 Hz	

2.2 Output characteristic or charge stages

No.	Item	Technical specification	Remark
1	CC(constant current)	40A	
2	CV(constant voltage)	43.2Vdc	
3	Float Charging	No	
4	Transition Current	2.0A	

5	Power efficiency	≥85%	Input Voltage =230Vac, rated load
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2.3 Protection characteristics

No.	Item	Technical specification	Remark
1	Over voltage protection	Yes	
2	Software over voltage protection	The charger software limits the maximum output voltage to a level suitable for the connected battery system.	
3	Over temperature protection	Yes	
4	Over current protection	Yes	At CC mode
5	Short circuit protection	Short circuit protection should be automatically recovery after remove the condition.	
6	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.	

2.4 Charging indicator

No.	Item	Status	Remark
1	Power on	LED1: Red	
2	Charging	LED2: Red	
3	Fully charged	LED2: Green	
4	Charging Voltage Display	yes	
5	Charging Current Display	yes	

3.Environmental condition

No.	Item	Technical specification	Remark
1	Operation temperature	-20~+45°C	

2	Humidity	5~95%	
3	Storage temperature	-40~+70°C	
4	Altitude	0~3000m	

4. Safety

No.	Item		Standard (or test condition)	Remark
1	Electric strength test	Input-output	1500Vac/10mA/1min	No breakdown
2	Isolation resistance	Input-ground	≥10Mohm@500Vdc	
		Output-ground	≥10Mohm@500Vdc	
3	Leakage current		<5.0mA	Input voltage =264Vac

5. Environmental testing requirements

No.	Item	Technical specification	Remark
1	High temperature ambient operating	+40°C	Features OK
2	Low temperature ambient operating	-10°C	Features OK
3	High temperature storage	+70°C	Work normally after recovery under normal temperature for 2 hours
4	Low temperature storage	-40°C	Work normally after recovery under normal temperature for 2 hours

6. Mechanical characteristic:

Shell material: Aluminum

Outline dimension: L*W*H=280×175×90mm

Input plug :220vac EU Plug

Output connector : 50A Red Anderson connector

AC wires: 1.5m length

DC wire: 1.5m length

Net Weight: 4.8Kg

Package : one charger one box, 2 pcs / carton

7. Reliability requirements

No.	Item	Technical specification	Remark
1	MTBF	MTBF no less than 20000 hours (25 degrees C, Full load and rated voltage input)	
2	Burn-in and Life test	At ambient temperature 25 °C aging in two minutes, shell surface temperature ≤ 55 °C.	

8. Charging Curve

