

TR8206 – 12V 10A LiFePO4 Battery Charger Specification Sheet

Product Name	12V 10A (LiFePO4 Smart Charger)
Model Spec	14V 10A LiFePO4 Charger
File Revision	A1 – 14 January 2019

1. General

LiFePO4 battery pack charger with aluminium casing with reverse-polarity protection.

2. Main product specification

Max. output power	Input voltage	Output voltage	Output current
140W	90~263VAC	14Vdc	10A

3. Environmental condition

No.	Item	Technical specification	Unit	Remark
1	Humidity	5%-95%		
2	Altitude	≤3000	m	
3	Cooling	Natural convection cooling		Working under full load

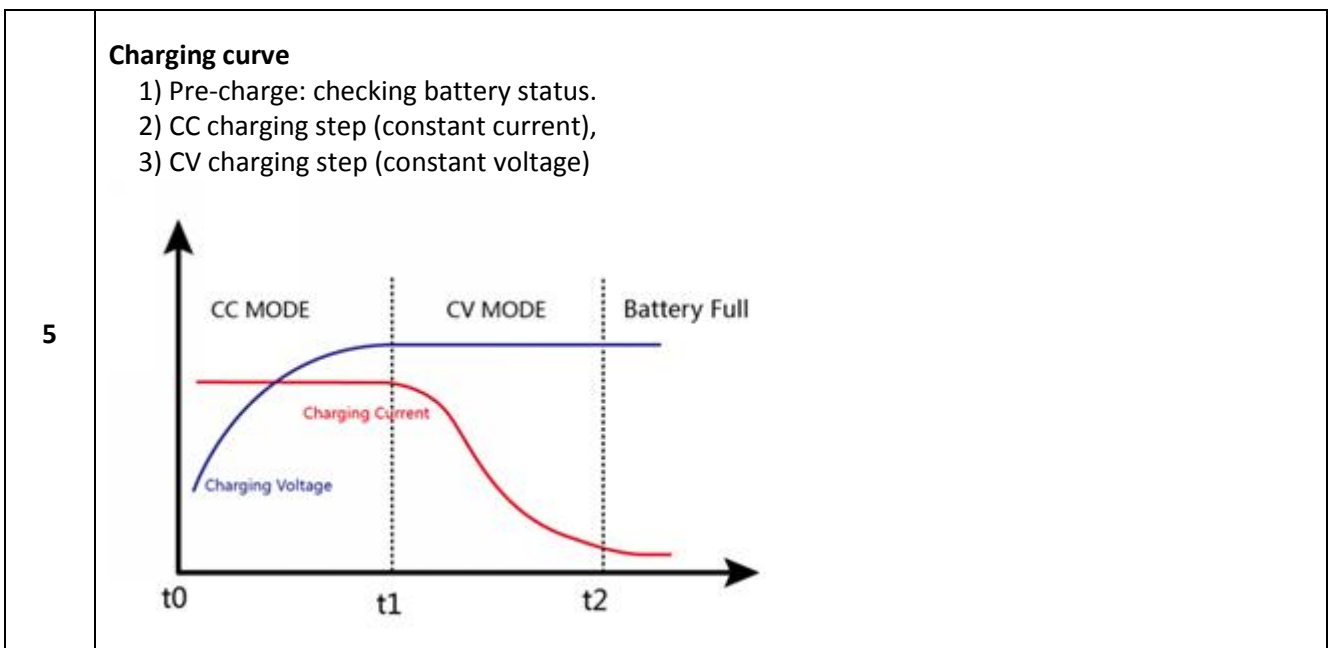
4. Electrical characteristics

1	Input characteristics			
No.	Item	Technical specification	Unit	Remark
1.1	Input voltage range	90~263	Vac	With PFC
1.2	AC input voltage frequency	47—63	Hz	

2	Output characteristics			
No.	Item	Technical requirements	Unit	Remark
2.1	Battery	LiFePO4 Battery Pack		
	Type			
	Item			
	Fast charge voltage	14	V	Customized
	Floating voltage	/	V	Customized
2.2	Constant current	10	A	
2.3	Output voltage accuracy	±1%		
2.4	Power efficiency	≥90%		Vin=220Vac, rated load
2.5	Temperature compensation	/		Customized

3 Protection characteristics				
No.	Item	Technical requirements		Remark
3.1	Output over voltage protection	14	V	Lockout
3.2	Output current limiting protection	10	A	@CC MODE
3.3	Output short circuit protection	Short circuit protection should be automatically recovery after remove the condition		
3.4	Electronic reverse battery protection	The charger is electronically protected against permanent reverse battery connection		
3.6	Cell short circuit timer	Internal software protection		

4 Status LED				
No.	Item	Status LED		Remark
1	LED1 Red LED2 Green	Power On		
2	LED1 Red LED2 Red	Charging		
3	LED1 Red LED2 Green	Fully Charged		



5. Safety & EMC

No.	Item		Standard (or testing condition)	Remark
1	Electric strength test	Input—output	1500Vac/10mA/1min	No breakdown
		Input—ground	1500Vac/10mA/1min	
		Output—ground	500VDC/10mA/ 1min	
2	Isolation resistance	Input—output	≥10MΩ@500Vdc	
		Input—ground	≥10MΩ@500Vdc	
		Output—ground	≥10MΩ@500Vdc	
3	Leakage current		<3.5mA	Vin = 264Vac, 50—60Hz
4	SAFETY		TUV CE IEC60601-1 EN60601-1	
5	EMC	RE	CLASS B	EN55014
		CE	CLASS B	EN55014
		Air discharge	LEVEL 3	EN61000-4-2
		Contact discharge	LEVEL 3	EN61000-4-2
		RS	LEVEL 3	EN61000-4-6
		CS	LEVEL 3	EN61000-4-3
		EFT	LEVEL 3	EN61000-4-4
		Surge	LEVEL 3	EN61000-4-5

6. Environmental testing requirements

No.	Item	Technical specification	Remark
1	High temperature ambient operation	+40°C	Operates correctly
2	Low temperature ambient operation	-10°C	Operates correctly
3	High temperature storage	+70°C	Operates correctly after recovery under normal temperature for two hours
4	Low temperature storage	-40°C	Operates correctly after recovery under normal temperature for two hours
5	Random Vibration	20Hz to 2000Hz 3Grms 20hours per axis	
6	Repetitive Shock	40g peak 3 orthogonal axes, 3+ and 3- in each axis, 11ms Pulse width	
7	Thermal shock	-35°C to +75°C, <3minute transition, 2.5hour dwell, 200cycle	
8	Drop test	BS EN60068-2-32:1993 Test Ed: Free fall, appendix B	

7. Mechanical characteristics

- 1). **Outline dimension:** length × width × height = 190×90×50 mm
- 2). **NET WEIGHT:** 1.3 KG