TRACER® POWER
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TR8208 – 29.2v 5A LiFePO4 Battery Charger

Specification Sheet

Product Name	24v - 5A (LiFePO4 Smart Charger)
Model Spec	29.2v 5A LiFePO4 Charger JCG150-292050-11
File Revision	A0

Amendment Records

Revision	Description	Issued Date
A0	New release	2012-07-11

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1. Range

The technical requirements applicable to 8S LiFePO4 battery pack charger. Unless otherwise specified, all the following data is tested and obtained after 15 minutes of charging.

2. Input Characteristics

2.1 **Rated Voltage**

It is normal for 100Vac to 240Vac input AC voltage.

2.2 **Rated Frequency**

It is normal for 50Hz or 60Hz and single phase.

2.3 **Frequency Range**

The adapter shall operate with an input frequency from 47 Hz to 63 Hz.

2.4 **Rated AC Current**

Maximum steady state input current is less than3.0A rms. Measured at 90Vac input and maximum load.

2.5 **Peak Inrush Current**

With cold starting, the peak inrush current should less than 60A.

2.6 **POWER CONSUMPTION ON POWER SAVING MODE**

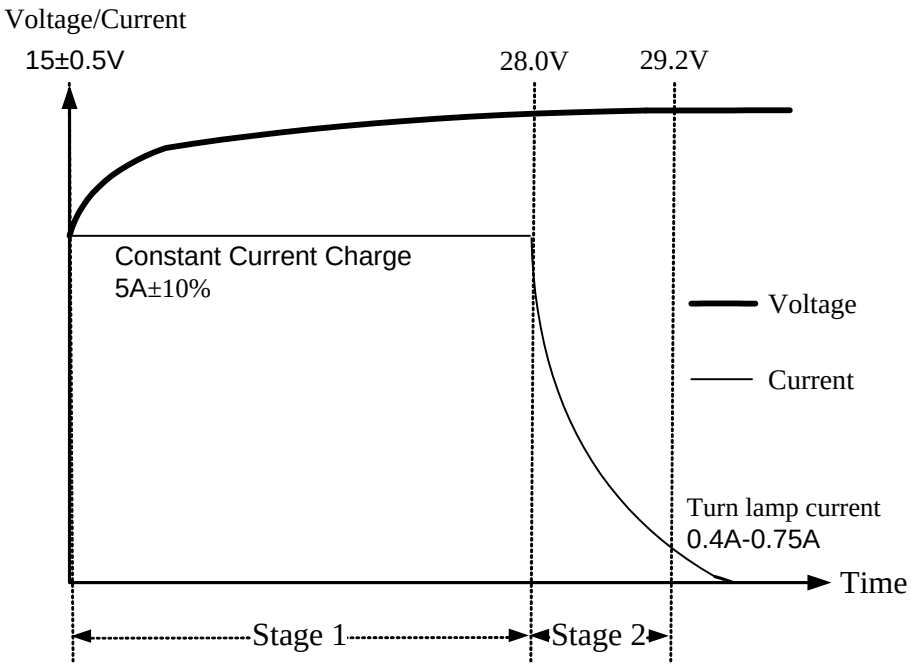
LOAD	INPUT CONDITION	INPUT POWER REQUIREMENT
0A	120 VAC 60 Hz	2.0 W maximum
0A	230 VAC 60 Hz	2.0 W maximum

3. OUTPUT REQUIREMENT

3.1	**No-load voltage**	29.2 ±0.2V.
3.2	**Constant Current**	5A±10%
.3	**Constant voltage Range**	15V -28V
3.4	**LED-alter Current**	0.4A-0.75A
3.5	**Output power**	150W Max
3.6	**Efficiency**	80% minimum At 120Vac input voltage and full load
		80% minimum At 230Vac input voltage and full load

3.7	**Startup Delay Time**	3mS maximum
		At nominal input voltage and full load
	Short-circuilt Protection	The charger will auto-cut off in case of short-circuit and no damage to the charger.
3.8	**Reverse Polarity Protection**	The charger will auto-cut off in case of reverse polarity and no damage to the charger. It will recover charging after correct connection.
3.9	**Reverse Leakage Current**	Reverse leakage current≤1mA（No AC input）
3.10	**Over Voltage Protection**	The charger will auto-cut off and stop charge when an accident occurs and the charging voltage16±1V
3.11	**Status display LED**	Constant Charging: Red LED
		Full Charged: Green LED
		Reverse Polarity and Short-circuit: Green LED
3.12	**Cooling Type**	Air Cooling

4. CHARGER CHARACTERISTICS



5. Reliability Items

5.1 **HI-POT test**
Short circuit all the primary and secondary circuits in the charger, apply a 3000Vac 50/60HZ sinusoidal voltage, leakage current 10mA; Then test for 1 min without breakdown or flashover.

5.2 **Insulation Resistance**
DC 500V 1min input to DC-plug 10MΩ or more

5.3 **Leakage Current**
0.25mA maximum, at nominal AC input voltage and frequency

5.4 **Temperature Rise**
With the rated voltage charged to the primary and rated load (load out=2.0A) on the secondary, every parts of the case surface 50℃ or less.

6. Environmental Requirement

6.1 **Operating Temperature**
-0°C TO 40°C

6.2 **Storage Temperature**
-20°C TO +70°C

6.3 **Operating Humidity**
35~85% RH. Non-condensing

6.4 **Storage Humidity**
5 ~ 80% RH. Non-condensing

7. Mechanical Requirement

7.1 **Dimension**
178.0(L) * 95.5(W) *55(H) mm maximum

7.2 **Weight**
880g(REF) Max

7.3 **Vibration Test Requirement**
(Non-operating, with packing) Reference to IEC publ. 68-2-6

Test conditions		**Acceptance Criteria**
Frequency	10~55Hz	Nominal functional test should be satisfied after the test
Sweep	2hours, For each axis(X,Y, Z)	
Acceleration	0.6G (5~50Hz, peak-peak), 1.5G (50~55 Hz, peak-peak)	
Displacement	0.35 mm(5~50Hz)	

7.4 **Drop Test**
Drop the adapter from a height of 100cm onto a hardwood floor, hitting the adapter for 6 times, no mechanical damages or other failures, no electrical deterioration and other failures comparing to before test condition.

8. Mechanical Characteristics

8.1 **Appearance**
Visual inspection the case have no visual abnormality, no obvious nick, burr and other mechanical damage, outer metal have no rust. Use limit sample to check for any failures.

8.2 **Case**
Aluminum materials

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9. Environmental Performances

9.1 **Operating at the lower temperature**

Put the product in 0±2°C environment for 2 hours, it output characteristics comply with the specification requirement in normal input condition.

9.2 **Operating at the higher temperature**

At 40±2°C, with the rated voltage charged to the primary and full load on the secondary. No abnormality in electric and mechanical characteristic after 2 hours recovery at the room temperature.

9.3 **Storage at the lower temperature**

At -20±2°C , test of non-operated, No abnormality in electric and mechanical characteristic after 2 hours recovery at the room temperature.

9.4 **Storage at the higher temperature**

At 70±2°C, test of non-operated, No abnormality in electric and mechanical characteristic after 2 hours recovery at the room temperature.

9.5 **Storage at high temperature and high humidity with the adaptor turned on.**

At 40°C,90~95%RH, operating at power supplied, no abnormality in electric and mechanical characteristic, after 2 hours recovery at the room temperature.

9.6 **Storage at low temperature and low humidity with the adaptor turned on.**

At -20°C, 10%~40%RH, operating at power supplied, no abnormality in electric and mechanical characteristic, after 2 hours recovery at the room temperature.