



LFP Battery Charger

MCHEB-7220A-LFP

83.95V/20A

Specification of Battery Charger

General

Battery Charger 1600G 300×165×80mm can work normally under 83.95Vdc/20A and with reverse polarity protection.

Main product specification

Max output power	Input voltage	Output voltage	Combined regulation	Output current	Combined regulation
1750W	180-220V ac	83.95V $\pm$ 0.2Vdc	$\pm$ 0.2V	20.0A	$\pm$ 0.2A

Environmental condition

No.	Item	Technical specification	Remark
1	Humidity	5~95%	With package
2	Altitude	$\leq$ 3000m	Work normally

Electrical characteristics

Input characteristic

No.	Item	Technical specification	Remark
1	Rated input voltage	220Vac	230Vac
2	Input voltage range	180_240Vac	
3	AC input voltage frequency	50~60 Hz	

Output characteristic or charge stages

No.	Item	Technical specification	Remark
1	CC (constant current)	$\leq 83.95\text{Vdc}$, 20A	
2	CV (constant voltage)	83.95Vdc, 20A ↓	
3	Float stage		5%CC
4	Power efficiency	$\geq 90\%$	Vin=230Vac, rated load

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	Thermal protection	Yes	
4	Current limiting 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.	

Safety & EMC

No.	Item		Standard (or test condition)	Remark
1	Electric strength test	Input-output	1500Vac/10mA/1min	No breakdown
2	Isolation resistance	Input-ground	$\geq 10\text{Mohm}@500\text{Vdc}$	
		Output-ground	$\geq 10\text{Mohm}@500\text{Vdc}$	
3	Leakage current		$< 3.5\text{mA}$	$V_{in}=264\text{Vac}$
4	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 is not allowed, but damage of the 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

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
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, <3min transition, 2.5hours dwell, 200cycle	
8	Drop test	BS EN60068-2-32:1993 TEST ED: free fall appendix B	

Mechanical characteristic:

Shell material	ABS
Outline dimension L*W*H	300×165×80mm
Input socket	meets 3C standard
AC wires	90 centimeters
DC wire	90 centimeters
Net Weight	1560g

Charging Curve:

