Battery Charger for Powered Wheelchairs

IN2904200

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Input	
Input Voltage	100-240Vac
Input Frequency	47-63Hz
Input Current	2.5A Max
Earth Leakage Current	<1 mA at 240 Vac/50Hz
Power Factor	>0.6
No Load Input Power	<0.5W
Input Protection	Internal T5A/250V fuse in line

Output	
Charging Voltage	18 ~29.4V
Charging Current	4.2A+/-0.2A
Open Circuit Voltage	29.4+/-0.3V
Load Regulation	+/-5% Max
Ripple & Noise	1-3% Max
Transient Response	0.5mS for 50% Load Change Typical
Holdup time	>8 mS at 115Vac @ full load
	Reverse Polarity Protection
Protection	Backfeed Protection(BFP)
	Short Circuit Protection
	Protection against fulty battery

Electrical	
Dielectric Withstand	3000Vac Primary-Secondary
Leakage Current	<1 mA at 240Vac/50Hz
Efficiency	Meet DOE Level VI
MTBF	40.000 Calculated Hours at 25 ${\mathbb C}$

Environmental	
Operating Temperature	-10℃- +40℃
Storage Temperature	-20℃- +85℃
Relative Humidity	5%- 95%
Cooling	Natural Convection Cooling

Features:

- Switch mode charger with universal input voltage
- For 7S Lithium-ion battery powered wheelchair
- Microcontroller based with pre-charging and wrong /bad battery identification
- One LED for charging status and one for mains on
- Automatic cut-off when battery attains full charge
- Backfeed protection(BFP)
- Protected against reverse polarity and short circuit
- With a 12 hours built-in timer
- Ingress Protection IPX2
- EN/AS/NZS60335-2-29 Battery charger approved
- Comply with ISO7176-25 Requirements for electrically powered wheelchairs
- Meet DOE regulations efficiency Level VI

Safety Certification	
UL/cUL1310	Class 2 Battery chargers
EN60335-2-29	Household and similar electrical
	appliances Safety part 2-29:
AS NZS60335-2-29	Particular requirements for battery
	chargers

EMC	
Emissions	EN55014,Class B
Harmonic currents	EN61000-3-2 Class A
Voltage Flicker	EN61000-3-3 Section 5
ESD Immunity	IEC61000-4-2
EFT Burst	IEC61000-4-4
Surge	IEC61000-4-5
Conducted Immunity	IEC61000-4-6
Dip & Interruptions	IEC61000-4-11

Mechanical	
Case Dimension	L166 x W66 x H38.5(mm)
Weight without power cable	0.5kgs









