

600W 25A-12V CHARGER

for 12V Lithium Iron Phosphate battery



600W 12V-25A CHARGER SPECIFICATIONS

1. Input characteristics				
No.	Item	Technical specification	Unit	Remark
1.1	Rated input voltage	230	V	AC
1.2	Input voltage range	100 – 240	V	AC
1.3	AC input voltage frequency	47 - 63	Hz	
1.4	Inrush current	< 6	A	@ 264Vac start-up in cold condition
1.5	Max input current	5	A	

2. Output characteristics				
No.	Item	Technical specification	Unit	Remark
2.1	Nominal charge voltage	12.8	V	4 cells 12.8V LiFePO4 battery
2.2	Max charge voltage	14.6	V	4 cells 14.6V LiFePO4 battery
2.3	Floating charge voltage limit	14.6 ± 0.2	V	
2.4	Constant current	25 ± 0.5	A	
2.5	Power efficiency	> 85	%	At max. load
2.6	Maximum output power	600	W	
2.7	Charge end condition	0.12 – 0.30	A	
2.8	Output voltage range	9 – 14.6	V	

3. Protection characteristics				
No.	Item	Technical specification	Unit	Remark
3.1	Output over voltage protection	16	V	
3.2	Software over voltage protection	The charger software limits the maximum output voltage to a level suitable for the connected battery system		
3.3	Thermal cutback	The internal temperature monitor reduces the charger output power in extreme operational temperature to prevent damage		
3.4	Output current limiting protection	27.5	A	@ CC Mode
3.5	Output short circuit protection	Short circuit protection at the output terminals.		

		Automatic recovery after restoring to normal conditions	
3.6	Electronic reverse battery protection	The charger is electronically protected against permanent reversed battery connection.	

4. Environmental test requirements				
No.	Item	Technical specification	Unit	Remark
4.1	High ambient operating temperature	+40 °C	Deg C	continuous operation
4.2	Low ambient operating temperature	-10 °C	Deg C	continuous operation
4.3	Highest storage temperature	+60 °C	Deg C	allow 2 hours to recover to normal temperature
4.4	Lowest storage temperature	- 20 °C	Deg C	allow 2 hours to recover to normal temperature

Charging curve (I and V) :


