

Parameters			1	
Products			SUN LION SOLAR PCU	
Model No.			SUN LION 1200	
System Rating			1000 VA	
Operating DC Voltage			12.8V	
Switching Element			MOSFET	
Charger Topology			BOOST MOSFET	
Max. Battery Capacity (LiFePo4 (Inbuilt )			100AH , 1280Wh	
Operating Mode (SMART/HYBRID)			HYBRID	
Parameters (Solar)				Variable Settable Range
Switching Element			MOSFET	
Type of Charger			rMPPT	
SPV Charging Voltage	Boost / Float		13.9V ± 0.2V	13.6V - 14.2V
Solar Charging Current			22A + 2A	
Maximum PV Power Recommended			540Wx1	
Solar PV Maximum Voltage			25V -50V (VOC)	
Efficiency			>95%	
Parameters (Grid)			Default Value	
Nominal Grid Voltage			230V 1Φ	
Nominal frequency			50Hz	
Battery Charging Method 3 Stages			Bulk/Absorption/Float/Equalize	
Grid - Battery Charging Voltage	Boost/Float		13.8V ± 0.2V	13.5V-14.1V
Grid Charging Current	Normal/Boost		15A /18A ± 2A	1A-18A
Grid Reconnect @ Battery Voltage			12.4V ± 0.2V	12V - 13V
Grid Low Cut Voltage	IT MODE ENABLE		170V ± 10V	
Grid Low Cut Recovery			180V ± 10V	
Grid High Cut Voltage			265V ± 10V	
Grid High Cut Recovery			255V ± 10V	
Grid Low Cut Voltage	IT MODE DISABLE		80V ± 10V	
Grid Low Cut Recovery			90V ± 10V	
Grid High Cut Voltage			280V ± 10V	
Grid High Cut Recovery			275V ± 10V	
Change Over (Battery to Mains)	IT MODE ENABLE		<8ms	
Change Over (Mains to Battery)			<15ms	
Parameters (Inverter)				
Output Phase			1Φ	
Nominal output voltage			230V+10% RMS	
Nominal Frequency			50 Hz±1%	
Max. Output Current			3.1A	
Output Waveform			Modified Sinewave	
Battery Low Buzzer			11.9V + 0.2V	Battery Low Cut +0.3V
Battery Low Cut			11.6V + 0.2V	11V-12V
Battery High Cut			14.5V + 0.2V	14.5V - 15.0V
Typical Efficiency			>80%	
Over Load Capacity	IT Mode Disable	>100% After 30 sec delay (with Alarm) 3 Time Auto Reset , 4th Time ShutDown		
	IT Mode Enable	>100% After 30 sec delay (with alarm) 1st Time Shut Down		
Protection			Overload, Battery Low, Battery High, Output Short Ckt, Battery Reverse (DC Fuse Blown) , Over Heat @90°C ± 10°C , SPV High, SPV Reverse , I/P HV, I/P LV	
LED Indication			SYSTEM ON, (IT MODE, HYB/SMT , BOOST CHG.) ENABLE/DISABLE	
Switches (Micro)			System ON/OFF, UP, Down, Back, Enter(For LCD Calibration)	
Display ( Multi color)			Battery Voltage, Charging Current, Grid Voltage, Grid Frequency, Output Voltage, Output Frequency, Load%, Battery Graph , BLK/ABS/FLT, SPV Current, Operating Mode (HYB/SMT) .	
Parameters (Environment)				
Operating Temperature			0-45°C	
Cooling			Fan	
Max. Relative Humidity @ 25°C (non Condensing)			95%	
Noise @ 1 meter			50dB	
Standard Compliance			IP21	
Weight (kg)			24.5	
Dimension (LXWXH)			180X282X538mm	

\*Specification are subject to change without prior notice due to constant improvement in design & technology.