

Parameters		SUN LION SOLAR PCU	
Products		SUN LION 1200	
Model No.		1000 VA	
System Rating		12.8V	
Operating DC Voltage		MOSFET	
Switching Element		BOOST MOSFET	
Charger Topology		100AH , 1280Wh	
Max. Battery Capacity (LiFePo4 (Inbuilt )		HYBRID	
Operating Mode (SMART/HYBRID)			Variable Settable Range
Parameters (Solar)			
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 (LWXH)		180X282X538mm	

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