

WIDE RANGE OF OFF-GRID/HYBRID SOLAR HOME INVERTER



PATANJALI

Anant Urja Srot...

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FEATURES

- Pure sine wave output
- Multi-colour LCD Display
- Built in Solar Charge Controller
- Solar Priority of load & battery charging.
- High Speed Micro Controller based Solar Home UPS.



WIDE RANGE OF PWM BASED OFF-GRID/HYBRID PCU

Parameters						
Model No.		PRE-1000	PRE-1200	PRE-1800	PRE-2500	PRE-4000
Capacity		850VA	1050VA	1500VA	2000VA	3500VA
Operating DC Voltage		12V		24V		48V
Switching Element		Mosfet				
Charger Topology		Boost Mosfet				
Parameters (Solar)						
Switching Element		Mosfet				
Controller		Yes				
Type of Charger		PWM				
Efficiency		≥95%				
Input Voltage Range (Min-Max) Voc		17V - 25V		31V - 45V		60V - 90V
Maximum PV Power Recommended		165 x 4	165 x 5	325 x 4	325 x 5	325 x 10
Parameters (Grid)		Default Value			Variable Range	
Nominal Grid Voltage		230V				
Battery Low Buzzer		10.8V			Battery Low Cut + 0.3V	
Battery Low Cut		10.5V			10V - 11.5V	
Battery High Cut		16.5V			16.5V - 17.5V	
SPV Charging Voltage (Boost)	SMF/TUB	13.7V/15V			13.5V - 14.5V/14V - 15.5V	
SPV Charging Voltage (Float)	SMF/TUB	13.7V/14.2V			13.5V - 14.5V/13.8V - 14.5V	
Grid Charging Voltage (Boost)	SMF/TUB	13.5V/14.5V			13.5V - 14.2V/13.5V - 15V	
Grid Charging Voltage (Float)	SMF/TUB	13.5V/13.8V			13.5V - 14.2V/13V - 14.2V	
Grid Charging Voltage (Equalize)		After 30 Days			NA	
Grid Charging Current		12A/15A			5A - 20A	
Grid Reconnect @ Battery Voltage		11.8V			11V - 12V	
Grid Low Cut Voltage	IT MODE ENABLE/DISABLE	170V ± 10V / 100V ± 10V				
Grid Low Cut Recovery	IT MODE ENABLE/DISABLE	180V ± 10V / 110V ± 10V				
Grid High Cut Voltage	IT MODE ENABLE/DISABLE	265V ± 10V / 290V ± 10V				
Grid High Cut Recovery	IT MODE ENABLE/DISABLE	255V ± 10V / 280V ± 10V				
Changeover (Batt. to Mains)	IT MODE ENABLE/DISABLE	<5ms				
Changerover (Mains to Batt.)	IT MODE ENABLE/DISABLE	<12ms				
Parameters (Inverter)						
Output Phase		1 Phase				
Nominal Output Voltage		220V ± 8%				
Max. Output Current		2.5A	3.2A	4.3A	5.5A	10.0A
Nominal Frequency		50Hz±1%			50-60Hz	
Output Waveform		Sinewave				
Typical Efficiency		≥82%	≥80%	≥85%	≥80%	≥80%
Voltage Harmonic		<3% (Linear Load)				
Over Load Capacity	IT Mode Disable	>110% 3 Time Auto Reset, 4th Time Shut Down				
	IT Mode Enable	>110% 1st Time Shut Down				
		>150% Output Goes Down				
Protection		Overload, Battery Low, Battery High, Output Short Ckt., Battery Reverse, Over Heat, Over Frequency, Under Frequency, SPV High				
LED Indication		System ON, (IT Mode, SMF/TUB, Boost Chg., DG Mode, Grid Chg.) Enable/Disable				
Switches		Reset for System ON/OFF, UP, Down, Back, Enter (For LCD Calibration)				
Display		Battery Voltage, Charging Current, Grid Voltage, Grid Frequency, Output Voltage, Output Frequency, Load%, Battery Graph, Overheat, SPV Current, Working Mode (HYB/PCU/SMT)				
Parameters (Environment)						
Operating Temperature		0-50°C				
Cooling		Fan				
Max. Relative Humidity @25°C (non Condensing)		95%				
Noise @ 1meter		50dB				
Standard Compliance		IP20				
Weight (Kg)		10	11	15	28	40
Dimension (with Packing) L x W x H (mm)		365x365x185		370x370x225		450x340x300

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

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