



## PWM (PCU SINEWAVE)

### FEATURES

- High Speed Micro Controller based Solar Home UPS.
- Built in Solar Charge Controller.
- Multi-colour LCD Display.
- Freq.:- Available - 50Hz & 60Hz.
- Charging Multi Stage (Bulk, Absorption & Float).
- Solar Priority of load & battery charging.
- Preference to Solar Power over Grid Power.
- Pure sine wave output.
- Protections : RBP, RSPV, OVL, BL, OBC, SC, IHV & ILV.
- Compatible with DG as an Input Source.
- Compatible with IT Load.
- Compatible with SMF, Gel & Tubular Batteries.
- Priority Selection - PCU, Smart & Hybrid for Saving Energy and Money.

# TECHNICAL SPECIFICATION

Parameters		Rating				
Model No		EGP/975/12V	EGP/1175/12V	EGP/1675/24V	EGP/2200/24V	EGP/2700/24V
Capacity		850VA	1000VA	1500VA	2000VA	2500VA
Operating DC Voltage		12V		24V		
Switching Element		Mosfet				
Charger Topology		Boost Mosfet				
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				
Battery High Cut		16.5V				
SPV Charging Voltage (Boost)	SMF	13.7V			13.5V-14.5V	
	TUB	15V			14.2V-15.5V	
SPV Charging Voltage (Float)	SMF	13.7V			13.5V-13.7V	
	TUB	14.2V			13.8V-14.5V	
Grid Charging Voltage (Boost)	SMF	13.5V			NA	
	TUB	14.5V			13.8V-15V	
Grid Charging Voltage (Float)	SMF	13.5V			NA	
	TUB	13.8V			13V-14.2V	
Grid Charging Voltage (Equalize)		After 30Days			NA	
Grid Charging Current		12A/15A			5A-20A	
Grid Reconnect @ Battery Voltage		11.8V			11V-12V	
Grid Low Cut Voltage	IT Mode Enable	170V±10V				
	IT Mode Disable	100V±10V				
Grid Low Cut Recovery	IT Mode Enable	180V±10V				
	IT Mode Disable	110V±10V				
Grid High Cut Voltage	IT Mode Enable	265V±10V				
	IT Mode Disable	290V±10V				
Grid High Cut Recovery	IT Mode Enable	255V±10V				
	IT Mode Disable	280V±10V				
Changeover (Batt. to Mains)	IT Mode Enable/Disable	<5ms				
Changeover (Mains to Batt.)	IT Mode Enable/Disable	<12ms				
Parameters (Inverter)						
Output Phase		1 Phase				
Nominal Output Voltage		220V±8%				
Max. Output Current		2.1A	2.9A	4.3A	5.5A	6.8A
Nominal Frequency		50Hz±1%			50-60Hz	
Output Waveform		Sinewave				
Typical Efficiency		≥82%	≥80%	≥85%		
Voltage Harmonic		<3% (Linear Load)				
Over Load Capacity	IT Mode Disable	>110% 3Time Auto Reset, 4th Time Shut Down Note : 1HP Motor Load Run for 15min in 2250 & 2650 Model.				
	IT Mode Enable	>110% 1st Time Shut Down				
		>150% Output Goes Down				
Motor 1HP		NA			Yes (<6.5A)	Yes (<7A)
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 (Solar)						
Switching Element		Mosfet				
Controller		Yes				
Type of Charger		PWM				
Efficiency		≥95%				
Solar Current MIN.		>3A (Below 3A, System will act like Solar Absent)				
Solar Current MAX.		50A			70A	
Input Voltage Range (Min - Max)Voc		17V-25V		31V-45V		
Maximum PV Power Recommended		600W	750W	1200W	2000W	
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	18	28
Dimension L x W x H(mm)		300x265x128		300x265x165	450x340x300	450x340x385

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

