

## SHAMSI (Solar Home PCU)

“Affordable Yet, Very Reliable”

Available in  
675VA to 1475VA



### FEATURES

- ➔ **Maintain battery health for longer life.**
- ➔ **Modified Sine wave output.**
- ➔ **Built-in IT mode.**
- ➔ **Easy Installation & low maintenance.**
- ➔ **Best Regulated output.**
- ➔ **Battery Charging with Multi stage (Bulk, Absorption & Float)  
Auto Equalize in a month.**
- ➔ **Protections : RBP, RSPV, OVL, BL, OBC, SC, IHV & ILV.**
- ➔ **Inbuilt PWM Solar Charge Controller.**
- ➔ **Priority Mode Selection**  
1) PCU 2) Hybrid 3) Smart  
**For Saving Energy & Money.**
- ➔ **Can Operated without Solar.**
- ➔ **LED Display for Operation & Fault.**

## SHAMSI (Solar Home PCU)

Parameters		Rating		
Model No		675/25A	875/50A	1075/50A
Operating DC Voltage		12V		24V
Switching Element		Mosfet		
Charger Topology		Boost Mosfet		
Parameters (Grid)		Default Value		
Nominal Grid Voltage		230V		
Battery Low Buzzer		10.8V		
Battery Low Cut		10.5V		
Battery High Cut		17V		
SPV Charging Voltage (Boost)	SMF	13.7V		
	TUB	15V		
SPV Charging Voltage (Float)	SMF	13.7V		
	TUB	14.2V		
SPV Current		50A		
Grid - Battery Charging Voltage (Boost)	SMF	13.5V		
	TUB	14.5V		
Grid - Battery Charging Voltage (Float)	SMF	13.5V		
	TUB	13.8V		
Grid - Battery Charging Voltage (Equalize)		After 30 Days		
Grid - Battery Charging Current		10A/12.5A		
Grid Reconnect @ Battery Voltage		11.8V		
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 (Battery to Mains)	IT MODE ENABLE/DISABLE	<5ms		
	IT MODE ENABLE	<15ms		
Changeover (Mains to Battery)	IT MODE ENABLE	<15ms		
	IT MODE DISABLE	<15ms		
Parameters (Inverter)				
Output Phase		1 Phase, 3Wire		
Nominal Output Voltage		240V±5%		
Nominal Frequency		50Hz±1%		
Output Waveform		Modified Sinewave		
Typical Efficiency		≥82%	≥80%	≥88%
Over Load Capacity		>110% 3Time Auto Reset, 4th Time Shut Down >150% Output Goes Down		
Protection		Overload, Battery Low, Battery High, Output Short Ckt., Battery Reverse, Phase Reverse, Over Heat, SPV High.		
LED Indication		System ON, (IT Mode, SMF/TUB, Boost Chg., Grid Chg.) Enable/Disable, Mains Status, Overload, Grid Chg., Inverter ON, Battery Status, SPV Chg., Fault.		
Switches		System ON, (IT Mode, SMF/TUB, Boost Chg., Grid Chg.) Enable/Disable		
Parameters (Solar)				
Switching Element		Mosfet		
Controller		Yes		
Type of Charger		PWM		
Efficiency		>95%		
Input Voltage Range (Min - Max)Voc		17V-25V		31V-45V
Maximum PV Power Recommended		(150W/160W) x 4	(150W/160W) x 5	(315W/320W/325W) x 4
Parameters (Environment)				
Operating Temperature		0-50°C		
Cooling		Fan		
Max. Relative Humidity @25°C (non Condensing)		95%		
Noise @ 1meter		50db		
Standard Compliance		IP20		

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