

## TECHNICAL SPECIFICATION

Parameters						
System Rating		850	1100	1750	2000	10KV
Operation DC Voltage		12	12	24	24	180
Switching Element		Mosfet	Mosfet	Mosfet	Mosfet	Mosfet
Charger Topology		Boost Mosfet	Boost Mosfet	Boost Mosfet	Boost Mosfet	Boost Mosfet
Grid		Setable Rance				
Nominal Grid Voltage		230 V				
Battery Low Buzzer		10.6V + 0.2V		Battery Low Cut- 0.3V   21.2V +-0.2V		
Battery Low Cut		10.3V + 0.2V		10-11.5V   20.6V +-0.2V		
Battery High Cut		14.5V + 0.2V		16.5-17.5V   29V +-0.2V		
SPV Charging Current		Depends Upon Panel capacity		11-40A   Depends Upon Panel capacity		
SPV Charging Voltage Boost	TUB	14.5 V		14-15.5V   29v +-0.2v		
SPV Charging Voltage Float	TUB	14.2 V		13.8-14.5V   28.4v +-0.2v		
Grid-Battery Charging Voltage Boost	TUB	14.2 V		13.5-15V   28.4v +-0.2v		
Grid-Battery Charging Voltage Float	TUB	13.6AMP		13-14.2V   27.2v +-0.2v		
Grid-Battery Charging Current		12AMP+-2AMP		11A-15A   12AMP +-2AMP		
Grid Reconnect @ Battery Voltage		11.6V		11-12V   23.2V +-0.2V		
Grid Low Cut Voltage	UPS Mode Enable UPS Mode Enable			170V +-10V 100V +-10V		
Grid Low Cut Recovery	UPS Mode Enable UPS Mode Enable			180V +-10V 110V +-10V		
Grid High Cut Voltage	UPS Mode Enable UPS Mode Enable			265V +-10V 290V +-10V		
Grid High Cut Recovery	UPS Mode Enable UPS Mode Enable			265V +-10V 290V +-10V		
Change Over (Battery to Mains) Mode Enable / Disalbe		<5ms				
Change Over (Mains to Battery) Mode Enable Mode Enable		<10ms <60ms				
Operating Mode		PCU/Hybrid				
Inverter						
Output Phase		1 Phase, 3 Wire				
Nominal Output Voltage		220+-8%				
Nominal Frequency		50+-1%				
Load Power Factor		0.8				
Output Waveform		Sinewave				
Typical Efficiency		>80%				
Voltage Harmonic		<3% (Liner Load)				
Overload Capacity (IT Load Enable)%		100-110:10 Min 110-120:2 Min 120-150:30 Sec		150-200:2 Sec 200-300:1 Sec >350:20ms		
Overload Capacity (IT Load Disable)%		100-120: (3 time auto reset):60 Sec 250-350:1 Sec 120-150: (3 time auto reset):30 Sec >350:20ms 150-200:2 Sec				
Protection		Overload, Battery Low, Battery High, Output Short Ckt, Battery Reverse, Over Heat, Over Frequency, SPV High				
Display (LCD)		Battery Voltage, Charging Current, Grid Voltage, Grid Frequency, Output Voltage, Output Frequency, Load % Battery Graph, Overheat, SPV Current, Working Model (HYB/PCU/SMT)				
Solar						
Switching Element		Mosfet				
Controller		Yes				
Type of Charger		PWM				
Efficiency		>90%				
Input Voltage Range (Min - Max) Voc		15-45V				
Maximum PV Power Recommended		800 WATT				
Enviroment						
Operating Temperature		0-50				
Cooling		Fan				
Max. Relative Humidity @ 25°C (Non Condensing)		95%				

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