



TECHNICAL SPECIFICATION FOR SOLAR HYBRID INVERTER WITH MPPT SOLAR CHARGER

CAPACITY		VA	1400/2000	2500	4000	5000
CAPACITY		WATTS	1000/1600	2000	3000	4000
Battery VDC			24	48	48	48
Voc			90	150	180	180
Vmp			35-69	70-125	75-140	75 - 140
MPPT Charger			30	30	50	50
Switching By			MOSFETS	MOSFETS	MOSFETS	
Nominal Output Voltage			220/230/240V AC			
User Selection Mode			UPS Mode		INVERTER Mode	
Input	Voltage Range	Acceptable Voltage Range	180-265Vac		110-290Vac	
		Low Voltage Cutoff	180±5Vac		110±10Vac	
		Low Voltage Recovery	190±5Vac		120±10Vac	
		High Voltage Cutoff	265±5Vac		290±10Vac	
		High Voltage Recovery	255±5Vac		275±10Vac	
	Frequency	50Hz Nominal (47-53 Hz Range)				
Output	Voltage Regulation On Mains		Same as Mains input			
	Voltage Regulation in Battery mode		220V AC Nominal +/-2%(Range 210-240V selectable)			
	Freq.Reg	Mains Mode	Same as Mains input			
		Battery Mode	50Hz ±0.1HZ			
	Wave Form		Pure Sine Wave			
	THD		≤3%			
Efficiency		≥85%				
Protections	Over Load		For 100% Load Buzzer Indication, 101% above Load Trips and Retry for 4times then Inverter shutdown			
	Output Short Circuit		Circuit Breaker On Mains, Shutdown on Inverter			
	Battery Reverse Protection		Fuse			
	Low Battery		Load Disconnection			
	Thermal Shutdown		Below 0°C and Above 90°C			
	Lightening/Surge		Protected upto 4KV Surge			
Solar Reverse		Blocking Diode is provided to Prevent reverse flow of current				
Battery Charging Current		Optional Battery current limit during low load on solar panel				
Shared Charging		On priority it will charge from solar only as long as it is giving sufficient current. When Solar Current is drops to below set point, then shared charging is activated and te balance current it will chagre from Grid.				
Priority	Grid Priority	In this Mode it will charge the battery form Solar + Grid in Sharing				
		Grid charging starts only when Solar Current is less than set value				
		It will shifts to battery mode if battery is full from solar(i.e14.4VDC for 12V system)				
	Solar Priority	In this mode it will charge the Battery only from Solar				
Operating Temperature		0-45°C				
Relative Humidity		0-95%				
Change Over time		< 20ms				
LED Display		Mains ON(REG);Charging On Mains(REG),Charging On Solar(GREEN), Duo(YELLOW); Inverter(GREEN); Battery Low(YELLOW);Overload/Short Circuit(YELLOW)				
LCD Display		Batter Voltage; I/P Voltage;I/P Frequency;O/P Voltage; Grid Charging Current; Solar Voltage; Solar Charging Current; Solar Units Saved KWH(up to 999.9Units); Grid Priority/Solar Priority; Load %; Over Load; Battery Low; UPS/INV Mode				