



HYBRID SOLAR INVERTER

LEAD FOR YOUR POWER NEEDS

HIGHLIGHTS

- ▶ DSP based intelligent technology
- ▶ LCD based display for showing of parameters and status
- ▶ Protection against reverse polarity
- ▶ Dynamic short circuit protection with fold-back current limiting
- ▶ Protection against all possible errors like battery low, overload, heavy load, short circuit etc.
- ▶ Early warning for battery low and overload conditions. System continues normally if the errors is corrected.
- ▶ Pure sinewave. Safe to all kind of loads.
- ▶ Ideal for mixed load application
- ▶ Indigenous design with proven technology.
- ▶ Generator compatibility
- ▶ Priority Solar charging.
- ▶ UPS mode option selection



INBUILT MPPT CHARGER

PCU Mode

Solar/Battery/Grid
Charging - Solar only
Priority - Solar

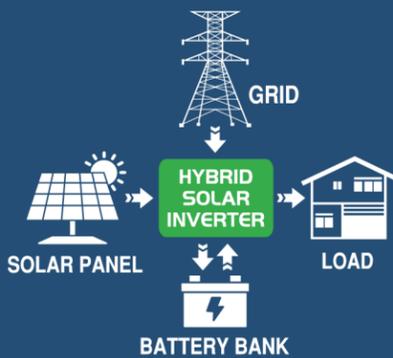
Hybrid Mode

Solar/Battery/Grid
Charging - Solar/Grid
Priority - Solar

Application

- Hospital
- School
- Industries
- Home
- Petrol Pump
- Bank

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TECHNICAL SPECIFICATION



Parameters	Units																	
System Model	HS	HS 1500	HS 2000	HS 2000	HS 3000	HS 4000	HS 4000	HS 5000	HS 4000	HS 5000	HS 7500	HS 7500	HS 10000	HS 10000	HS 10000	HS 20000		
Operating DC Voltage	V	12V			24V			36V			48V			72V		96V	120V	240V
Photovoltage Input																		
Input Voltage Range (Min-Max)	VDC	15 - 55		30 - 55	30 - 110	30 - 150	45 - 110	45 - 150	60 - 110	60 - 150		90 - 150	90 - 200	120 - 200	150 - 200	300 - 550		
Maximum PV Power Recommended	W	750	1000	1600		2200	2000	2400		3000	4500	4000	6000		7500	15000		
Solar MPPT Rating	A	40	60	40	40	60	40	60	40	40	40	40	60	40				
MPPT Based Charge Controller																		
Switching Element		MOSFET															IGBT	
Controller		DSP																
Type of Charger		MPPT																
Efficiency	%	96																
Parameter																		
Battery Low Buzzer	V	10.5		21		31.5		42		63		84		105		210		
Battery Low Cut	V	10		20		30		40		60		80		100		200		
Battery Charging Voltage by SPV	V	14.8		29.6		44.4		59.2		88.8		118.4		148		296		
Battery Charging Current Limit by SPV (Adj)	A	0 - 60																
Battery Charging Voltage by GRID	V	14.4		28.8		43.2		57.6		86.4		115.2		144		288		
Battery Charging Current by GRID	A	1 - 12																
Grid Low Cut Voltage (UPS mode Disable/Enable)	V	100 / 160																
Grid High Cut Voltage (UPS mode Disable/Enable)	V	270 / 260																
Output Voltage	V	220																
Over Heat Cut Off	°C	100																
Grid Disconnect (Solar Available)	V	14		28		42		56		84		112		140		280		
Grid Reconnect (PCU Mode / Hybrid Mode)	V	11		22		33		44		66		88		110		220		
No Load Current (Min-Max)	A	1 - 2																
Grid Charger		Enable / Disable, Default - Enable																
UPS Mode		Enable / Disable, Default - Disalbe																
Operating Mode		PCU Mode / Hybrid Mode, Default - Hybrid Mode																
Input Source		GRID / GENSET, Default - GRID																
Inverter																		
Nominal Output Voltage		220																
Output Supply Phase	A	1 Phase																
Output Current		3	4	4	6	8	8	10	8	12	14	14	18	24	24	36		
Cooling		Temp Controlled, Fan																
Protections		Overload, Battery low, Battery high, Output low, Output high, Output Short Circuit, Overheat, Under Frequency, Over Frequency, Solar panel reverse																
Display Parameters		Battery Voltage, Charging Current, Solar Voltage, Solar Current, Instantaneous Power, Grid Voltage, Output Voltage, Output Load, Total Unit, System Temperature																
Switches		(Solar) PCU mode/ Hybrid mode, System ON/OFF, INV/UPS mode																
Indications (LED)		*Mains On, Grid Charging, System ON, Batt. Low, Overload, SPV Charging, Solar Use, UPS mode																
Environment																		
Dimension (L x W x H)	Cm	35x33x16	40x19x33	40x19x33	46x22x38	60x28x52	46x22x38	60x28x52	46x22x38	60x28x52	60x28x52	60x28x52	80x28x52	85x42x70	85x42x70	110x42x70		
Weight (Approximate)	Kg.	14.2	22.2	19.5	23.5	36.0	29.7	40.5	29.7	40.5	49.0	49.0	67.0	90.0	90.0	110.0		

Specification are subject to change wi thout prior notice due to constant improvement in design & technology.