



**POWER SERIES**  
**OFF-GRID LOW FREQUENCY  
PWM SOLAR INVERTER**

### Salient Features

- Interactive multicolor LCD display
- Electronic over current charging protection
- Maximum grid current saving by charging Through "Solar Power Only"
- Smart Solar Section Logic Based on Real Time Clock
- Smart Protection Built-up on PCB
- Solar KWH used on Digital Display
- Solar PV Reverse Voltage Protection
- Provision for Setting Critical Parameters of Solar & Battery
- Noiseless Operation
- Provision to Maintain Battery Gravity for Better Battery Performance
- Advanced Pure Sine Wave Technology
- 50 Amp. PWM Built-in Solar Charge Controller
- Maximum Utilization of Solar Current Through Monitoring of abrupt Weather Conditions
- Easy to Service and Installation Operation

### Advantages

- Reliable technology
- Easiest to maintain as they are installed in easy-to-access locations
- Availability of 3 options of phases
- Highly efficient
- Lower installation cost as no specialized tools or equipment are needed
- High design flexibility
- Low power consumption



ADVANCED BATTERY  
MANAGEMENT



INTELLIGENT  
POWER SAVING



UNMATCHED  
POWER BACKUP



SMART BATTERY  
CHARGER



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**Application**

This type of inverters are ideal for users who want to cut costs by utilizing energy produced from sunlight during daytime as well as store the same in batteries to support energy usage after sunset. Hybrid solar inverters are a perfect choice for buyers who are encountering frequent power outages, faults and excessive load-shedding.

-  SMART PROTECTION  
BUILT-UP ON PCB
-  NOISELESS  
OPERATION
-  AC & DC MCB  
PROTECTION
-  EASY TO SERVICE  
AND INSTALLATION  
OPERATION

**AVAILABLE RANGE**  
 1000VA, 1200VA, 1700VA, 2300VA, 2500VA

**TECHNICAL SPECIFICATIONS\***

**Solar Inverter**

Nominal Power Storage Voltage	12 VDC	24 VDC
<b>AC Mains Mode</b>		
I/p Volt. Range (Normal Mode)	90 to 290 VAC $\pm$ 5 VAC	
I/p Volt. Range (UPS Mode)	145 to 270 VAC $\pm$ 5 VAC	
Changeover Time Maximum	$\leq$ 20 ms	
Max. Charging Current (NC)	25% less than HC	
Max. Charging Current (HC)	15A $\pm$ 1A, 18A $\pm$ 1A 26A $\pm$ 1A	17A $\pm$ 1A, 20A $\pm$ 1A
Boost Charging Voltage	14.4 $\pm$ 0.1 VDC	28.8 $\pm$ 0.2 VDC
Float Charging Voltage	13.7 $\pm$ 0.2 VDC	27.4 $\pm$ 0.4 VDC
Stabilizer mode	If input Mains AC Volt. < 180V	Output will be input Mains AC Volt. +30%V.

**Solar Charge Controller**

Technology	DSP based intelligent power storage charging and Charge Sharing with Mains#
Charge Controller Type	PWM based
Peak Solar PV Current	50 Amps
Solar Power storage Charging Current (settable)	50/70 Amps (default)
Solar Power storage Low Cut Voltage (Settable)	11.5V (Default)
PV Reverse Polarity Protection	Available
Reverse Current flow to PV Protection	Available

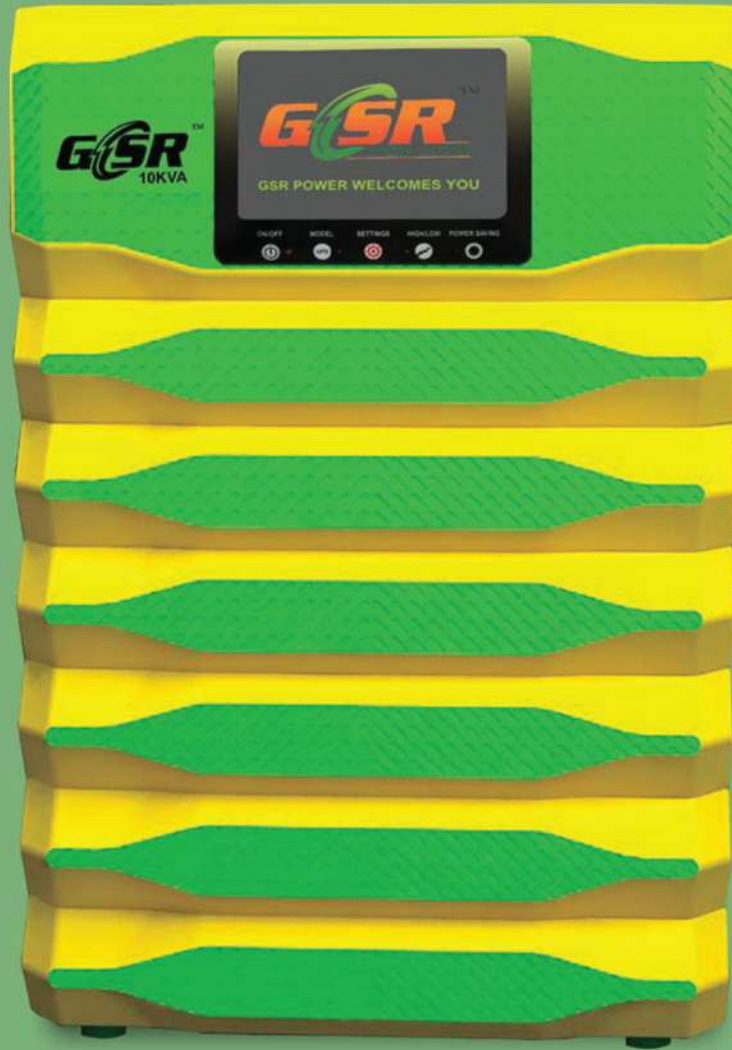
**Power Storage Backup Mode**

Output Voltage at No Load	225 VAC $\pm$ 7 VAC	
Output Frequency	50.0Hz $\pm$ 0.5Hz	
Output Wave Form (At No Load)	100% Pure Sine Wave	
Power storage Low alarm (VDC)	10.6 $\pm$ 0.2	21.2 $\pm$ 0.2
Power storage Low protection	10.4 $\pm$ 0.2 VDC	20.8 $\pm$ 0.2

**Current Boost Function Mode in Normal Mode Only**

Charging Current at 100V AC	8A $\pm$ 1A
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\*As a process of continuous product improvement, the specifications are subjected



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SMART PROTECTION  
BUILT-UP ON PCB



NOISELESS  
OPERATION



AC & DC MCB  
PROTECTION



EASY TO SERVICE  
AND INSTALLATION  
OPERATION

### AVAILABLE RANGE

3.8 KVA, 5.5 KVA, 8 KVA, 10KVA

### TECHNICAL SPECIFICATIONS\*

Parameters	Normal Mode	UPS Mode
Main AC Lower Voltage Limit	100 ± 5 VAC	180 ± 5 VAC
Main AC Lower Recovery Volt.	110 ± 5 VAC	190 ± 5 VAC
Main AC Higher Voltage Limit	280 ± 5 VAC	260 ± 5 VAC
Main AC Higher Recovery Limit	270 ± 5 VAC	250 ± 5 VAC
Output Voltage with full load in ECO /Normal Mode	220 ± 10 VAC	
Battery Low Cut-Off Voltage (Settable)	10.4± 0.2 V (per Belt) Default	
Main O/p Frequency	Same as Input	
INV. O/p Frequency	50 ± 1.0 Hz	

### Solar Charge Controller

Technology	DSP based intelligent battery charging and Charge Sharing with Mains#
Charge Controller Type	PWM based
Peak Solar PV Current	50/70 Amps
Solar Battery Charging Current (settable)	40 Amps (default)
Solar Battery Low Cut Voltage (Settable)	11.5V (Default)
PV Reverse Polarity Protection	Available
Reverse Current flow to PV Protection	Available

### Battery Charging

Battery Charging Volt. Range	48 V to 120 V	180 to 260V
Mains Charging Current (Settable)	HC-5-22A (range) NC-25% less than HC	
Trickle Charging Current Limit	0.5 ± 0.3A	
Boost Voltage (Settable)	14.4 ± 0.1 V (per belt) (default)	
Float Voltage	13.6 ± 0.2 V (per Belt)	
Overload	100+3% (with Auto reset function)	
Short Circuit Protection	>300% Load (with manual reset function)	
Change Over Time	<20 ms upto 2KVA	< 10 mSec.
	<60mSec. 2.75 KVA and above	