

Solar PCU

3KW-100KW



- DOD level setting for Deep discharge protection.
- User friendly LCD display energy meter to monitor solar power.
- GSS PCU for mains –solar power sharing during day.

Extends the life of your batteries

- With adequate charging during long power cuts.
- By reducing the discharge rate of batteries as the solar power caters the load during day.

PANEL MOUNTED ABOVE GENERATOR ROOM



PANEL MOUNTED ABOVE THE TERRACE



SOLAR PANEL MOUNTED IN THE PARKING AREA



PANEL BEING MOUNTED IN A SCHOOL PLAY GROUND



PANEL MOUNTED IN A WATER TANK



PANEL MOUNTED IN A PETROL PUMP

Solar PCU Hybrid Inverter with MPPT charge controller with high utilisation factor 85%

Model SHI 101
3KVA - 5KVA
 Domestic
 Lights / Fans / Mixer /
 washing machine / Fridge

Model SGI 101
5 KVA - 10KVA
 Domestic/Industrial
 Lights / AC / Motors

Model SGI 303
10KVA - 100KVA
 Industrial
 Lights / AC /
 Motors / Machines

Solar hybrid inverter / UPS for

Schools | Colleges | Offices | Hospitals | Residences | Apartments | Lifts | Process Industries

Solar PCU
MODEL - SHI 101 / SGI 101 / SGI 303

TECHNOLOGY	MPPT technology		
RATING	1Ø Input - 1Ø Output	1Ø Input - 1Ø Output	3Ø Input - 3Ø Output
CAPACITY	3KVA ~ 5KVA	5KVA ~10KVA	10KVA ~ 100KVA
DC BUS	48V -72V	96V/120V/192V	192V-360V

SOLAR INPUT

Operating MPPT Voltage	90V-150V	144V-180V	180V-325V
Maximum Panel current	20A-30A	34A-50A	50A-300A
Reverse Polarity Protection	Short Circuit Diode		
Back feed Protection	Protected using reverse diode		
MPPT Efficiency	96% (Peak)		

BATTERY

Battery Type	SMF/ TUBULAR		
Charger Type	Boost cum float charger		
Charging Current Solar mode	0-55A	0-50A	0-250A

OUTPUT

Transfer time	Mains to Inverter	<5 ms		
	Inverter to Mains	<5ms		
Voltage on Mains	180V - 250V	180V - 250V	400V±15V	
Voltage on Inverter	230V/50Hz	230V/50Hz	400V Ph- Ph :230V Ph- Neutral	
Regulation	Balanced Load	(±) 1%	(±) 1%	(±) 1%
	Unbalanced Load	N.A	N.A	(±) 1%
Unbalanced Load Phase Shift	N.A	N.A	120°± 0.5°	
Over Load Capacity	125% -1 Minute : 150% 10 Seconds			
Inverter Protection	Advanced Electronic Protection for device safety backed up with MCB's & fast acting fuses, high speed pulse by pulse electronic device protection over voltage / under voltage protection, Electronic over current trip .			

PROTECTIONS

	• I/P Low Voltage / High voltage • Over Temperature
	• Battery Low • Over Load • Short Circuit
ALARMS	• Mains Failure • Battery Low • Over Temperature

EFFICIENCY

Efficiency@ 100% Load	On Inverter Mode	>85%	>85-90%	>85-92%
	On Mains Mode	98%	98%	98%

MULTIFUNCTIONAL SOLAR LCD ENERGY METER

Indicates following parameters	• Solar Voltage • Solar Current • Solar Power
	• Solar Energy generated
	• Input Voltage • Output Voltage • Battery Voltage
	• Load Current
ENCLOSURE PROTECTION	IP-20

ENVIRONMENTAL

Acoustic Noise level	<60db @ 1.5 meter
Operating Ambient Temperature	0 to 40 Deg C

UTILITY POWER INPUT

Input Voltage	230V -1Ø	230V -1Ø	3Ø -4 Wire
Input Voltage Window	170-270V	170-270V	330-470V
TESTING STANDARD	As per IEC 62040-3 /IEC 61683		