

## TECHNICAL SPECIFICATION

INVERTER RATING (KVA)	3.5KVA	5KVA	10KVA
<b>A. SOLAR CHARGE CONTROLLER (SCC)</b>			
1 Charger Type & Topology	Buck Type MPPT		
2 PV Total Nominal Capacity (KVA)	3KW	5KW	10KW
3 No. of MPPT Channels	1	1	1
4 Per Channel PV Capacity (w) (Nominal Peak)	3.5KW/3.2KW	5KW/5.5KW	10KW/11KW
5 Max. Open Circuit PV Volts (Voc)	240	240	400
6 MPPT Voltage Range (Volts)	70-240	96-300	140-400
7 PV Minimum Voltage (Volts)	24	48	120
8 Max. I/P Amps Per Channel (Amps)	45	75	60
9 Max. Battery Amps during PV Charging (Amps)	70	100	80
10 Battery type supported	VRLA / LMLA / Li-Ion/Li-Ph (User Settable)		
11 Min. Battery AH (Suggested)	150	150	150
<b>B. Solar Inverter</b>			
1 No. of Phase/Connection Type	1-Phased /2 wire		
2 Nominal battery voltage (Volts)	24	48	96
3 Battery Ripple	5% for VRLA & LMLA/1% for Li-Lon/Li-Ph (User Settable)		
4 Nominal Output Voltage/Frequency (Votls/Hz)	230/50		
5 Nominal KVA Capacity ( KVA)	5KVA		10KVA
6 Output Amps	10.43	17.39	34.78
7 Voltage Regulations( In Standalone Mode)	10.43	17.39	34.78
8 Freq. Regulation (in Standalone Mode)	±2%		
9 THD	±0.5Hz		
10 Load Power Factor	<3%		
11 Efficiency(%) Peak/ 100% Load /25% Load	0.8 Lag to Unity		
12 Over Loads:	110-125% - 30 Sec		
13 Max Allowed Phase Imbalance(%)	N/A		
14 Auto Bypass Feature	Provided		
<b>C. GRID CHARGER</b>			
1 Grid Voltage Range (Voltage Sync. Range )	160V-280V (Phase to Nutral)		
2 Grid Frequency Range (Voltage Sync. Range)	50Hz ±5%		
3 Max Grid Import Power (KVA)	3.5KVA	5KVA	10KVA
4 Max Battery Amps During Grid Charging (Amps)	40	68	54
5 Peak Charging Efficiency (%)	>87		
INVERTER (KW)	3	4	8
1 PV Side	Reverse Polarity, Surg Protection		
2 Battery Side	Reverse Polarity, Over/Under Voltage, Current Limit		
3 Grid Side	Over/Under Voltage, Over/Under Frequency, Anti-Islanding, Surg Protection		
4 Load Side	Overloads, Short Circuit		
5 System Protection	Over Temperature Trip, Breakers at all Inputs, Emergency stop		
<b>D. USER INTERFACE</b>			
1 DISPLAY INTERFACE	LCD NUMERICAL DISPLAY		
2 DISPLAYED PARAMETERS	VRLA / LMLA/ Li-Ion/Li-Ph (User Suitable)		
1 Battery Parameters	Voltage, Charging Current, Discharging Current, AH-in AH-out, Cumulative AH-in, Cumulative AH-out, Charging State-Charging/Discharging		
2 PV Parameters	Voltage ,Current , Power, Cumulative, Today Generation		
3 Grid Parameters	Voltage, Current, Frequency, Import Power, Import Cumulative, Today Generation		
4 Load Parameters	Voltage, Current, Frequency, Power, Cumulative, Power Factor		
5 Data Logging	90 Days PV Generation, Import Energy, Load Energy.		
6 System Level	Faults and Warnings		
3 INDICATION/ PROTECTION			
1 LED Indication:	Power On, PV Available, PV Charging Inverter On, Grid Import Mode , Fault, HYBRID/OFF GRID Mode		
2 User Keypad for Settings Changes	Keypad for Settings Input		
3 Breakers at all Inputs/Space Heater/Emergency stop Button	Provided		
4 Over Shoot due to misbehaviour of BHMS	Provided		
5 Remote Monitoring: Optional*	Data Monitoring through (GPRS Optional)		
4 DESIGNED & MANUFACTURED THE PRODUCT AS FOR IEC	Tested as per IEC 61683,IEC61727,EN50530 and IEC60068 (1,2,14,30).		
1 MISCELLANEOUS			
2 Degree of Protection	IP31		
3 Cooling Method	Temp. Controlled Force Cooling		
4 Operating Temperature	0-55C ambient Operation		
5 Humidity (Non-condensign)	Max. 95% Non-Condensing		
6 Altitude (above Sea level)	1000m above sea level		
7 Housing	Sheet Metal ,Floor Standing	Floor Standing,Front/Rear Door	
8 Color Shade	RAL-7035/RAL-7016		
9 Cable Entry	Rear Bottom	Front Bottom	
10 Cable Termination Type	Bus Bar Type with ring type lugs		
11 Terminal Sizes (PV/Battery/Grid/Load)	TERMINAL SCREW TYPE	35-50MM/35-50MM/25MM/25MM	