

# PRODUCT SPECIFICATIONS

MODEL NAME	1100VA	2675VA	3250VA	4000VA	5500VA	6000VA	7500VA	10000VA	15000VA	20000VA	
MAINS INPUT MODE											
Mains AC low cut UPS mode						175VAC ± 10VAC					
Mains AC low cut recovery UPS mode						185VAC ± 10VAC					
Mains AC high cut UPS mode						265VAC ± 10VAC					
Mains AC high cut recovery UPS mode						255VAC ± 10VAC					
Mains AC low cut WUPS mode						90VAC ± 10VAC					
Mains AC low cut recovery W. UPS mode						110VAC ± 10VAC					
Mains AC high cut WUPS mode						295VAC ± 10VAC					
Mains AC high cut recovery W. UPS mode						285VAC ± 10VAC					
Input Frequency Range						40Hz to 60Hz					
Voltage Output in Mains Mode						Same as input					
Mains Charging Enable/Disable						Yes Provided, you can set by front switch					
Frequency Output in Mains Mode						Same as input					
BATTERY											
Battery Type	LA / Tubular / SMF										
DC input voltage	12V	24V		48V	72V	96V	120V	180V	240V		
Battery Quantity 12V 100Ah to 220Ah	1	2		4	6	8	10	15	20		
Float charging voltage	13.7V±0.2V	27.4V±0.2V		54.8V±0.2V	82.2V±0.2V	109.6V±0.4V	137V±0.4V	205.5V±0.4V	274V±0.4V		
Boost charging voltage for LA Battery	14V±0.2V	28V±0.3V		56V±0.4V	84V±0.2V	112V±0.4V	140V±0.4V	210V±0.4V	280V±0.4V		
Boost charging voltage for Tubular and SMF Battery	14.5V±0.2V	29.0V ± 0.2V		57.8V±0.4V	87V±0.2V	116V±0.4V	145V±0.4V	217.5V±0.4V	290.5V±0.4V		
Bulk Absorption Battery Voltage	14.8V±0.2V	29.6±0.2V		60V±0.2V	88.8V±0.2V	120V±0.4V	150V±0.4V	222V±0.4V	296V±0.4V		
Battery deep Discharge Recovery	Yes (Independent Charger to Recover Deep Discharge Battery)										
Charging Current By Grid	15A±2A										
BACKUP MODE											
Output voltage	220VAC±10%										
Output frequency	50Hz ± 0.2 Hz										
Output waveform	Pure Sine Wave ≤ 5% THD										
No Load current	<1.8A										
Discharging current @ full load	60A ± 2A	70A ± 2A	90A ± 2A	60A ± 2A	90A ± 2A	66A ± 2A	65A ± 2A	65A ± 2A	65A ± 2A	65A ± 2A	
Low Battery Warning	10.7V±0.2V	21.4V±0.2V	21.64V±0.2V	43.2V±0.4V	43.2V±0.4V	64.2V±0.4V	86.4V±0.4V	108V±0.4V	162V±0.4V	214V±0.2V	
Low Battery Cut	10.4V±0.2V	21V±0.2V	21V±0.2V	41.6V±0.4V	41.6V±0.4V	62.4V±0.4V	83.2V±0.4V	104V±0.4V	159V±0.4V	208V±0.2V	
Change over time UPS mode	< 10msec					< 4msec					
Change over time WUPS mode	< 25msec										
Cooling	Temp. Controlled Fan										
PROTECTION											
Phase to Phase Voltage Protection	Mains Mode										
Back feed protection	Mains apply in output side@<295V										
Over Load system Shutdown	> 130% after approx >180sec, and > 300% system will be shutdown approx < 20 Sec.										
Short Circuit (A PK-PK)	Yes, After 3 tries system will be shutdown (System reset from front switch)										
Reverse Battery	DC Fuse Burn										
SCC Reverse Battery	DC Fuse Burn										
Short Circuit in Mains Mode	Mains MCB Trip										
Battery Over Charge	Battery Over Charge Protection in Charging mode										
Reverse PV Connected	Yes, Provided										
Over Charge Protection	Yes, Provided										
Over Current Protection PV	Yes, Provided										
SOLAR CHARGE CONTROLLER											
Solar Charge Controller type	MPPT										
Max Panel wattage can be connected	750 WATT	1800 WATT	2500 WATT	3000 WATT	4000 WATT	4500 WATT	6500 WATT	8000 WATT	10000 WATT	14000 WATT	
Maximum PV Voltage	50V	102V	102V	135V	150V	200V	250V	350V	450V	600V	
Maximum Battery current	50 Amp.		70 Amp.	50 Amp.	70 Amp.	50 Amp.					
Efficiency	> 93%										
Reverse PV protection	Yes provided, it will also display on LCD panel										
Switches	Menu (Select), Up, Down, Esc										
Reverse current flow to PV	Yes provided										
Sharing of current when PV and Grid Both are available	If PV power is not sufficient enough to charge the battery, system will start sharing battery charging from PV and grid.										
DOD definition (Depth of Discharge)	Mains will be connect when battery voltage reach at defined value of the battery voltage.										
DOD (Depth of Discharge)	20% - if battery voltage is	12.5V		25.0V±0.2V	50.0V±0.2V		75V±0.2V	100V±0.2V	125V±0.2V	187.5V±0.2V	250V±0.2V
	30% - if battery voltage is	12.0V		24.0V±0.2V	48.0V±0.2V		72V±0.2V	96V±0.2V	120V±0.2V	180V±0.2V	240V±0.2V
	40% - if battery voltage is	11.5V		23.0V±0.2V	46.0V±0.2V		69V±0.2V	92V±0.2V	115V±0.2V	172.5V±0.2V	230V±0.2V
	50% - if battery voltage is	11.0V		22.0V±0.2V	44.0V±0.2V		66V±0.2V	88V±0.2V	110V±0.2V	165V±0.2V	220V±0.2V
Mode Selection	Solar>>Battery>>Grid Grid>>Solar>>Battery Solar>>Grid>>Battery				SOLAR>GRID>BATTERY SOLAR>BATTERY>GRID						
BATTERY CHARGING CURRENT BY SOLAR											
30% battery will charged with			20Amp. ± 3Amp.								
40% battery will charged with			30Amp. ± 3Amp.								
50% battery will charged with			40Amp. ± 3Amp.								
100% battery will charged with			70Amp. ± 3Amp.								
LCD DISPLAY											
LCD Display	Messages (Display Values can be different 2% from the RMS actual values)										
	Mains Input Voltage / Battery Voltage / Mains Fuse Blown / Solar Power Available or Not. / Reverse PV / High PV Voltage / Mains Current / Solar Current / Battery Current / PCU ON, OFF / Battery Voltage / Battery Current / Solar Power Available or Not / Load % . / Short Ckt. / Over Load / Wiring Fault / Battery Low. / Battery High / Out Put Voltage / High Temp. / Output Frequency.										
	Mains Disconnected, Connected Selection										
If solar is available battery reaches float voltage after <5 min. mains will be disconnected, when mains is connected battery voltage reaches permitted DOD voltage and solar power not available. NOTE: This Condition is not applicable for Grid >> Solar >> Battery Condition.											