

# PRODUCT SPECIFICATIONS

MODEL NAME	1100VA	2675VA	3075VA	4000VA	5500VA	7500VA	10000VA
<b>MAINS INPUT MODE</b>							
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			
<b>BATTERY</b>							
Battery Type	LA / Tubular / SMF						
DC input voltage	12V	24V	48V		96V	120V	
Battery Quantity 12V 100Ah to 220Ah	1	2	4		8	10	
Float charging voltage	13.7V±0.2V	27.4V±0.2V	54.8V±0.4V		109.6V±0.4V	137V±0.4V	
Boost charging voltage for LA Battery	14V±0.2V	28V±0.3V	59.2V±0.4V		118V±0.4V	140V±0.4V	
Boost charging voltage for Tubular and SMF Battery	14.5V±0.2V	28.8V±0.3V	56.0V±0.4V		112V±0.4V	145V±0.4V	
Bulk Absorption Battery Voltage	14.8V±0.2V	29.6±0.2V	58.0V±0.4V		116V±0.4V	148V±0.4V	
Battery deep Discharge Recovery	Yes (Independent Charger to Recover Deep Discharge Battery)						
Charging Current By Grid	15A±3A						
<b>BACKUP MODE</b>							
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	62A ± 2A	70A ± 2A	90A ± 2A	60A ± 2A	90A ± 2A	66A ± 2A	66A ± 2A
Low Battery Warning	10.8V±0.2V	21.6V±0.2V	21.6V±0.2V	43.2V±0.4V	43.2V±0.4V	86.4V±0.4V	108V±0.4V
Low Battery Cut	10.4V±0.2V	20.8V±0.2V	20.8V±0.2V	41.6V±0.4V	41.6V±0.4V	83.2V±0.4V	104V±0.4V
Change over time UPS mode	< 10msec					< 4msec	
Change over time WUPS mode	< 25msec						
Cooling	Temp. Controlled Fan						
<b>PROTECTIONS</b>							
Overload in backup mode	Yes provided, system will indicate on display at 101% load						
Short Circuit in Backup Mode	System will shutdown after 3 - retries in case of output short circuit						
Short Circuit in Mains Mode	Mains MCB will trip						
Back feed	System will shutdown in case of back feed and there is no retry						
Over temperature	Yes provided, if heat sink temperature goes above 100°C System will shut down						
Reverse Battery	DC fuse will blown			DC MCB will trip			
Phase to Phase protection in mains mode	Yes provided by electronic						
<b>SOLAR CHARGE CONTROLLER</b>							
Solar Charge Controller type	MPPT						
Max Panel wattage can be connected	750 WATT	1500 WATT	3000 WATT	4000 WATT	6500 WATT	8000 WATT	
Maximum PV Voltage	50V	103±2V	135V	150V	250V	350V	
Maximum PV current	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	100V±0.2V	125V±0.2V	
	30% - if battery voltage is	12.0V	24.0V±0.2V	48.0V±0.2V	96V±0.2V	120V±0.2V	
	40% - if battery voltage is	11.5V	23.0V±0.2V	46.0V±0.2V	92V±0.2V	115V±0.2V	
	50% - if battery voltage is	11.0V	22.0V±0.2V	44.0V±0.2V	88V±0.2V	110V±0.2V	
Mode Selection	SOLAR>GRID>BATTERY SOLAR>BATTERY>GRID			SOLAR>GRID>BATTERY SOLAR>BATTERY>GRID			
<b>DISPLAY AND ALARMS</b>							
LCD Initial Display	Welcome, SMARTEN Website Address, System Capacity, Charging Till 90VAC and Deep Discharge Battery, System Setting, UPS / WUPS mode, I/P range 90-295VAC / 170-265VAC, Battery Type Selected LA / SMF / Tubular, DOD.						
LCD Status Display	Mains ON, Input Voltage, Input Frequency, Battery Voltage, Battery Charging, Battery Charged, Charging Current, Backup Mode, UPS ON, UPS OFF, Battery Voltage, Load %, Output Voltage, Output Frequency, Battery Current, PV Current, PV Voltage.						
LCD Fault / Protection Status Display	Mains Low Cut, Mains High Cut, Mains Not Available, Mains Frequency Cut						
Buzzer	Mains Fuse Blown / MCB Trip, Short Circuit, Overload, Battery Low, High Temperature, Back feed Mains Fuse Blown / MCB Trip, Short Circuit, Overload, Battery Low, High Temperature, Back feed						
<b>ENVIRONMENT</b>							
Operating Temperature	0°C to 50°C						
Storage Temperature	0°C to 50°C						
Operating Relative Humidity	90% Non-Condensing						
<b>WEIGHT AND DIMENSIONS</b>							
Dimensions in mm (LxWxH)	425X315X335		415x320x415	518x415x515		608x485x660	
Weight (Kg)	15	25	30	42	48	82.8	86.6