

TECHNICAL SPECIFICATION

	MPPT 12-24 automatic		MPPT 24-48 automatic					
MODEL	12V	24V	24V	48V	72V	96V	120V	180V
ELECTRICAL								
Battery Type	LA/Tubular/SMF							
Technology	Digital Processor Based High Efficiency Design							
Max. BATTERY Current Rating	50AMP.							
Max. PV Voltage Rating	50V±0.5V	85V±1V	100 V±1V	135V±2V	200V±0.5V	250V±1V	350V±1V	460V±1V
High PV Voltage	>50V	>85V	>100V	>135V	>200V	>250V	>350V	>460V
Max. Panel Install	up to 750W	up to 1500W	up to 1500W	up to 3000W	up to 5000W	up to 6500W	up to 8000W	up to 12000W
Battery Qty.12V 100-220AH	1	2	2	4	6	8	10	15
Boost Charging Voltage For Tubular And SMF Battery	14.5V±0.2V	29V±0.2V	29V±0.2V	58V±0.2V	87V±1V	116V±1V	145V±1V	217.5V±1V
Boost Charging Voltage For LA Battery	14V±0.2V	28V±0.2V	28V±0.2V	56V±0.2V	84V±1V	112V±1V	140V±1V	210V±1V
Bulk/ Absorption Voltage	14.8V±0.2V	29.6V±0.2V	29.6V±0.2V	59.2V±0.2V	88.8V±1V	118.4V±1V	148V±1V	222V±1V
DOD level (Depth of Discharge)	20% - if battery voltage is	12.5V	25.0V	50.0v±0.2V	DOD function is not available in this segment			
	30% - if battery voltage is	12.0V	24.0V	48.0v±0.2V				
	40% - if battery voltage is	11.5V	23.0V	46.0v±0.2V				
	50% - if battery voltage is	11.0V	22.0V	44.0v±0.2V				
Mains Connect if Solar Power Not Available	At any Stage of Battery Voltage				Mains Connect disconnect function is not available			
Mains Disconnect	If battery reaches boost level then after <10 minutes mains will be disconnect							
D.O.D (Depth of Discharge)	Mains will be connect when battery voltage reach at defined value of the battery voltage							
MPPT To PV Power Connection Time	<15 Sec.							
Peak Efficiency	>94%							
Mains AC low cut WUPS mode	90VAC ± 10VAC							
Mains AC low cut recovery WUPS mode	110VAC ± 10VAC							
Mains AC high cut WUPS mode	295VAC ± 10VAC							
Mains AC high cut recovery WUPS mode	285VAC ± 10VAC							
Input Frequency Range	40Hz to 60Hz							
Voltage Output in Mains Mode	Same as input							
Frequency Output in Mains Mode	Same as input							
Panel configuration (NTC)	375W 2P	250W 2S 3P/300W 5P	250W 2S 3P/300W 5P	250W 3S 4P/ 330W 3S 3P	330W 4S 4P	330W 5S 4P	330W 6S 4P	330W 10S 4P
Panel configuration VOC (NTC)	39.75V	74V/ 44V	74V/ 44V	111V/132V	180V	225V	270V	450V
PROTECTIONS								
Reverse Battery	Yes							
Reverse PV Protection	Yes							
Reverse Current Flow to PV	Yes							
High PV Voltage	Yes							
Over Current	Yes							
Thermal Protection	Yes							
MCB	MCB ensures your UPS and connected loads stay protected from short circuits							
DISPLA Y PARAMETERS								
Display Type	LCD Display							
Display Messages	Welcome, Smarten Website Address, System Capacity, Mains available, Battery Priority, PV Current, Battery Current, PV Voltage, Battery Voltage							
SCC Fault/Protection Status	Reverse PV/High PV voltage /High Temp.							
ENVIRONMENT								
Operating T temperature	0°C To 40°C							
Storage Temperature	0°C To 50°C							
Fixing	Wall Mounted							
Operating Relative Humidity	90% Non-Condensing							