

TECHNICAL SPECIFICATION

MODEL - PRIME+ 24-48-50A (MPPT BASED)

DOC REF NO.	RD/MPPT/48V/50A/R.01	
PRODUCT FG CODE	SCD-PR-048-050-01	
Model	MPPT 24-48 automatic	
	24V	48V
ELECTRICAL		
Battery Type	LA/Tubular/SMF	
Technology	Digital Processor Based High Efficiency Design	
Max. BATTERY Current Rating	50AMP.	
Max. PV Voltage Rating	85V±1V	130V±2V
High PV Voltage	>85V	>130V
Max. Panel Install	up to 1500W	up to 3000W
Battery Qty.12V 100-220AH	2	4
Boost Charging Voltage For Tubular And SMF Battery	29V±0.2V	58V±0.2V
Boost Charging Voltage For LA Battery	28V±0.2V	56V±0.2V
Bulk/ Absorption Voltage	29.6V±0.2V	59.2V±0.2V
DOD level	20%- if battery voltage is 25.0v±0.2V	20%- if battery voltage is 50.0v±0.2V
	30%- if battery voltage is 24.0v±0.2V	30%- if battery voltage is 48.0v±0.2V
	40%- if battery voltage is 23.0v±0.2V	40%- if battery voltage is 46.0v±0.2V
	50%- if battery voltage is 22.0v±0.2V	50%- if battery voltage is 44.0v±0.2V
Mains Connect if Solar Power Not Available	At any Stage of Battery Voltage	
MAINS DISCONNECT	if Battery reaches boost level then after <10 min. 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)	250W 2S 3P/ 330W 5P	250W 3S 4P/ 330W 2S 4P
Panel configuration VOC (NTC)	74V/ 48V	111V/94V
PROTECTIONS		
Reverse Battery	Yes	
Reverse PV Protection	Yes	
Reverse Current Flow to PV	Yes	
High PV Voltage	Yes	
Over Current	Yes, Provided Battery current >50Amp	
Thermal Protection	Yes	
MCB	MCB ensures your UPS and connected loads stay protected from short circuits	
DISPLAY 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 Temperature	0°C To 40°C	
Storage Temperature	0°C To 50°C	
Fixing	Wall Mounted	
Operating Relative Humidity	90% Non-Condensing	
Dimensions	410x350x170	
Weight	5.6Kg	