

MPOWER OFF GRID PWM SOLAR PCU - TECHNICAL SPECIFICATIONS

Technology			
Charge sharing from Solar and Grid			
Use Settable mode high and low charging			
Grid charging Enable Disable			
MODEL	MPOWER SOLAR PCU		
PCU VA	1100VA/12V	2000VA/24V	3.5KVA/48V
Inbuilt Solar Charge Controller			
Maximum Input PV Voltage	25V	45 V	90V
Max. Solar Panel Wattage	Upto 800Wp	Upto 1500Wp	Upto 3500Wp
Battery Charging Current	20 Amp.	20 Amp.	50 Amp.
Protections	Batt.over charge , Over current, PV Reverse polarity, current flow		
Display Type	LCD Display	LCD Display	LCD Display
Voltage Limits (UPS MODE)			
Mains AC Low Cut	180±10V	180±10V	180±10V
Mains AC Low Cut Recovery	190±10V	190±10V	190±10V
Mains AC High Cut	265±10V	265±10V	265±10V
Mains AC High Cut Recovery	255±10V	255±10V	255±10V
Voltage Limits (NORMAL MODE)			
Mains AC Low Cut	100±10V	100±10V	100±10V
Mains AC Low Cut Recovery	110±10V	110±10V	110±10V
Mains AC High Cut	280±10V	280±10V	280±10V
Mains AC High Cut Recovery	270±10V	270±10V	270±10V
AC MAINS MODE			
Grid Input Range (UPS Mode)	180±10V,265±10v	180±10V,265±10v	180±10V,265±10v
Grid Input Range (Normal Mode)	100±10v , 280±10v	100±10v , 280±10v	100±10v , 280±10v
Grid Charging High	12±0.2V DC	12±0.2V DC	12±0.2V DC
Grid Charging Low	10±0.2V DC	10±0.2V DC	10±0.2V DC
Boost Batt Voltage	14.4V±0.2V	14.4V±0.2V	14.4V±0.2V
Float Voltage	13.8V±02V	13.8V±02V	13.8V±02V
Change Over Time Normal Mode (Mains- UPS)	<40 ms	<40 ms	<40 ms
Change Over Time UPS Mode (UPS-Mains)	<10 ms	<10 ms	<10 ms
Change Over Time UPS Mode (Mains-UPS/UPS-Mains)	<10 ms	<10 ms	<10 ms
Backup Mode (Solar Power Available / Not Available)			
Output Voltage Regulation (AC)From Min.to Max. Battery	180-220V	180-220V	180-220V
Normal Input Battery Volatge (DC)	12V	24V	48V
Batt. Low Warning	10.8±02V	21.6±04V	43.2±04V
Batt. Low Cut	10.5±02V	21±04V	42±04V
Load Reoncted Voltage	12.7±02V	25.4±04V	50.8±04V
Short Ckt. Protection	Provided	Provided	Provided
Over Load Protection (125%)	6e sec.	6e sec.	6e sec.
Over Load Protection (150%)	2 sec	2 sec	2 sec
Over temprature Protection	Through Cooling Fan	Through Cooling Fan	Through Cooling Fan

USER SETTABLE MODE - HC/EC

1. HC Mode: Charging current = 20A±1A; Solar + Mains below float voltage and when battery voltage >float voltage charging current =15A±1A
2. EC Mode: Mains Charging current is zero if solar current >13A, Charging current will be maximum at below float voltage, when battery voltage is >float voltage charging current is 15A±1A, system will cut off the mains when battery voltage reaches boost voltage level and output load is transferred to Solar + Battery and reconnect below 11.8V per battery.