

WIDE RANGE OF MPPT BASED OFF-GRID/HYBRID PCU



PATANJALI

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FEATURES

- Digital display with fault & energy logging.
- Remote monitoring over internet & RS 485.
- 3 stage battery charging,
- 30% Extra Utilization of Solar
- Excellent performance upto 50° of temperature.

APPLICATION



WIDE RANGE OF MPPT BASED OFF-GRID/HYBRID PCU

Capacity (KVA)	1KVA	1KVA	2KVA	3KVA	4KVA	5KVA	4KVA	5KVA	6KVA	7.5KVA	10KVA	15KVA
Nominal Battery Voltage (VDC)	24V	48V	48V	48V	48V	48V	96V	96V	96V	120V	120V	240V
Output Waveform	Sine Wave											
SOLAR PHOTOVOLTAIC INPUT												
Charge Controller Type	MPPT											
Maximum PV Power	1kwp	1kwp	2kwp	3kwp	4kwp	5kwp	4kwp	5kwp	6kwp	7.5kwp	10kwp	15kwp
Input Voltage Range	30-57V		60-135V				120-250V			150-250V		225-400V
Max. PV Voltage	72V		165V				230V			320V		450V
Max PV Charging	26A	13A	26A	39A	52A	65A	26A	32A	39A	39A	52A	52A
MPPT Efficiency	>92%						>93%				>94%	
GRID INPUT												
Operating Voltage range	170-270V AC, 1PH, 50Hz											
INV OUTPUT												
Nominal O/P	230V, ± 2%											
Mode	50 ± 0.5HZ											
No Load Current	<10% of Full Load Current											
THD	<5%											
Maximum O/P Current	3.5Amps	3.5Amps	7Amps	10.5Amps	13.9Amps	17.5Amps	13.9Amps	17.5Amps	20.8Amps	26.0Amps	35Amps	52Amps
DC-AC Efficiency	>85%		>87%						>88%		>90%	
BATTERY												
Battery Charging Through Mains	Mains Charging Yellow LED Blinking											
Battery Charging Through Solar	MPPT Charging Yellow LED Blinking											
Battery Charging Through Mains + Solar	MPPT Charging and Mains Charging Both LED Blinking											
Low Battery Indication	Red LED											
Solar Optimization after Battery Full Charged	MPPT Charging Yellow LED Blinking											
PROTECTIONS												
Over Load	>110 - 125% For 60 Sec, > 125-150% For 30 Sec., > 150 - Immediate Trip											
Over Load Indication	Provided											
Switch Gears	Battery-MCB, PV-MCB, Mains-MCB, Load-MCB											
Surge Protection	MOV at All input/Output Feeder											
Short Circuit Indication	Provided											
Battery & PV Reverse Polarity	Provided											
Battery Over Voltage	Provided											
Mains Under/Over Voltage	Provided											
INDICATION												
Power On	Green LED											
Inverter On	Yellow LED											
PV On	Green LED											
MPPT Charging	Yellow LED											
Grid On / Grid Charging	Yellow LED											
Fault	Red LED											
Display	Battery Voltage, Battery Amp, PV Volt, PV Amp., Inverter Voltage, Inverter Voltage, Inverter Amp, Inverter KVA, Inverter Frequency, PV KW, PV KWH, Mains Voltage, Mains Amp. 30 days data Logging											
GENERAL												
Net Weight (KG)	30.0KG	32.0KG	35.1KG	40.2KG	46.8KG	46.8KG	48.0KG	50.0KG	55.0KG	80.0KG	89.0KG	110.0KG
Gross Weight (KG)	31-0KG	33-0KG	36-6KG	42-7KG	49-8KG	49-8KG	51-0KG	54-0KG	51-0KG	100-0KG	103-0KG	120-0KG
Dimensions (MM)	359x280x530MM		359x280x560MM		359x280x600MM			478x375x725MM				
Communication	RS 232 Standard, GPRS : Optional											
Standby Power	<50W						<200W					
Operating Temp. range	(0°C to 55°C)											
Storage Temp.	(0°C to 60°C)											