

**Fuelling Green Energy
Powering Customer Satisfaction**

TECHSER[®]
THE TECHNICAL SERVICE PEOPLE SINCE 1988
SOLAR PCU

Salient Features

- IGBT based Inverter with high frequency PWM switching
- MPPT based PV charge controller
- DSP based hybrid integration logic
- Continuous full load operation
- Cold start and soft start feature
- Solar charging priority
- Lightning and Surge protection.
- Compact size, small foot print & dynamic performance.
- User friendly LCD display
- EMI/RFI noise filter.
- Pure sine wave output
- Advanced Communication with PC through RS-232 port
- Tested and Certified as per MNRE / IEC standards by TUV Rheinland



TECH-SOLAR SERIES - SOLAR PCU TECHNICAL SPECIFICATIONS

System Rating	1kVA/700W	2kVA/2kW	3kVA/3kW	4kVA/4kW	5kVA/5kW	6kVA/6kW	7.5kVA/7.5kW	
Photovoltaic Input								
MPPT Range -	24V - 35V	84V - 240V	84V - 240V	84V - 240V	84V - 240V	105 - 240V	105 - 240V	
Charge Controller Capacity	5Amps - 100Amps available; can be provided depending on the capacity requirement or based on the design of PV Array							
MPPT technology based solar charge controller with DSP based hybrid logic								
Switching Device	MOSFET/IGBT							
Type of Charger	MPPT Technology							
Efficiency of MPPT Charge Controller	Greater than 95%							
Grid Input								
Input Supply	1 Phase; 3 Wire							
Nominal Voltage	230V, 50Hz							
Voltage Range Line Low Transfer	Based on Load % (100%-70% / 70%-50% / 50%-and below) 165V AC / 150V AC / 118V AC			160V - 280V				
Battery								
Battery Nominal Voltage	36V	96V				120V		
Grid Charger capacity (% kW rating)	0 - 100%							
Battery Type	Compatible with Tubular / SMF Lead Acid Batteries							
Inverter								
Switching Device	IGBT							
Output Voltage	230VAC (Line - Neutral)							
Output Supply	1 Phase; 3 Wire							
Output Waveform	Sinusoidal							
Output Frequency	50Hz ± 0.5%							
Load Power Factor	0.7 Lag	0.7 Lag to 1						
O/P Voltage Regulation	± 1%							
O/P Voltage Distortion	≤ 3% with 100% Linear Load							
Output Overload	125% for 10 minutes, 150% for 1 minute							
Peak Efficiency	>85% at Full Load			>88% at Full Load				
No Load Current	<2% of the rated capacity							
Noise	< 60dBA @ 1 meter distance							
Cooling	Forced Air							
Mounting	Floor Mounted							
Galvanic Isolation	Inbuilt Isolation Transformer at Inverter Output							
Display Parameter	Array - Voltage, Current, Power ; Battery - Voltage; Grid - Voltage, Frequency; Inverter O/P - Voltage, Current, Frequency							
Protection	Under/Over voltage for Input & Output, Array & Battery Reverse Polarity, Output Overload, Short Circuit, Over Temperature, Surge Protection for Grid Input and Solar Array Input							
LED Indication	Grid ON, Grid High/Low, Inverter ON, Load ON Inverter, Battery Low, Inverter Over Temperature							
Computer Interface	Advanced Communication - RS232 Port							
Data Logging	Optional - Logs AC/DC kWh, Voltage, Current parameters							
Environment	Indoor (free from conductive dust)							
Operating Temperature	0 - 50° C							
Max. Relative Humidity	Upto 95% RH @ 25°C non condensing							
Standard Compliance	Complies to IEC 61683 - 1999 ; IEC 60068-2 (1,2,14,30)							

Specification stated above subject to change without any prior notice Other DC and AC Voltage and Power ratings are available on request

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OTHER PRODUCTS: SILENT GENERATOR / INVERTER, LINE INTERACTIVE UPS, SERVO STABILIZER (AIR COOLED & OIL COOLED), AVR (AUTOMATIC VOLTAGE REGULATOR) FLOAT CUM BOOST CHARGER & GRID-TIED SOLAR UPS, OFF-GRID SOLAR UPS, SOLAR HYBRID UPS & LED LIGHTING SOLUTIONS

Note: For District Level Branch/Service Centre Telephone and address please contact above regional office in respective state or Visit our website