



BIS Certified Inverters

An ISO 9001, OHSAS 18001 Certified

MPPT Solar PCU/ MPPT Solar Online

MPPT Solar Inverters are a next generation solar inverters, High efficiency MPPT technology ensure 20% to 30% more solar power harvesting from the same capacity solar panels as compare to other technology. Its state-of-the-art design and intelligent control optimizes the yield of all PV installations in residential, offices, rural and other remote installations with very poor or no grid availability. It consists of MPPT based solar charge controller and bi-directional inverter with transformer on the AC side. Transformer based design makes our inverter more rugged and reliable in worst grid input conditions. It provides uninterrupted Pure Sine Wave power at the load output using Solar, Battery and grid input in customizable order of priority.

Latest DSP based control ensures excellent performance and protection from any kind of malfunction. The high conversion efficiency helps in longer battery backup. Ease of operation and Plug 'N' Use type of design make it the ideal product for all kinds of users.

Highlights

- **Efficiency:**
 - a) MPPT Charge Controller @95%
 - b) MPPT PCU / Inverter @85%
 - c) MPPT Tracking Efficiency @99.5%
- **Solar Feature:**
 - a) Solar Volt in Display
 - b) Solar Current in Display
- **ATC (Automotive Temperature Compensation)**
 - a) when temperature is below 25 degree, ATC is working to boost the battery V to optimum load so that you get the more back up.
 - b) When temp. is above 25 degree, ATC is saving power in charging to reduce boost V.
- **Grid Charging** through multiple settings (0,5,10 & 15 Amp)
- **Battery Equalizer** inside to increase battery life & backup
- Charge sharing features in Solar PCU
- Bi-Directional Technology
- Special in built MCB, which trips & protects all your appliances even before the traditional MCB can respond. (7.5KVA Onwards)
- Isolation transformer, which provides safety to the users & the appliances.
- Generator compatible
- 30% more efficient than conventional PWM/PCU
- Soft start: slow increase of voltage
- Cold start technology
- Shows Charging Volt of the Battery
- DSP based automatic battery level management
- Compatible with Inverter load as well as UPS load
- Bypass switch for manual Operation
- Protection Inverter Batt. Low, Batt. High, Overload, Short Circuit, Overtemp, PV Reverse, PCB Trip/Fuse Trip.
- Selected Priority Modes for Solar/Grid/Battery.



Technical Specifications

MPPT Solar PCU / Solar Online

Model No.	SK1112M	SK1724M	SK2124M	SK2524M	SK3024M	SK3548M	SK5048M	SK7596M	SK10120M
Ratings	1100VA	1750VA	2100VA	2500VA	3000VA	3500VA	5000VA	7500VA	10KVA
Nominal DC	12V	24V				48V		96V	120V
Switching Element	MOSFET							IGBT	
Controller	DSP IC 32 BIT								
Max. Battery Capacity	220AH								
Charging Mode	Priority(Grid/Solar)								
Solar Parameters									
VOC (Volt - Open Circuit)	25V-40V	45V-100V				80V-180V		160V-360V	200V-400
For Max Current (MPPT)	50A			60A		50A	70A	70A	70A
Battery Charging by Solar	20A								
Inverter Parameters									
Output Voltage	220V ± 8%, 1φ								
Output Frequency	50Hz ± 1								
Max Load (±5%)	800W BULB LOAD	1200W BULB LOAD	1600W BULB LOAD	8A	9.5A	11A	17A	26A	34A
Isolation Transformer	Provided Inbuilt								
Crest Factor	03:01								
Output Waveform	Pure Sine Wave								
THD (Linear Load)	< 3%								
THD (Non-Linear Load)	< 5%								
Overload	>100%,15 Second								
Inverter Efficiency	>85%								
Changeover Time	inverter to Mains				< 10ms				
	Mains to inverter				< 12ms				
Protections & Alarm	Over and under voltage Grid, Overload, Battery Low & High, Short Circuit, Over Temperature					Over and under voltage Grid, Overload, Battery Low & High, Short Circuit, Over Temperature			
Grid Input Parameters(UPS MODE) IT Load									
Input Low Cut Voltage	180V ± 5V								
Input Low Recovery Voltage	> 190V ± 5V								
Input High Cut Voltage	260V ± 5V								
Input High Recovery Voltage	< 250V ± 5V								
Grid Input Parameters(Inverter MODE)									
Input Low Cut Voltage	90V ± 5V				120V ± 5V				
Input Low Recovery Voltage	> 100V ± 5V				> 130V ± 5V				
Input High Cut Voltage	290V ± 5V				270V ± 5V				
Input High Recovery Voltage	< 280V ± 5V				< 260V ± 5V				
Input Frequency Range	47Hz - 53Hz								
Battery Charging by Grid	Disable, 5A,10A(Default),15A (Sateable)								
Battery Parameters									
Battery Low Buzzer	10.7V ± 0.2V Per Battery								
Battery Low Cut	10.5V ± 0.2V Per Battery								
Battery Flot	13.5V ± 0.2V Per Battery								
Battery Boost	14.5V ± 0.2V Per Battery								
Grid Charging Voltage (Equalize)	15.5V ± 0.2V Per Battery(After 30 Days)								
Display Parameters	LCD display for Input Voltage, Frequency, Battery - Voltage & Current, Load %, Solar -Voltage & Current & Power ,Temperature								
Display Alarms Protection	Output load Percentage, Grid - On / Fail / High / Low, Battery - Low Pre-alarm / Low Trip , Inverter - On / OFF, Overload Trip, Temperature								
Enclosure	IP 20								
Operating Temp.	0 to 40 Deg C								
Humidity	Up to 95% Rh (non-condensing)								
Cooling	Forced Air (FAN)								
Noise	< 55 dB, distance 1 meter								
Dimensions in mm (L X W X H)	365X340X322					345*520*520		370*750*775	
Weight (Approx. Kgs.)	12 Kgs	16 Kgs	18Kgs	22 Kgs	24Kgs	39 Kgs	55 Kgs	65 Kgs	78 Kgs
Bypass Switch	Relay						SCR		
Wheels	Not Provided					Provided			

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