



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

- Intelligent Charging Algorithm to increase Battery Life
- MPPT based State-of-the-art Latest technology for Optimum Performance
- Smart solar charging current sharing when mains is available
- 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, MCB Trip/Fuse Trip.
- Smart Solar Management (User Configurable)
- Battery Equalizer inside to increase battery life & backup
- Soft start technology
- Cold start technology
- ATC (automatic temperature compensation technology)
- Charging Ampere adjustable (0,5,10 & 15 Amp) in inverter
- Advance Battery Management for longer battery life and prevent battery from overcharging
- Selectable Priority Modes for Grid/Solar/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	24V					48V		96V	120V
Switching Element	MOSFET							IGBT	
Controller	DSP IC 32 BIT								
Max. Battery Capacity	220AH								
Charging Mode	Priority(Grid/Solar)								
Solar Parameters									
MPPT	45V-100V					80V-160V		160V-350V	200V-400
For Max Current (MPPT)	30A	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	10.5A	16A	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)								
Protection	Overload, Battery Low, Battery High, Output Short Ckt., Battery Reverse ,Over Heat @90°C + 10°C , Over/Under Frequency, I/P Hi, I/P Low, SPV High.								
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)	230x272x111	284x274x159	280x274x258	345x335x230	600x350x482	700x350x520	700x350x520		
Weight (Approx. Kgs.)	12 Kgs	16 Kgs	22 Kgs	25 Kgs	27 Kgs	39 Kgs	55 Kgs	65 Kgs	78 Kgs
Bypass Switch	Relay						SCR		
Wheels	Not Provided					Provided			

SUNGARNER ENERGIES LIMITED

Corporate & Factory :

Plot No. 113, Udyog Kendra -II, Sector Ecotech -III ,
Greater Noida, Gautam Budh Nagar, U.P. 201306, India

Middle East and North Africa :

PO Box 924, Postal Code 112,
Sultanate of Oman

◆ Email : info@sungarner.com ◆ Toll Free : 1800-102-2748 ◆ Sales Enquiry : +91-97175-58008 ◆ Service Helpline : +91-74287-44995