



TECHNICAL SPECIFICATIONS

Industrial Grade SOLAR PCU SGI 101 SGI 303

5KVA to 10KVA / 10KVA To 50KVA

TECHNOLOGY	MPWM using IGBT			
RATING	5KVA To 10 KVA / 10 KVA To 50 KVA			
DC BUS	96 V To 192 VDC / 192 V To 360V			
INPUT				
Input Voltage Window	180 V -250 V / 330V - 470V			
Input Frequency	50Hz \pm 10%			
SOLAR INPUT				
TECHNOLOGY	MPPT Converter			
Maximum Open Circuit array voltage				
Operating MPPT Voltage	Depends on Panel			
Maximum Panel current	Depends on Panel			
Reverse Polarity Protection	Short Circuit Diode			
Back feed Protection	Protected using reverse diode			
MPPT Efficiency	96% (Peak)			
OUTPUT				
Transfer time	Mains to Inverter	<2 msec		
	Inverter to Mains	< 2 msec		
Voltage on mains	180V - 250V (P-N)			
Voltage on Inverter	230V (\pm) 1% / 415 \pm 1%			
Power Factor	0.8 lag			
Frequency on Inverter mode	50 Hz \pm 0.5Hz			
Waveform on Inverter mode	Pure Sinewave			
Over Load Capacity	100%	Continuous		
	125%	1 Minute		
Mode of Operation	Designed for Continuous operation			
Inverter Protection	Advanced Electronic Protection for device safety backed up with MCB's & fast acting fuses, high speed pulse by pulse electronic device protection over voltage / under voltage protection, Electronic over current trip .			
Efficiency	On Inverter Mode	>84% on full load		
	On Mains Mode	> 98%		
Cold start facility	Yes			
LED Indication (5 LED with Multi function)				
		*Input On / Input on (R Y B)		
		* Out put On / Output on (R Y B)		
		* Solar on		
		* Battery Low		
		* Over Load		

PROTECTIONS		
		* High speed pulse by pulse electronic
		* Linear current limiting, under voltage trip
		* Short circuits and overload trip
		* Battery deep discharge, mains high & low cut
Multifunctional Solar LCD energy meter		
		• Solar Voltage
		• Solar Current
		• Solar Power
		• Energy generated (Energy generated & delivered to load)
		• Input Voltage
		• Output voltage
		• Battery Voltage
		• Load Current.
		• Output frequency
ALARMS		
		Power Failure
		Battery Low
		UPS Fault
PHYSICAL		
Enclosure Protection Grade		IP - 20
Cooling		Forced Air
Cable Entry		Rear side
ENVIRONMENTAL		
Acoustic Noise level		<60db @ 1.5 meter
Ambient Temperature		0 to 40 Deg C
Storage Temperature		-10 to 70 Deg C
Humidity		Up to 95% RH Non condensing
Altitude		< 3000 Feet above sea level (without derating)
Extreme climatic conditions		AC Environment is required if the temperature goes beyond the normal operating temperature(0-40 deg C)
BATTERY		
Battery Type		SMF/ Tubular
Voltage		96V To 192 V / 192 V To 360 V
Battery Low advance warning at		11 V / Battery
Battery Low cut off at		10.5 V / Battery
Charger Type		CVCC
Charging Current	Mains mode	10A
	Solar Mode	Depends on Panel