

**TECHNICAL SPECIFICATIONS**  
**1 KVA - 10 KVA / 7.5 KVA - 30 KVA / 15 KVA - 150 KVA**  
**OF SOLAR INVERTER / PCU ( POWER CONDITIONING UNIT )**

Standard Rating			
	1 KVA - 10 KVA	7.5 KVA - 30 KVA	15 KVA - 150 KVA
<b>INPUT</b>			
Voltage	230 V AC - 1 Ph	415 V AC - 3 PH 4 Wire	415 V AC - 3 Ph 4 Wire
Opening Range	170 V - 265 V	345 V - 475 V	345 V - 475 V
Frequency	50 Hz		
Frequency Range	47 - 53 Hz		
Power Factor	> 0.8		> 0.92
MPPT Range	1,2,3 KVA : 10 - 100 V	5,7,5,10 KVA : 40 - 200 V	15 - 150 KVA : 100 - 800 V
<b>OUTPUT</b>			
Rating	1/2/3/5/7.5/10 KVA	10/15/20/25/30 KVA	15/20/25/30/40/45/50/60 75/80/100/120/150 KVA
Voltage	220 / 230 V AC		400 / 415 V AC
Voltage Regulation	± 1%		
Power Factor	0.8 lag to unity		
Crest Factor	3 : 1		
Frequency	50 / 60 Hz		
Frequency Regulation	± 0.1%		
Wave form	True Sine wave		
Harmonic Distortion	THD < 3%		
Overload Rating	150% for 30 seconds		
Transient Response	± 5% for full load change		
Response Time	Recovery to ± 2% within 5 msec		
<b>DC Link</b>			
Nominal DC Voltage	1,2,3 KVA : 12-48V	4-10KVA:72/96/120/144/180V 15-150KVA:240,360,384,408V	
DC Bus Volts Ripple	< 2%		
Battery Type	VRLA Sealed Maintenance Free (SMF) / Lead Acid Tubular (Flooded type) / C-10/C-20		
Isolation	DC Circuit Breaker		
<b>EFFICIENCY (Typical)</b>			
Inverter Efficiency	> 95%		
Overload Efficiency	> 92%		
<b>PROTECTIONS</b>			
Rectifier	I/P AC Over voltage / Under voltage		
In case of Online	DC Over voltage & DC Low		
	Battery Charging Over current		
	I/P Single Phasing		
	I/P Phase Reversal		
Inverter	O/P Over voltage / Under voltage		
	O/P Overload		
	O/P Short circuit		
	O/P Under voltage		
	Over Temperature		

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<b>AUDIO ALARM</b>			
	Rectifier Trip		
	Overload		
	Mains Fail		
	Battery Low with Pre-alarm		
	System Trip		
<b>METERING</b>			
	Multifunction LCD Display to read following parameters with user friendly Mimic Diagram		
	I/P Voltage & Current	1 Ph Parameters upto 30 KVA	
	I/P Frequency		
	Battery Voltage		
	Battery charging / discharging current		
	OP Voltage		
	OP Current		
	OP Frequency		
	Solar PV Voltage		
	Solar PV Current		
<b>PHYSICAL</b>			
Dimensions	260(w)x545(d)x600(h)mm (1 - 5 KVA)	325(w)x650(d)x650(h)mm (7.5 - 15 KVA)	400(w)x900(d)x850(h)mm 15 KVA
	325(w)x550(d)x650(h)mm (6 - 10 KVA)	400(w)x800(d)x850(h)mm (20 - 30 KVA)	400(w)x900(d)x950(h)mm (20 - 40 KVA)
			800(w)x800(d)x1800(h)mm (50 - 100 KVA) - A
			A+1000(w)x800(d)x1800(h)mm (120 - 150 KVA)
Enclosure	IP 21		
Cable Entry	Bottom / As per requirement		
Colour	Siemens gray / Sea Blue		
<b>ENVIRONMENT</b>			
Operating Temperature	0 to 45 <sup>o</sup>		
Storage	- 10 to 70 <sup>o</sup>		
Humidity	up to 95% RH (non - condensing)		
Cooling	Forced Air Cooling		
Noise	< 55 db	< 60 db	< 65 db
Altitude	< 3000 mtr.above mean sea level.		
<b>OPTIONAL FEATURES</b>			
Enclosure	IP 42 / Industrial Grade		
Cable Entry	Top		
Input Power Factor	0.99 (in case Online)		
Operating Temperature	50 <sup>o</sup> C		
Auto Changeover to Bypass supply ( Static Bypass )			
Remote Indicating Panel			
Computer Interface			
Data Logger and Self Diagnostics Feature			
SNMP			
Output Frequency	UP to 400 Hz		
Auto / Manual Battery Test / Discharge Facility			
Parallel Load Sharing / N + 1 Configuration is available			
Individual Battery Monitoring system			
19"Rack mounting type Models available			
IEC Conformance on request			
ECO mode with 98% Efficiency			
Custom Built / Mil - Grade System			

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