







## SEOG SERIES

-  MPPT for maximum solar utilisation
-  Less dependency on grid
-  3 modes of priority
-  Optional grid charging
-  LCD display
-  Optional two-way IoT access

1KVA/24V

1-6KVA/48V

5-7.5KVA/96V

5-15KVA/120V

15-20KVA/240V \*

## MPPT-BASED PCU (SINGLE PHASE)

### The Heavyduty Soldier of Solar Inverters

Built for harsh Indian weather conditions. Our MPPT-based PCU uses smart management of renewable solar power, grid supply and battery. This allows it to deliver power seamlessly for all electrical applications - thus significantly reducing diesel consumption and electricity bill. Result: Economical power solution giving benefit of optimal renewable energy - 365 days a year

\*Other customised ratings available on request

## LOW VOLTAGE 48V 1-6 KVA SEOG SERIES MPPT-BASED PCU



With Energiaa's range of SEOG series single-phase inverters, gone is the time where the entire family had to sit in one room in case of a power-cut. These are build for maximum power extraction, thanks to our latest MPPT polynomial algorithm. We use advanced DSP Controllers that deliver high-performance for real-time signal processing. You can now enjoy a much faster RoI and peace of mind with this solar companion.

### Applications



RATINGS	1KVA/24	1KVA/48V	2KVA/48V	3KVA/48V	4KVA/48V	5KVA/48V	6KVA/48V
Model No.	SEOG-024-1K0-1P	SEOG-048-1K0-1P	SEOG-048-2K0-1P	SEOG-048-3K0-1P	SEOG-048-4K0-1P	SEOG-048-5K0-1P	SEOG-048-6K0-1P
<b>A. MPPT CHARGER</b>							
Type (Buck)	MPPT						
PV Nominal Capacity (KWp)	1	1	2	3	4	5	6
Max PV Strings in parallel	2	1	2	3	4	5	6
No of MPPT Channel/No. of Input	1/1						
Max. Open Circuit Voltage ( Voc)	105	190					
MPPT Tracking Range (Vmp)	35-72	75-160					
Max Output Current (A)	40	20	40	60	80	100	120
Peak Charging Efficiency	≥92%			≥94%			
<b>B. SOLAR INVERTER</b>							
Nominal Capacity	1KVA	1KVA	2KVA	3 KVA	4 KVA	5KVA	6KVA
Output Current (A)	3.5	3.5	7.0	10.4	13.9	17.4	20.8
Battery Voltage (V)	24	48					
Output Voltage/ Freq/Phase	230V(± 2%)/50Hz/1P+N						
Peak Efficiency	≥85%	≥88%					
Over Loads: 60 sec/ 30 sec/ 5 sec	101-110%/111-150% /151-200%						
Auto Bypass Feature	Provided						
<b>C. GRID CHARGER</b>							
Grid Voltage Range (V)	230V (+10% & -20%)						
Grid Freq Range(Hz)	50Hz (+5% & -5%)						
Max Grid Import Power	1.5KVA	1.5KVA	3KVA	4.5 KVA	6 KVA	7.5KVA	9KVA
<b>D. PROTECTIONS &amp; DISPLAY PARAMETERS</b>							
	<b>PROTECTIONS</b>				<b>LCD PARAMETERS</b>		
PV Side	• Reverse Polarity, PV Overload, Surge Protection (MOV)				• Voltage, Current, Power , Energy		
Battery Side	• Reverse Polarity, O/U Voltage, Current Limit				• Voltage, Current, Battery Charging/Discharging		
Grid Side	• O/U Voltage, O/U Frequency , Surge Protection (MOV)				• Voltage, Frequency		
Load Side	• O/U Voltage, Overloads, Short Circuit , Surge Protection (MOV)				• Voltage, Current, Frequency, Load %		
Miscellaneous	• Over Temperature				• Mode of Operation, Faults		
<b>E. MISCELLANEOUS</b>							
Switchgear Protection	MCB/MCCB provided in PV, Battery, Load & Grid path.						
LED Indications	Power On, Inverter ON, Solar Present/Charging, Load On Grid/Charging, Battery Low, System Trip						
Remote Monitoring	GPRS based Modem (at extra cost)						
Ingress Protection	IP-20( Indoor Type )						
Operating Temperature	0-50 degrees (without Derating)						
Type of Cooling	Forced Cooled(Temp. Controlled)						
Humidity	Max. 95% Non -Condensing						
Altitude	1000m above sea level						
Color Shade	Green/White						
Dimensions(H X W X D)	175 X 450 X 360	347X275X385	348X295X415	448X275X580	448X275X580	498X300X680	498X300X680

## HIGH VOLTAGE 5-10 KVA SEOG SERIES MPPT-BASED PCU

Our high-voltage 5-10 KVA SEOG Series MPPT-based PCU is built to perform steadily in difficult grid conditions. Whether it is the heavy load of a Petrol Pump, the 24-hour-demand of your office load, or your school that is looking to adopt solar power, this heavy-duty inverter will drastically reduce electricity consumption and diesel-dependence. Along with a large LCD display and IoT-readiness, this inverter also offers faster Rol.



### Applications



RATINGS	5KVA/96V	6KVA/96V	7.5KVA/96V	5KVA/120V	7.5KVA/120V	10KVA/120V
Model No.	SEOG-096-5K0-1P	SEOG-096-6K0-1P	SEOG-096-7K5-1P	SEOG-120-5K0-1P	SEOG-120-7K5-1P	SEOG-120-10K0-1P
<b>A. MPPT CHARGER</b>						
Type (Buck)	MPPT					
PV Nominal Capacity (Total KWp)	5	6	7.5	5	7.5	10
Max PV Strings in parallel	4	5	6	4	6	6
No of MPPT Channel/No. of Input	1/1					
Max. Open Circuit PV Volts ( Voc)	360					
MPPT Voltage Range (Vmp)	140-299			165-299		
Max Output Current (A)	50	60	75	40	60	80
Peak Charging Efficiency	≥94%					
<b>B. SOLAR INVERTER</b>						
Nominal Capacity	5KVA	6KVA	7.5KVA	5KVA	7.5KVA	10KVA
Output Current (A)	17.5	21	26	17.5	26	35
Battery Voltage (V)	96			120		
Output Voltage/ Freq/Phase	230V(± 2%)/50Hz/1P+N					
Peak Efficiency	≥88%					
Over Loads: 60 sec/ 30 sec/ 5 sec	101-110%/111-150% /151-200%					
Auto Bypass Feature	Provided					
<b>C. GRID CHARGER</b>						
Grid Voltage Range	230V (+10% & -20%)					
Grid freq Range(Hz)	50Hz (+5% & -5%)					
Max Grid Import Power	7.5KVA	9KVA	11.3KVA	7.5KVA	11.3KVA	15KVA
<b>D. PROTECTIONS &amp; DISPLAY PARAMETERS</b>						
	<b>PROTECTIONS</b>			<b>LCD PARAMETERS</b>		
PV Side	• Reverse Polarity, PV overload, Surge Protection (MOV)			• Voltage, Current, Power , Energy		
Battery Side	• Reverse Polarity, O/U Voltage, Current Limit			• Voltage, Current, Battery Charging/Discharging		
Grid Side	• O/U Voltage, O/U Frequency , Surge Protection (MOV)			• Voltage, Frequency		
Load Side	• O/U Voltage, Overloads, Short Circuit , Surge Protection (MOV)			• Voltage, Current, Frequency, Load %		
Miscellaneous	• Over Temperature			• Mode of Operation, Faults		
<b>E. MISCELLANEOUS</b>						
Switchgear Protection	MCB/MCCB provided on PV, Battery, Load & Grid path.					
LED Indications	Power On, Inverter ON, Solar Present/Charging, Load On Grid/Charging, Battery Low, System Trip					
Remote monitoring	GPRS based Modem (at extra cost)					
Ingress Protection	IP-20( Indoor Type )					
Type of Cooling	Forced Cooled(Temp. Controlled)					
Operating temperature	0-50 degrees (without Derating)					
Humidity	Max. 95% Non -Condensing					
Altitude	1000m above sea level					
Color Shade	Black					
Dimensions(H X W X D)	650X375X625					650X400X700

## HIGH VOLTAGE 10-20 KVA SEOG SERIES MPPT-BASED PCU



Our high-voltage 10-20 KVA SEOG Series MPPT-based PCU is built to perform steadily in difficult grid conditions. Whether it is the heavy load of a Petrol Pump, the 24-hour-demand of your office load, or your school that is looking to adopt solar power, this heavy-duty inverter will drastically reduce electricity consumption and diesel-dependence. Along with a large LCD display and IoT-readiness, this inverter also offers faster Rol.

### Applications



RATINGS	12.5KVA/120V	15KVA/120V	15KVA/240V	20KVA/240V
Model No.	SEOG-120-12K5-1P	SEOG-120-15K0-1P	SEOG-240-15K0-1P	SEOG-240-20K0-1P
<b>A. MPPT CHARGER</b>				
Type (Buck)	MPPT			
PV Nominal Capacity (Total KWp)	10	15	15	20
Max PV Strings in parallel No of MPPT Channel/No. of Input	6	9	5	6
Max. Open Circuit PV Volts ( Voc)	360		700	
MPPT Voltage Range (Vmp)	165-299		365-560	
Max Output Current (A)	80	120	60	80
Peak Charging Efficiency	≥94%			
<b>B. SOLAR INVERTER</b>				
Nominal Capacity	12.5KVA	15KVA	15KVA	20KVA
Output Current (A)	43.5	52	52	70
Battery Voltage (V)	120		240	
Output Voltage/ Freq/Phase	230V(± 2%)/50Hz/1P+N			
Peak Efficiency	≥88%			
Over Loads: 60 sec/ 30 sec/ 5 sec	101-110%/111-150% /151-200%			
Auto Bypass Feature	Provided			
<b>C. GRID CHARGER</b>				
Grid Voltage Range	230V (+10% & -20%)			
Grid freq Range(Hz)	50Hz (+5% & -5%)			
Max Grid Import Power	18.7KVA	22.5KVA	22.5KVA	30KVA
<b>D. PROTECTIONS &amp; DISPLAY PARAMETERS</b>				
	<b>PROTECTIONS</b>		<b>LCD PARAMETERS</b>	
PV Side	• Reverse Polarity, PV overload, Surge Protection (MOV)		• Voltage, Current, Power , Energy	
Battery Side	• Reverse Polarity, O/U Voltage, Current Limit		• Voltage, Current, Battery Charging/Discharging	
Grid Side	• O/U Voltage, O/U Frequency , Surge Protection (MOV)		• Voltage, Frequency	
Load Side	• O/U Voltage, Overloads, Short Circuit , Surge Protection (MOV)		• Voltage, Current, Frequency, Load %	
Miscellaneous	• Over Temperature		• Mode of Operation, Faults	
<b>E. MISCELLANEOUS</b>				
Switchgear Protection	MCB/MCCB provided on PV, Battery, Load & Grid path.			
LED Indications	Power On, Inverter ON, Solar Present/Charging, Load On Grid/Charging, Battery Low, System Trip			
Remote monitoring	GPRS based Modem (at extra cost)			
Ingress Protection	IP-20( Indoor Type )			
Type of Cooling	Forced Cooled(Temp. Controlled)			
Operating temperature	0-50 degrees (without Derating)			
Humidity	Max. 95% Non -Condensing			
Altitude	1000m above sea level			
Color Shade	Black			
Dimensions(H X W X D)	650X450X700	667.50X500X700	650X450X700	667.50X500X700