

— MPPT-based PCU · single phase

SEOG series MPPT solar PCU

The heavy-duty soldier of solar inverters, built for harsh Indian weather conditions.

1–20 kVA · 24 to 240 V

Single phase

Designed and built in India



1–20 kVA

single-phase ratings

24–240 V

battery voltages

≥94 %

peak charging efficiency

3

priority modes

— Overview

Solar, grid and battery, managed smartly

The SEOG series MPPT-based PCU manages solar power, the grid supply and the battery to deliver power seamlessly for every electrical application, cutting diesel use and electricity bills. The result is an economical power solution that makes the most of solar energy 365 days a year.

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

Low voltage, 48 V: 1–6 kVA

Built for maximum power extraction with an MPPT polynomial algorithm and advanced DSP controllers for real-time signal processing, for a faster return on investment.

Homes · bank ATMs · shops · clinics · gyms · farmhouses

High voltage, 96–240 V: 5–20 kVA

Built to perform steadily in difficult grid conditions, from petrol pump loads to round-the-clock offices and schools, with a larger LCD and IoT readiness.

Petrol pumps · schools · hotels · rural microgrids · cold storage · hospitals

Ratings

1 kVA / 24 V

1–6 kVA / 48 V

5–7.5 kVA / 96 V

5–15 kVA / 120 V

15–20 kVA / 240 V

— Low voltage, 24 V and 48 V

SEOG 1–6 kVA

	1 kVA / 24 V	1 kVA / 48 V	2 kVA / 48 V	3 kVA / 48 V	5 kVA / 48 V	6 kVA / 48 V
Model number	SEOG-024-1K0-1P	SEOG-048-1K0-1P	SEOG-048-2K0-1P	SEOG-048-3K0-1P	SEOG-048-5K0-1P	SEOG-048-6K0-1P
A. MPPT charger						
Type (buck)	MPPT					
PV nominal capacity (kWp)	1	1	2	3	5	6
Max. PV strings in parallel	2	1	2	3	5	6
No. of MPPT channels / inputs	1/1					
Max. open-circuit voltage (Voc)*	105 V			190 V		
MPPT tracking range (Vmp)*	32–72 V			75–160 V		
Max. output current (A)	40	20	40	60	100	120
Peak charging efficiency	≥92%			≥94%		
B. Solar inverter						
Nominal capacity	1 kVA	1 kVA	2 kVA	3 kVA	5 kVA	6 kVA
Output current (A)	3.5	3.5	7.0	10.4	17.4	20.8
Battery voltage (V)	24			48		
Output voltage / frequency / phase	230 V (±2%) / 50 Hz / 1P+N					
Peak efficiency	≥85%			≥88%		
Overloads: 60 s / 30 s / 5 s	101–110% / 111–150% / 151–200%					
Auto bypass	Provided					
C. Grid charger						
Grid voltage range	230 V (+10% / –20%)					
Grid frequency range	50 Hz (+5% / –5%)					
Max. grid import power	1.5 kVA	1.5 kVA	3 kVA	4.5 kVA	7.5 kVA	9 kVA
E. Miscellaneous						
Switchgear protection	MCB/MCCB provided on PV, battery, load and 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	IP20 (indoor type)					
Operating temperature	0–50 °C (without derating)					
Cooling	Forced cooled (temperature controlled)					
Humidity	Max. 95%, non-condensing					
Altitude	1000 m above sea level					
Colour	Green / white					
Dimensions (H x W x D, mm)	175 x 450 x 360	347 x 275 x 385		348 x 295 x 415	448 x 275 x 580	498 x 300 x 680

* Revised Voc and Vmp effective from 21 September 2023.

The above models are compatible with lead-acid batteries only. Lithium compatibility requires extra hardware and software (at extra cost), which is factory fitted only.

Statcon Energiaa Pvt. Ltd. reserves the right to modify or withdraw any of the ratings or technical specifications. Other customised ratings are available on request.

— High voltage, 96 V and 120 V

SEOG 5–10 kVA

	5 kVA / 96 V	6 kVA / 96 V	7.5 kVA / 96 V	5 kVA / 120 V	7.5 kVA / 120 V	10 kVA / 120 V
Model number	SEOG-096-5K0-1P	SEOG-096-6K0-1P	SEOG-096-7K5-1P	SEOG-120-5K0-1P	SEOG-120-7K5-1P	SEOG-120-10K0-1P
A. MPPT charger						
Type (buck)	MPPT					
PV nominal capacity (total kWp)	5	6	7.5	5	7.5	10
Max. PV strings in parallel	3	4	5	3	5	6
No. of MPPT channels / inputs	1/1					
Max. open-circuit PV volts (Voc)*	320 V					
MPPT voltage range (Vmp)*	165–280 V					
Max. output current (A)	50	60	75	40	60	80
Peak charging efficiency	≥94%					
B. Solar inverter						
Nominal capacity	5 kVA	6 kVA	7.5 kVA	5 kVA	7.5 kVA	10 kVA
Output current (A)	17.5	21	26	17.5	26	35
Battery voltage (V)	96		120			
Output voltage / frequency / phase	230 V (±2%) / 50 Hz / 1P+N					
Peak efficiency	≥88%					
Overloads: 60 s / 30 s / 5 s	101–110% / 111–150% / 151–200%					
Auto bypass	Provided					
C. Grid charger						
Grid voltage range	230 V (+10% / –20%)					
Grid frequency range	50 Hz (+5% / –5%)					
Max. grid import power	7.5 kVA	9 kVA	11.25 kVA	7.5 kVA	11.25 kVA	15 kVA
E. Miscellaneous						
Switchgear protection	MCB/MCCB provided on PV, battery, load and 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	IP20 (indoor type)					
Operating temperature	0–50 °C (without derating)					
Cooling	Forced cooled (temperature controlled)					
Humidity	Max. 95%, non-condensing					
Altitude	1000 m above sea level					
Colour	Black					
Dimensions (H x W x D, mm)	650 x 375 x 625		550 x 325 x 697	650 x 375 x 625		550 x 325 x 697

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— High voltage, 120 V and 240 V

SEOG 12.5–20 kVA

	12.5 kVA / 120 V	15 kVA / 120 V	15 kVA / 240 V	20 kVA / 240 V
Model number	SEOG-120-12K5-1P	SEOG-120-15K0-1P	SEOG-240-15K0-1P	SEOG-240-20K0-1P
A. MPPT charger				
Type (buck)	MPPT			
PV nominal capacity (total kWp)	10	15	15	20
Max. PV strings in parallel	6	9	5	6
No. of MPPT channels / inputs	1/1			
Max. open-circuit PV volts (Voc)*	320 V		650 V	
MPPT voltage range (Vmp)*	165–280 V		330–570 V	
Max. output current (A)	80	120	60	80
Peak charging efficiency	≥94%			
B. Solar inverter				
Nominal capacity	12.5 kVA	15 kVA	15 kVA	20 kVA
Output current (A)	43.5	52	52	70
Battery voltage (V)	120		240	
Output voltage / frequency / phase	230 V (±2%) / 50 Hz / 1P+N			
Peak efficiency	≥88%			
Overloads: 60 s / 30 s / 5 s	101–110% / 111–150% / 151–200%			
Auto bypass	Provided			
C. Grid charger				
Grid voltage range	230 V (+10% / –20%)			
Grid frequency range	50 Hz (+5% / –5%)			
Max. grid import power	18.7 kVA	22.5 kVA	22.5 kVA	30 kVA
E. Miscellaneous				
Switchgear protection	MCB/MCCB provided on PV, battery, load and 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	IP20 (indoor type)			
Operating temperature	0–50 °C (without derating)			
Cooling	Forced cooled (temperature controlled)			
Humidity	Max. 95%, non-condensing			
Altitude	1000 m above sea level			
Colour	Black			
Dimensions (H x W x D, mm)	650 x 450 x 753	667.50 x 500 x 700	650 x 450 x 753	667.50 x 500 x 700

— D. Protections and display parameters

Protections		LCD parameters
PV side	Reverse polarity, PV overload, surge protection (MOV)	Voltage, current, power, energy
Battery side	Reverse polarity, over/under voltage, current limit	Voltage, current, battery charging / discharging
Grid side	Over/under voltage, over/under frequency, surge protection (MOV)	Voltage, frequency
Load side	Over/under voltage, overloads, short circuit, surge protection (MOV)	Voltage, current, frequency, load %
Miscellaneous	Over-temperature	Mode of operation, faults

* Revised Voc and Vmp effective from 21 September 2023. Lead-acid batteries only; lithium needs factory-fitted hardware and software at extra cost.