PG SERIES UNI Inverter Charger

PG3.0S / PG4.0S / PG6.0S / PG8.0S 48VDC 3kW / 4kW / 6kW / 8kW 230VAC

FEATURES



- All-in-one design significantly saves installation space and installation time
- Inverter charger combination
  - Rated power 48V 3kW / 4kW / 6kW / 8kW
  - High-frequency design featuring compact size, ultra-light weight, and quiet operation
  - Powering the AC load through 48V auxiliary battery and automatically perform charging upon connected to shore power
  - Outstanding overload capability for all kinds of demanding AC loads
  - Powerful AC charger with current up to 150A (48V)
  - Power control and power assist function to compose the generator hybrid system
  - High efficiency up to 96.5% (PG3.0S / PG4.0S)
  - Extreme low zero-load power at 14.4W (PG3.0S / PG4.0S)
- Integrated MPPT solar charge controller
  - Charge 48V auxiliary battery from PV with a wide range input voltage
  - Max charging current: 30A
- Integrated bi-directional DC-DC charger
  - Euro 6 compatible, PG charges the auxiliary battery while driving and maintaining the starter battery when parked
  - Auxiliary battery current: 48V 30A with 12V alternator / 48V 60A with 24V alternator (PG4.0S / PG6.0S / PG8.0S)
- Equipped with an insulation guard that automatically shuts down inverter output in case of low insulation, ensuring user safety
- Supports three-phase operation (PG4.0S)
- Plug and play WAGO connectors ensure fast, reliable installation and prevent mismating
- Automatic power on when there is power from grid, or PV, or alternator

Model NO.	PG3.0S	PG4.0S	PG6.0S	PG8.0S
Inverter Charger				
Nominal Battery Voltage (V)	48			
Input Voltage Range (V)	40 ~ 57			
Zero Load Current (mA)	≤ 300		≤ 400	
Static Current (mA)	≤ 1			
Cont. Output Power @25℃ (kVA / kW)	3.0	4.0	6.0	8.0
Cont. Output Power @40℃ (kVA / kW)	3.0	3.0	5.8	5.8
Peak Power (2s) (kW)	6.0	8.0	12.0	16.0
AC Output Voltage / Frequency	230Vac ± 2%, 50Hz ± 0.1%			
Inverter / AC Charger Efficiency (%)	Maximum: 96.5, full load: 95.2	Maximum: 96.5, full load: 94.8	Maximum: 96, Full load: 95.5	Maximum: 96, Full load: 95
AC Input Voltage / Frequency	176 ~ 264Vac, 45 ~ 65Hz			
Max. AC Charge Current (A)	55	75	110	150
Transfer Time (ms)	2 (<15 in Weak AC source mode)			
Max. AC Input Current (A)	25		40	
Bi-directional DC-DC Charger				
ALT Voltage (V)	12 / 24			
Static Power (mA)	< 1 @ 12V ALT, < 2 @ 24V ALT			
ALT Current (A)	60 @ 12V ALT / 24V ALT	120 @ 12V ALT / 24V ALT		
Auxiliary Battery Max. Charge/Discharge Current (A)	15 (48V BAT) @ 12V ALT, 30 (48V BAT) @ 24V ALT	30 (48V BAT) @ 12V ALT, 60 (48V BAT) @ 24V ALT		
Converter Power (W)	750 @ 12V ALT, 1500 @ 24V ALT	1500 @ 12V ALT, 3000 @ 24V ALT		
Efficiency (%)	Maximum: 95.5, Full load: 94.8 @ 12V ALT Maximum: 97.5, Full load: 97.0 @ 24V ALT			
MPPT				
PV Input Voltage Range (V)	15~60 @ 25℃			
Max. PV Short-Circuit Current (A)	60			
Max. Power of PV Panels (W)	1800			
Max Charging Current (A)	30			
Efficiency (%)	Maximum: 97.6, Full load: 95		Maximum: 96, Full load: 95 @ 30V	
MPPT Efficiency (%)	> 99.5			
Others				
Programmable Relay	Yes			
Insulation Guard	Yes (Disabled by default)			
Dimensions (mm)	449.9 x 313.2 x 86.9		506.6 x 351.2 x 88.1	
Weight (kg)	8.8		12.5	
Cooling	Forced fan			
Noise (dB)	≤ 55			≤ 62
IP Rating	IP20			
Altitude (m)	0 ~ 5000 (Derating when > 2000)			
Operating Temperature Range (℃)	-30 ~ 65 (Derating when > 30)			
Safety Standards	IEC62109-1, IEC62109-2, IEC62477			
EMC Standards	EN61000-6-3, EN61000-6-1, ECE R10		EN61000-6-4, EN61000-6-2, ECE R10	