



Off-grid Energy Storage Inverter Series

Product Highlights

- █ Lithium battery activation function by PV or Utility
- █ Compatible work with LiFePO4 battery via RS485
- █ Pure sine wave
- █ Power factor 1.0
- █ PV input Voltage 60Vdc-500Vdc
- █ Built-in MPPT 60A/100A/120A
- █ Capable to work without battery
- █ Detachable dust cover for harsh environment
- █ WiFi remote monitoring optional
- █ Support multiple output priority: UTL,SOL, SBU, SUB
- █ EQ function to optimize battery performance and extend lifecycle

MODEL	TG-PGF-3500E	TG-PGF-5500E	TG-PGF-6200E
Capacity	3.5 KVA/3.5KW	5.5KVA/5.5KW	6.2KVA/6.2KW
Parallel Capability	NO		
Lithium Battery Activation	YES (By PV or Utility)		
Lithium Battery Communication	YES (RS485)		
INPUT			
Nominal Voltage	230VAC		
Acceptable Voltage Range	170-280VAC (For personal Computer); 90-280VAC (For Home Appliances)		
Freduency	50/60 Hz (Auto sensing)		
OUTPUT			
Nominal Voltage	220/230VAC±5%		
Surge Power	7000VA	11000VA	12400VA
Freduency	50/60 Hz		
Waveform	Pure Sine wave		
Transfer Time	10ms (For personal Computer); 20ms (For Home Appliances)		
Peak Efficiency (PV to INV)	96%		
Peak Efficiency (Battery to INV)	93%		
Overload Protection	5s@>=140% load; 10s@110%~140% load		
Crest Factor	3:1		
Admissible Power Factor	0.6~1 (inductive or capacitive)		
BATTERY			
Battery Voltage	24VDC	48VDC	48VDC
Floating Charge Voltage	27VDC	54VDC	54VDC
OverCharge Protection	33VDC	63VDC	63VDC
Charging Method	CC/CV		
SOLAR CHARGER & AC CHARGER			
Solar Charger TYPE	MPPT		
Max.PV Array Power	4000W	5500W	6500W
Max. PV Array Open Circuit Voltage	500VDC		
PV Array MPPT Voltage Range	60VDC ~ 500VDC		
Max. Solar Input Current	15A	18A	27A
Max. Solar Charge Current	100A	100A	120A
Max. AC Charge Current	80A	80A	80A
Max. Charge Current (PV+AC)	100A	100A	120A
PHYSICAL			
Dimensions, DxWxH(mm)	358*295*100	438*295*105	438*295*105
Package Dimensions, DxWxH(mm)	465*380*175	560*375*185	560*375*185
Net Weight(Kg)	7	9	9
Communication Interface	RS232 + RS485		
ENVIRONMENT			
Operating Temperature Range	(-10°C to 55°C)		
Storage temperature	(-15°C ~ 60°C)		
Humidity	5% to 95% Relative Humidity (Non-condensing)		



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- Built-in 2 MPPT
- Lithium battery activation function by PV or Utility
- Compatible work with LiFePO4 battery via RS485
- Pure Sine Wave
- Power factor 1.0
- PV Input 500Vdc Max
- Built-in MPPT 140A/160A
- Capable to work without battery
- Detachable dust cover for harsh environment
- Wifi remote monitoring optional
- Support multiple output priority: UTL, SOL, SBU, SUB
- EQ function to optimize battery performance and extend lifecycle

MODEL	TG-PGF-8500E	TG-PGF-11000E
Capacity	8.5KVA/8.5KW	11KVA/11KW
Maximum PV Input Power	10KW	11KW
Parallel Capability	NO	
Lithium Battery Activation	YES (By PV or Utility)	
Lithium Battery Communication	YES (RS485)	
INPUT		
Nominal Voltage	230VAC	
Acceptable Voltage Range	170-280VAC (For personal Computer); 90-280VAC (For Home Appliances)	
Freduency	50/60 Hz (Auto sensing)	
OUTPUT		
Nominal Voltage	220/230/240VAC	
Surge Power	17000VA	22000VA
Freduency	50/60 Hz	
Waveform	Pure Sine wave	
Transfer Time	10ms (For personal Computer); 20ms (For Home Appliances)	
Peak Efficiency	94%	
Overload Protection	5s@>=140% load; 10s@110%~140% load	
Admissible Power Factor	0.6~1 (inductive or capacitive)	
Grid-tie Operation	NO	
BATTERY		
Maximum Discharge Current	180A	220A
Battery Voltage	48VDC	
Floating Charge Voltage	54VDC	
OverCharge Protection	63VDC	
Charging Method	CC/CV	
SOLAR CHARGER & AC CHARGER		
Solar Charger TYPE	MPPT	
Max. PV Array Power	5000W*2	5500W*2
Max. PV Array Open Circuit Voltage	500VDC	
PV Array MPPT Voltage Range	60VDC ~ 500VDC	
Max. Solar input Current	18A*2	18A*2
Max. Solar Charge Current	140A	160A
Max. AC Charge Current	120A	
Max. Charge Current	140A	160A
PHYSICAL		
Dimensions,DxWxH(mm)	540*415*122	540*415*122
Net Weight (Kgs)	14	15
Communication Interface	RS232 / RS485 / DRY CONTACT	
LCD	YES	
ENVIRONMENT		
Operating Temperature Range	-10°C to 55°C	
Storage temperature	-15°C~ 60°C	
Humidity	5% to 95% Relative Humidity (Non-condensing)	