

## SPECIFICATIONS

Line Mode Specifications			
Model	GPEO-4KL1	GPEO-6KL1	GPEO-12KL1
Rated Output Power	4000VA	6000VA	12000VA
	4000W	6000W	12000W
Nominal DC Input Voltage	24V	48V	48V
Input Voltage Waveform	Sinusoidal (utility or generator)		
Nominal Input Voltage	230Vac		
Low Line Voltage Disconnect	90Vac±3V(For Home Appliances: APL)170Vac±3V(For Computers: UPS)		
Low Loss Voltage Re-connect	100Vac±3V(For Home Appliances: APL)180Vac±3V(For Computers: UPS)		
High Line Voltage Disconnect	280Vac±3V		
High Line Voltage Re-connect	270Vac±3V		
Max AC Input Voltage	280Vac±3V		
Nominal Input Frequency	50Hz/60Hz(Auto detection)		
Low Line Frequency Disconnect	40±1Hz		
Low Line Frequency Re-connect	42±1Hz		
High Line Frequency Disconnect	65±1Hz		
High Line Frequency Re-connect	63±1Hz		
Output Voltage Waveform	As same as input waveform		
Output Short Circuit Protection	Line mode: Circuit Breaker; Battery mode: Electronic Circuits		
Efficiency (Line Mode)	>95%(Rated R load, battery full charged)		
Transfer Time (Single unit)	10ms typical (UPS); 20ms typical (Appliances)		
Transfer Time (Parallel)	50ms typical		
Pass Through Without Battery	Yes		
Max. Bypass Overload Current	28A	40A	70A
Max. Bypass Input Current	28A	50A	90A
Max. Inverter/Rectifier Current	18.2A/4000W	27.3A/6000W	54.5A/12000W

# Solar inverter

Utility Charge Mode Specifications			
Model	GPEO-4KL1	GPEO-6KL1	GPEO-12KL1
Nominal Input Voltage	230Vac		
Input Voltage Range	90-280Vac		
Nominal Output Voltage	Dependent on battery type		
Max. Grid Charge Current	100A	120A	210A
Charge Current Regulation	10A-Max. Grid Charge Current (Adjustable unit is 1A)		
Over Charge Protection	Yes		
Grid charging Current (I.max/I.min)	100A/25A	120A/30A	210A/50A
Relationship between battery charging current and grid voltage.			
Solar Charging & Grid Charging			
Max. PV Open Circuit Voltage	500V		
PV voltage range	85V-450V		
Nominal Voltage	400V	300V	
Max. Input Power	6000W	8000W	16000W
Max. Solar Charging Current	120A	120A	210A
Max. Charging Current(PV+Grid)	120A	120A	210A
Max.PV Input Current	15A	27A	27A+27A
Min. Startup Voltage	80V	75V	75V
Charge Algorithm			
Algorithm	<b>Three stage:</b> Boost CC (Constant current stage)-> Boost CV(Constant voltage stage)-> Float FV(Constant voltage stage)		
Charging Curve			
Battery Type Setting	Battery Type	Boost CC/CV	Float
	AGM	28.2V/56.4V	27V/54V
	Flooded	29.2V/58.4V	27V/54V
	Self-defined Lithium	Adjustable, up to 30V/60V	

Inverter Mode Specifications			
Model	GPEO-4KL1	GPEO-6KL1	GPEO-12KL1
Rated Output Power	4000VA	6000VA	12000VA
	4000W	6000W	12000W
Nominal DC Input Voltage	24V	48V	48V
DC Max.charging/Discharging current	120A/160A	120A/125A	210A/230A
Output Voltage Waveform	Pure sine wave		
Nominal Output Voltage	230Vac±5%		
Nominal Output Frequency(Hz)	50±0.3Hz/60±0.3Hz(Adjustable)		
Parallel capability	No	Yes, up to 12 units	
Peak Efficiency	93%		
Over-Load Protection(SMPS load)	5s@≥150%load; 10s@105%~150%load		
Surge Rating	2* rated power for 5s		
Capable of Starting Electric	Yes		
Output Short Circuit Protection	Yes		
Cold Start Voltage	23V	46V	
Low DC Input Shut-down Load < 50%/@Load ≥ 50%	21.5V/21V	43V/42V	
High DC Input Alarm & Fault	31V±0.2V	62V±0.4V	
High DC Input Recovery	29V±0.2V	60V±0.4V	
Battery Voltage Limitation (V.bat0/V.bat1/V.bat2)	21V/27.2V/31V	42V/50V/62V	
When battery voltage is lower than "V.bat1", output power will be derated. The minimum AC output voltage is 180V.	<p>The graph plots Output Load (%) on the y-axis (0 to 100) against Battery Voltage (V) on the x-axis. The load is constant at 100% until it reaches V.bat1. At V.bat1, the load begins to decrease linearly, reaching 80% at V.bat0. At V.bat2, the load drops to 0%.</p>		
Temperature Limitation(Td)	40°C	45°C	45°C
When ambient temperature is higher than 40°C/45°C, output power will be derated. The minimum Ac output voltage is 180V.	<p>The graph plots Output Load (%) on the y-axis (0 to 100) against Temperature (°C) on the x-axis. The load is constant at 100% until it reaches Td. At Td, the load begins to decrease linearly, reaching 80% at 30°C. At 55°C, the load drops to 0%.</p>		
General Specifications			
Operating Temperature	-10°C~55°C		
Range Storage Temperature	-15°C~60°C		
Net Weight(kg)	9.2kg	13kg	27kg
Gross Weight(kg)	11.4kg	15kg	30kg
Product Size(D*W*H)	347x445x120mm		525x630x125mm
Package Dimension(D*W*H)	560x465x240mm		715x620x210mm