

# OFF GRID INVERTER GPEO Series US Single/Split Phase

3K5L1-US/6KL2-US/12KL2-US

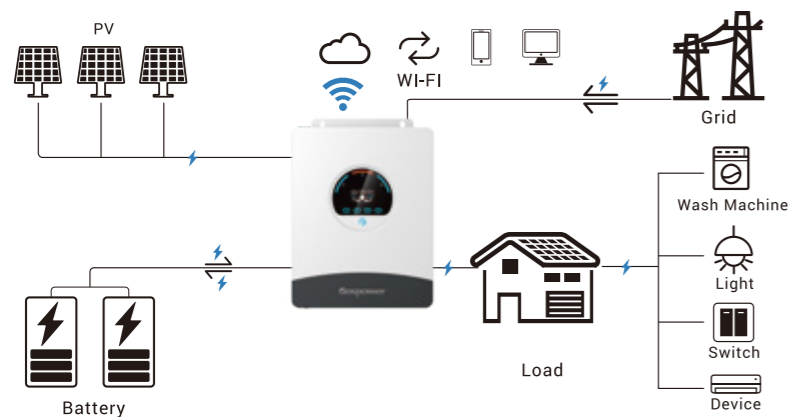
- 3.5-12Kw
- 500V
- 120/240V
- 48V
- IP54



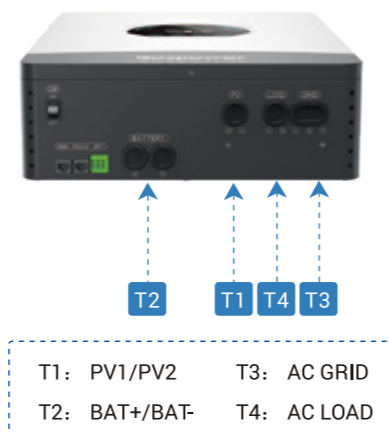
**IP54 Design**  
**Pure Sine Wave**  
**Wide MPPT Operating Range**  
**Built-In BMS Communication**  
**Max. 12 Units Parallel**  
**3 Years Warranty**

EN 62109-1 EN 62109-2 IEC 61000

## HOUSE ENERGY SYSTEM (OFF GRID)



## CONNECTOR



		GPEO-3K5L1-US	GPEO-6KL2-US	GPEO-12KL2-US
PV (DC Input)	Recommended max. PV input power	4000W	6000W	12000W
	Max. input voltage(Voc)	500V	500V	500V
	MPPT operating voltage range	85V-450V (@75V start up)	85V-450V (@75V start up)	85V-450V (@75V start up)
	Number of MPPT	1	1	2
	Max. number of input strings per MPPT	1	1	1
	Max. input current per MPPT	18A	27A	27/13(MAX:40A)
	Max. short-circuit current per MPPT	22A	35A	37A/17.5A
Grid (AC Input)	Max input power	6000W	12000W	24000W
	Max input current	50A	50A	100A
	Rated grid voltage	110/120/127Vac (L,N)	120/240,208Vac(L1,L2,N)	120/240,208Vac(L1,L2,N)
	Rated grid frequency	50/60Hz	50/60Hz	50/60Hz
	Acceptable range	90-140Vac (For UPS) ; 80-140Vac (For Home Appliances)	90-140Vac (For UPS) ; 80-140Vac (For Home Appliances)	90-140Vac (For UPS) ; 80-140Vac (For Home Appliances)
Battery Parameters (Bidirection)	Battery type	LiFePO <sub>4</sub> /Lead-acid	LiFePO <sub>4</sub> /Lead-acid	LiFePO <sub>4</sub> /Lead-acid
	Battery voltage range	40-60Vdc	40-60Vdc	40-60Vdc
	Rate Battery Voltage	48Vdc	48Vdc	48Vdc
	Max. charge/discharge current	60A/65A	120A/130A	210A/230A
BMS communication mode	RS485	RS485	RS485	
Back-up Output (AC Output)	Rated output power	3500W/3500VA	6000W/6000VA	12000W/12000VA
	Rated output current	31.8A	27.3A	54.5A
	Rated output voltage / Frequency	110/120/127V (L,N) 50/60Hz	120/240V (L1,L2,N) 50/60Hz	120/240V (L1,L2,N) 50/60Hz
	Parallel Capacity	Max. 12 Units	Max. 12 Units	Max. 12 Units
	Surge power	7000VA 5s	12000VA 5s	24000VA 5s
	THDv (@ linear load)	<3%	<3%	<3%
	Switching time	10ms typical (For UPS) 20ms typical (For Home Appliances)		
Efficiency	Peak efficiency	98.00%	98.00%	98.00%
	Max. MPPT efficiency	99.90%	99.90%	99.90%
Protection	Inner protection	√ Output short-circuit protection    √ Output overvoltage protection		
	Surge protection	PV: Type III, AC: Type III		
	IP rating	IP54		
General Parameters	Operating temperature range	-10°C ~ 55°C		
	Relative humidity range	5%~95%	5%~95%	5%~95%
	Max. operating altitude	>2000m derating	>2000m derating	>2000m derating
	Standby self-consumption	<10W	<10W	<20W
	Installation type	Wall-mounted	Wall-mounted	Wall-mounted
	Cooling mode	Fan cooling	Fan cooling	Fan cooling
	Communication	RS232/RS485/Dry contact/WI-FI	RS232/RS485/Dry contact/WI-FI	RS232/RS485/Dry contact/WI-FI
Mechanical Specifications	Display	LCD	LCD	LCD
	Inverter dimensions (L*W*H) (mm)	444.7*346.6*120	444.7*346.6*120	630*535*125
	Net weight (kg)	12	15	28
	Shipping dimensions (L*W*H) (mm)	560*465*240	560*465*240	745*650*240
	Gross weight (kg)	14	17	31
	Warranty	3 Years		