

# HYBRID INVERTER

## GPEO Series EU Single Phase

4KL1/6KL1/12KL1

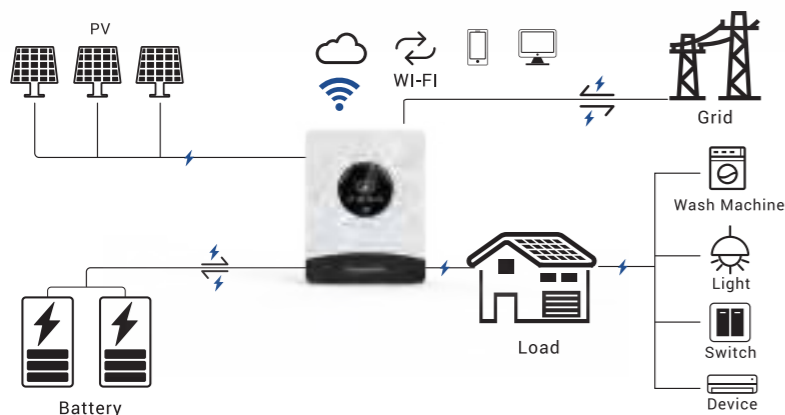
-   
4-12Kw
-   
500V
-   
230V
-   
48V
-   
IP54



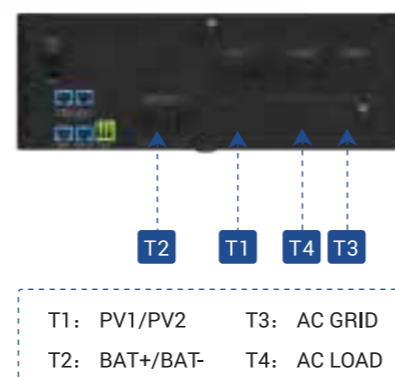
**IP54 Design**  
**Pure Sine Wave**  
**Wide MPPT Operating Range**  
**Built-In BMS Communication**  
**Max. 12 Units Parallel**  
**3 Years Warranty**

CE EN 62109-1 EN 62109-2 IEC 61000

### HOUSE ENERGY SYSTEM (HYBRID)



### CONNECTOR



		GPEO-4KL1	GPEO-6KL1	GPEO-12KL1
PV (DC Input)	Recommended max. PV input power	6000W	8000W	16000W
	Max. input voltage(Voc)	500V	500V	500V
	MPPT operating voltage range	85V-450V (@85V start up)	85V-450V (@85V start up)	85V-450V (@85V start up)
	Number of MPPT	1	1	2
	Max. number of input strings per MPPT	1	2	2
	Max. input current per MPPT	15A	27A	27/27A (MAX:54A)
	Max. short-circuit current per MPPT	18A	35A	37A/37A
Grid (AC Input)	Max input power	6440W	11500W	20700W
	Max input current	28A	50A	90A
	Rated grid voltage	220/230/240Vac	220/230/240Vac	220/230/240Vac
	Rated grid frequency	50/60Hz	50/60Hz	50/60Hz
	Acceptable range	170-280Vac (For UPS) ; 90-280Vac (For Home Appliances)	170-280Vac (For UPS) ; 90-280Vac (For Home Appliances)	170-280Vac (For UPS) ; 90-280Vac (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	20~30Vdc	40~60Vdc	40~60Vdc
	Rated Battery Voltage	24Vdc	48Vdc	48Vdc
	Max. charge/discharge current	120A/160A	120A/130A	210A/230A
	BMS communication mode	RS485	RS485	RS485
Back-up Output (AC Output)	Rated output power	4000W/4000VA (Twin output)	6000W/6000VA(Twin output)	12000W/12000VA (Twin output)
	Rated output current	18.2A	27.3A	54.5A
	Rated output voltage / Frequency	220/230/240Vac 50/60Hz	220/230/240Vac 50/60Hz	220/230/240Vac 50/60Hz
	Parallel Capacity	-	Single-phase Max. 12 units Three-phase Max. 12 units	Single-phase Max. 6 units Three-phase Max. 12 units
	Surge power	8000VA 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	95.00%	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
	Display	LCD	LCD	LCD
Mechanical Specifications	Inverter dimensions (L*W*H) (mm)	445*347*120	445*347*120	630*525*125
	Net weight (kg)	9.2	12.4	28.5
	Shipping dimensions (L*W*H) (mm)	560*465*240	560*465*240	715*620*210
	Gross weight (kg)	11.4	14.6	32
	Replacement warranty Period	3 Years		