






GEH 5-10kW




Single-phase Hybrid | Up to 4 MPPTs

GEH5.0-1U-10

GEH8.6-1U-10

GEH10-1U-10

-  Up to 4 MPPTs
-  Rapid Installation
-  AC Bypass Switch

-  Maximum Safety
-  UPS-level Switching
-  Full Backup Capacity up to 10 kW

Discover this unique single-phase hybrid inverter that offers up to four MPPTs, is compatible with high voltage (80-495V) batteries and has a power capacity ranging from 5kW to 10kW. Homeowners can now experience the ultimate solution for maximizing generation and self-consumption in comfort and security. Intelligent mechanisms are timely activated to ensure power supply to critical loads when most needed. AFCI (Arc-fault current interrupter) and rapid shutdown likewise ensure the safety of the whole PV system, offering freedom and security all in one.



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Up to 4 MPPTs | Single-phase Hybrid

Technical Data	GEH5.0-1U-10	GEH8.6-1U-10	GEH10-1U-10*7
Battery Input Data			
Battery Type	Li-Ion (BYD HVM&HVS, LG RESH10-TypeR, GOODWE LX S-H)		
Battery Voltage Range (V)*1	80~495		
Max. Charging Current (A)	50		
Max. Discharging Current (A)	50		
Charging Strategy for Li-Ion Battery	Self-adaption to BMS		
PV String Input Data			
Max. DC Input Power (W)	7500	12900	15000
Max. DC Input Voltage (V)*2	600		
MPPT Range (V)*3	80~550		
Start-up Voltage (V)	95		
MPPT Range for Full Load (V)	200~500	255~500	300~500
Nominal DC Input Voltage (V)	380		
Max. Input Current (A)	13/13/13		
Max. Short Current (A)	16.3/16.3/16.3		
No. of MPP Trackers	3		
No. of Strings per MPP Tracker	1/1/1		
AC Output Data (On-grid)			
Nominal Output Voltage (V)	230		
Nominal Output Frequency (Hz)	50		
Max. Apparent Power Output to Grid (VA)*4	8600		
Max. Apparent Power from Grid (VA)	5000	10000	9500 (@220Vac); 10000 (@240Vac)
Max. AC Current Output to Grid (A)*4	23	39	43.5
Max. AC Current From Grid (A)	27	45.5	45.5
Output Power Factor	~1 (Adjustable from 0.8 leading to 0.8 lagging)		
Output THDi (@Nominal Output)	<3%		
AC Output Data (Back-up)			
Nominal Output Voltage (V)	230 (±2%)		
Nominal Output Frequency (Hz)	50 (±0.2%)		
Automatic Switch Time (ms)	<10		
Output THDv (@Linear Load)	<3%		
Max. Continuous Output Apparent Power (VA)	5000	8600	9500 (@220Vac); 10000 (@230Vac)
Peak Output Apparent Power (VA)*5	6000, 60sec	10320, 60sec	12000, 60sec
Max. Continuous Output Current (A)	23	39	43.5
Efficiency			
PV Max. Efficiency	97.6%		
PV CEC Efficiency	97.0%		
Battery Charged By PV Max. Efficiency	98.2%		
Battery Charge/discharge to AC Max. Efficiency	96.5%		
Protection			
PV Arc Fault Detection	Optional		
Rapid Shutdown System (RSS) Transmitter	Optional		
DC&AC Breaker, AC Bypass Switch	Integrated		
AC&DC SPD Type II	Integrated		
Anti-islanding Protection	Integrated		
PV String Input Reverse Polarity Protection	Integrated		
Insulation Resistor Detection	Integrated		
Residual Current Monitoring Unit	Integrated		
Output Over Current Protection	Integrated		
Back-up Output Short Protection	Integrated		
Output Over Voltage Protection	Integrated		
Battery Input Reverse Polarity Protection	Integrated		
General Data			
Operating Temperature Range (°C)	-35~60		
Relative Humidity	0~95%		
Operating Altitude (m)	≤4000		
Cooling	Intelligent Fan		
Noise (dB)	<50		
User Interface	LED & APP (WiFi & Bluetooth)		
DC&AC Power Connect Port	MC4 & ADAPTER WIELAND		
Communication with BMS	RS485; CAN		
Communication with Meter	RS485		
Communication with EMS	RS485 (Insulated)		
Communication with Portal	Wi-Fi		
Communication with RSD	SUNSPEC		
Weight (kg)	28.8	32.3	
Dimensions (W × H × D mm)	415 × 791 × 175		
Mounting	Wall Bracket		
Protection Degree	IP65		
Standby Self Consumption (W)*6	<20		
Topology	Transformerless		

*1: Battery discharge/charge power limited by voltage.

*2: Inverter will not work when PV input voltage ≥585V.

*3: When there is no battery connected, inverter starts feeding in only if string voltage is higher than 200V.

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*5: The grid feed in power for AS/NZS 4777.2 is limited to 4950VA & 21.7A.

*6: Can be reached only if PV and battery power is enough.

*7: No Back-up Output.

*8: The model name does not represent the rated power, please refer to the marked parameters for details.