



GEH 5-9.6kW Series

Split-phase Hybrid | Up to 4 MPPTs

GEH5.0-1U-US10

GEH6.0-1U-US10

GEH7.0-1U-US10

GEH7.6-1U-US10

GEH8.6-1U-US10

GEH9.6-1U-US10



High Power Generation

- 4 MPPTs
- Up to 150% DC oversizing



Maximum Safety and Security

- AFCI for DC side & RSD ensuring system safety
- Full backup capacity up to 9.6 kW



Tailored for US Market Needs

- 120/240 VAC output
- Compatible with diesel generators

Discover this unique split-phase hybrid inverter that offers up to four MPPTs, is compatible with high voltage (80-495 V) batteries and has a power capacity ranging from 5 kW to 9.6 kW. Homeowners can now experience the ultimate solution for maximizing generation and self-consumption in comfort and security. Our Intelligent mechanisms safely ensure power to essential loads when most needed. This champion of energy independence integrates intelligent safety features that are second to none. AFCI (Arc-fault current interrupter) for both PV and battery and rapid shutdown likewise ensure the safety of the whole PV system, offering freedom and security all in one. Additionally, this inverter can connect to a diesel generator and is equipped with an external auto-transformer for 120 VAC output.



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Up to 4 MPPTs | Split-phase Hybrid

Technical Data	GEH5.0-1U-US10	GEH6.0-1U-US10	GEH7.0-1U-US10	GEH7.6-1U-US10	GEH8.6-1U-US10	GEH9.6-1U-US10
Battery Input Data						
Battery Type	Li-Ion					
Nominal battery voltage (V)	300					
Battery Voltage Range (V)*1	80~495					
Max. Continuous Charging Current (A)	50					
Max. Continuous Discharging Current (A)	50					
Max. Charge power (W)	5000	6000	7000	7600	8600	9600
Max. Discharge Power (W)	5000	6000	7000	7600	8600	9600
PV String Input Data						
Max. Input Voltage (V)*2	600					
MPPT Operating Voltage Range (V)*3	80~550					
Start-up Voltage (V)	95					
Nominal Input Voltage (V)	380					
Max. Input Current per MPPT (A)	12.5/12.5			12.5/12.5/12.5/12.5		
Max. Short Circuit Current per MPPT (A)	15.2/15.2			15.2/15.2/15.2/15.2		
Number of MPPTs	2			4		
Number of Strings per MPPT	1/1			1/1/1/1		
AC Output Data (On-grid)						
Nominal Apparent Power Output to Utility Grid (VA)	5000	6000	7000	7600	8600	9600
Max. Apparent Power Output to Utility Grid (VA)	5000	6000	7000	7600	8600	9600
Max. Apparent Power from Utility Grid (VA)	6000	7200	8400	9120	9600	9600
Nominal Output Voltage (V)	120/240					
Nominal AC Grid Frequency (Hz)	60					
Max. AC Current Output to Utility Grid (A)	20.8	25	29.2	31.7	35.8	40
Max. AC Current From Utility Grid (A)	25	30	35	38	40	40
Output Power Factor	~1 (Adjustable from 0.8 leading to 0.8 lagging)					
Max. Total Harmonic Distortion	<3%					
AC Output Data (Back-up)						
Back-up Nominal apparent power (VA)	5000	6000	7000	7600	8600	9600
Max. Output Apparent Power (VA)	5000	6000	7000	7600	8600	9600
Peak Output Apparent Power (VA)*4	6000, 60sec	7200, 60sec	8400, 60sec	9120, 60sec	10320, 60sec	11520, 60sec
Max. Output Current (A)	20.8	25	29.2	31.7	35.8	40
Nominal Output Voltage (V)	120/240					
Nominal Output Frequency (Hz)	60					
Output THDv (@Linear Load)	<3%					
Efficiency						
Max. Efficiency	97.6%					
CEC Efficiency	97.3%	97.4%	97.1%	97.1%	97.1%	97.1%
Max. Battery to Load Efficiency	96.6%					
Protection						
DC Insulation Resistance Detection	Integrated					
Residual Current Monitoring Unit	Integrated					
Anti-islanding Protection	Integrated					
DC Reverse Polarity Protection	Integrated					
AC Overcurrent Protection	Integrated					
AC Short Circuit Protection	Integrated					
AC Overvoltage Protection	Integrated					
DC Surge Arrester	Type III					
AC Surge Arrester	Type III					
DC Switch	Integrated					
PV String Current Monitoring	Integrated					
DC Arc Fault Circuit Interrupter	Integrated					
Rapid Shutdown	Integrated					
General Data						
Operating Temperature Range (°F)	-31°F~140°F (>113°F derating)					
Relative Humidity	0~95%					
Max. Operating Altitude (ft)	13124 ft (>9843 ft derating)					
Cooling Method	Smart Fan Cooling					
User Interface	WiFi+APP, LED					
Communication with BMS	RS485; CAN					
Communication with Meter	RS485					
Communication with Portal	Wi-Fi; 4G*6 (Optional)					
Weight (lb)	62.85			70.55		
Dimension (W × H × D in)	16.3 × 33.1 × 6.9					
Topology	Transformerless					
Night Power Consumption (W)*5	<20					
DC Connector	MC32*1.5					
AC Connector	MC32*1.5					
Protective Class	Type 4X					
Storage Environments	-40°F~+185°F, 0-95%RH, 13124 ft					
Mounting Method	Wall Bracket					

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

*2: Inverter will not work when PV input voltage $\geq 585V$.

*3: Can be reached only if battery is connected, otherwise the PV start voltage must be greater than 200V.

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

*5: No Back-up Output.

*6: Estimated launch date: 31/12/2021.

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