



GEH 5-10kW

Three phase | 2 MPPTs

GEH5.0-3U-10

GEH6.5-3U-10

GEH8.0-3U-10

GEH10-3U-10



Incessant Power Supply

- Full backup capacity up to 10kW
- UPS-level switching



High Power Generation

- Max. 16A DC input per string
- Up to 150% DC oversizing



Maximum Safety

- Type II SPD on DC side
- IP66 Protection

The GEH series is a three-phase hybrid inverter that has a power capacity ranging from 5kW to 10kW. Designed for large residential and small-scale commercial and industrial applications, the series provides a competitive edge with up to 16A DC input for each string and up to 150% DC oversizing for maximized energy production. 100% unbalanced output is supported to maximize self-consumption and increase load flexibility on each phase. It also provides the peak shaving capability to reduce the peak demand on the electricity network, achieving more efficiency and significant cost savings. When the grid is compromised, UPS-level switching allows the inverter to switch to the back-up mode in less than 10ms. Loads connected to the back-up stay powered on and ensure the safety of your electrical appliances. Furthermore, this product comes with advanced Type II Surge Protection Device (SPD) on DC side, integrated DC switch and remote shutdown, enhancing operational safety on all roofs.



GEH 5-10kW

Three phase | 2 MPPTs

Technical Data	GEH5.0-3U-10	GEH6.5-3U-10	GEH8.0-3U-10	GEH10-3U-10
Battery Input Data				
Battery Type	Li-Ion	Li-Ion	Li-Ion	Li-Ion
Nominal Battery Voltage (V)	500	500	500	500
Battery Voltage Range (V)	180 ~ 600	180 ~ 600	180 ~ 600	180 ~ 600
Max. Continuous Charging Current (A)	25	25	25	25
Max. Continuous Discharging Current (A)	25	25	25	25
Max. Charge Power (W)	7500	8450	9600	10000
Max. Discharge Power (W)	7500	8450	9600	10000
PV String Input Data				
Max. Input Power (W)	7500	9700	12000	15000
Max. Input Voltage (V) ¹	1000	1000	1000	1000
MPPT Operating Voltage Range (V) ²	200 ~ 850	200 ~ 850	200 ~ 850	200 ~ 850
Start-up Voltage (V)	180	180	180	180
Nominal Input Voltage (V)	620	620	620	620
Max. Input Current per MPPT (A)	16	16	16	16
Max. Short Circuit Current per MPPT (A)	21.2	21.2	21.2	21.2
Number of MPP Trackers	2	2	2	2
Number of Strings per MPPT	1	1	1	1
AC Output Data (On-grid)				
Nominal Apparent Power Output to Utility Grid (VA)	5000	6500	8000	10000
Max. Apparent Power Output to Utility Grid (VA) ^{2,4}	5500	7150	8800	11000
Max. Apparent Power from Utility Grid (VA)	10000	13000	15000	15000
Nominal Output Voltage (V)	400 / 380, 3L / N / PE	400 / 380, 3L / N / PE	400 / 380, 3L / N / PE	400 / 380, 3L / N / PE
Nominal AC Grid Frequency (Hz)	50 / 60	50 / 60	50 / 60	50 / 60
Max. AC Current Output to Utility Grid (A)	8.5	10.8	13.5	16.5
Max. AC Current From Utility Grid (A)	15.2	19.7	22.7	22.7
Power Factor	~1 (Adjustable from 0.8 leading to 0.8 lagging)			
Max. Total Harmonic Distortion	<3%	<3%	<3%	<3%
AC Output Data (Back-up)				
Back-up Nominal Apparent Power (VA)	5000	6500	8000	10000
Max. Output Apparent Power (VA) ³	5000 (10000@60sec)	6500 (13000@60sec)	8000 (16000@60sec)	10000 (16500@60sec)
Max. Output Current (A)	8.5	10.8	13.5	16.5
Nominal Output Voltage (V)	400 / 380	400 / 380	400 / 380	400 / 380
Nominal Output Frequency (Hz)	50 / 60	50 / 60	50 / 60	50 / 60
Output THDv (@Linear Load)	<3%	<3%	<3%	<3%
Efficiency				
Max. Efficiency	98.0%	98.0%	98.2%	98.2%
European Efficiency	97.2%	97.2%	97.5%	97.5%
Max. Battery to AC Efficiency	97.5%	97.5%	97.5%	97.5%
MPPT Efficiency	99.9%	99.9%	99.9%	99.9%
Protection				
PV Insulation Resistance Detection	Integrated	Integrated	Integrated	Integrated
Residual Current Monitoring	Integrated	Integrated	Integrated	Integrated
PV Reverse Polarity Protection	Integrated	Integrated	Integrated	Integrated
Anti-islanding Protection	Integrated	Integrated	Integrated	Integrated
AC Overcurrent Protection	Integrated	Integrated	Integrated	Integrated
AC Short Circuit Protection	Integrated	Integrated	Integrated	Integrated
AC Overvoltage Protection	Integrated	Integrated	Integrated	Integrated
DC Switch	Integrated	Integrated	Integrated	Integrated
DC Surge Protection	Type II	Type II	Type II	Type II
AC Surge Protection	Type III	Type III	Type III	Type III
Remote Shutdown	Integrated	Integrated	Integrated	Integrated
General Data				
Operating Temperature Range (°C)	-35 ~ +60	-35 ~ +60	-35 ~ +60	-35 ~ +60
Relative Humidity	0 ~ 95%	0 ~ 95%	0 ~ 95%	0 ~ 95%
Max. Operating Altitude (m)	4000	4000	4000	4000
Cooling Method	Natural Convection	Natural Convection	Natural Convection	Natural Convection
User Interface	LED, APP	LED, APP	LED, APP	LED, APP
Communication with BMS ⁵	RS485, CAN	RS485, CAN	RS485, CAN	RS485, CAN
Communication with Meter	RS485	RS485	RS485	RS485
Communication with Portal	WiFi / WiFi + LAN (Optional) / 4G (Optional)			
Weight (kg)	24.0	24.0	24.0	24.0
Dimension (W × H × D mm)	415 × 516 × 180	415 × 516 × 180	415 × 516 × 180	415 × 516 × 180
Noise Emission (dB)	<30	<30	<30	<30
Topology	Non-isolated	Non-isolated	Non-isolated	Non-isolated
Self-consumption at Night (W) ⁶	<15	<15	<15	<15
Ingress Protection Rating	IP66	IP66	IP66	IP66
Mounting Method	Wall Mounted	Wall Mounted	Wall Mounted	Wall Mounted

*1: For 1000V system, Maximum operating voltage is 950V.

*2: According to the local grid regulation.

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

*4: For Belgium Max. Output Apparent Power(VA): GW5K-ET is 5000; GW6.5K-ET is 6500; GW8K-ET is 8000; GW10K-ET is 10000.

*5: CAN communication is configured default. If RS485 communication is used, please replace the corresponding communication line.

*6: No Back-up Output.

*7: GE is a registered trademark of General Electric Company and is used under license by GoodWe Technologies Co., Ltd. © 2022 All Rights Reserved.