



GEH 6-15kW Three Phase G2

Three phase | Up to 3 MPPTs

GEH6.0-3U-20

GEH8.0-3U-20

GEH10-3U-20

GEH12-3U-20

GEH15-3U-20



Incessant Power Supply

- Strong backup power supply
- Parallel connection supported
- UPS-level switching



High Power Generation

- Max. 16A DC input per string
- Up to 160% DC oversizing



Maximum Safety

- Type II surge protection & failure alarm
- Integrated AFCI for safest solar power
- IP66 protection

The GEH 6-15kW Three Phase G2 inverters, ranging from 6kW to 15kW, offer enhanced flexibility to address diverse residential requirements. Featuring a maximum input current of 16A per string, they allow for a PV system oversizing of up to 160%.

Designed for user-friendly installation and operation, the inverter's plug-and-play functionality and compact design ensure seamless setup. With the capability to support parallel connections, it emerges as the ideal solution for expanding energy needs. Furthermore, advanced features such as smart load control, 100% unbalanced output, and a strong emphasis on system reliability and safety contribute to its versatility and long-term sustainability.



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Up to 3 MPPTs | Three phase

Technical Data	GEH6.0-3U-20	GEH8.0-3U-20	GEH10-3U-20	GEH12-3U-20	GEH15-3U-20
Battery Input Data					
Battery Type	Li-Ion	Li-Ion	Li-Ion	Li-Ion	Li-Ion
Nominal Battery Voltage (V)	500	500	500	500	500
Battery Voltage Range (V)	150 ~ 720	150 ~ 720	150 ~ 720	150 ~ 720	150 ~ 720
Start-up Voltage (V)	150	150	150	150	150
Number of Battery Input	1	1	1	1	1
Max. Continuous Charging Current (A)	30	30	40	40	40
Max. Continuous Discharging Current (A)	30	30	40	40	40
Max. Charging Power (W)	9000	12000	15000	18000	24000
Max. Discharging Power (W)	6600	8800	11000	13200	16500
PV String Input Data					
Max. Input Power (W) ¹	9600	12800	16000	19200	24000
Max. Input Voltage (V) ²	1000	1000	1000	1000	1000
MPPT Operating Voltage Range (V)	120 ~ 850	120 ~ 850	120 ~ 850	120 ~ 850	120 ~ 850
Start-up Voltage (V)	150	150	150	150	150
Nominal Input Voltage (V)	620	620	620	620	620
Max. Input Current per MPPT (A)	16	16	16	16	16
Max. Short Circuit Current per MPPT (A)	24	24	24	24	24
Number of MPP Trackers	2	2	3	3	3
Number of Strings per MPPT	1	1	1	1	1
AC Output Data (On-grid)					
Nominal Output Power (W)	6000	8000	10000	12000	15000
Nominal Apparent Power Output to Utility Grid (VA)	6000	8000	10000	12000	15000
Max. Apparent Power Output to Utility Grid (VA) ³	6000	8000	10000	12000	15000
Max. Apparent Power from Utility Grid (VA)	12000	16000	20000	20000	20000
Nominal Output Voltage (V)			400 / 380, 3L / N / PE		
Output Voltage Range (V) ⁴	170 ~ 290	170 ~ 290	170 ~ 290	170 ~ 290	170 ~ 290
Nominal AC Grid Frequency (Hz)	50 / 60	50 / 60	50 / 60	50 / 60	50 / 60
AC Grid Frequency Range (Hz)	45 ~ 65	45 ~ 65	45 ~ 65	45 ~ 65	45 ~ 65
Max. AC Current Output to Utility Grid (A) ⁵	8.7	11.6	14.5	17.4	21.7
Max. AC Current From Utility Grid (A)	15.7	21	26.1	26.1	26.1
Power Factor			0.8 leading ~ 0.8 lagging		
Max. Total Harmonic Distortion	<3%	<3%	<3%	<3%	<3%
AC Output Data (Back-up)					
Back-up Nominal Apparent Power (VA)	6000	8000	10000	12000	15000
Max. Output Apparent Power without Grid (VA) ⁶	6000	8000	10000	12000	15000
Max. Output Apparent Power with Grid (VA) ⁶	6000	8000	10000	12000	15000
Max. Output Current (A)	13.0	17.4	21.7	21.7	21.7
	(17.4 at 60sec)	(23.3 at 60sec)	(26.1 at 60sec)	(26.1 at 60sec)	(26.1 at 60sec)
Nominal Output Voltage (V)	400 / 380	400 / 380	400 / 380	400 / 380	400 / 380
Nominal Output Frequency (Hz)	50 / 60	50 / 60	50 / 60	50 / 60	50 / 60
Output THDv (@Linear Load)	<3%	<3%	<3%	<3%	<3%
Efficiency					
Max. Efficiency	98.0%	98.0%	98.2%	98.2%	98.2%
European Efficiency	97.2%	97.2%	97.5%	97.5%	97.5%
Max. Battery to AC Efficiency	97.2%	97.5%	97.5%	97.5%	97.5%
MPPT Efficiency	99.5%	99.5%	99.5%	99.5%	99.5%
Protection					
PV Insulation Resistance Detection	Integrated	Integrated	Integrated	Integrated	Integrated
PV AFCI 3.0	Integrated	Integrated	Integrated	Integrated	Integrated
Residual Current Monitoring	Integrated	Integrated	Integrated	Integrated	Integrated
PV Reverse Polarity Protection	Integrated	Integrated	Integrated	Integrated	Integrated
Battery Reverse Polarity Protection	Integrated	Integrated	Integrated	Integrated	Integrated
Anti-islanding Protection	Integrated	Integrated	Integrated	Integrated	Integrated
AC Overcurrent Protection	Integrated	Integrated	Integrated	Integrated	Integrated
AC Short Circuit Protection	Integrated	Integrated	Integrated	Integrated	Integrated
AC Overvoltage Protection	Integrated	Integrated	Integrated	Integrated	Integrated
DC Switch	Integrated	Integrated	Integrated	Integrated	Integrated
DC Surge Protection	Type II	Type II	Type II	Type II	Type II
AC Surge Protection	Type II	Type II	Type II	Type II	Type II
Remote Shutdown	Integrated	Integrated	Integrated	Integrated	Integrated
General Data					
Operating Temperature Range (°C)	-35 ~ +60	-35 ~ +60	-35 ~ +60	-35 ~ +60	-35 ~ +60
Relative Humidity	0 ~ 100%	0 ~ 100%	0 ~ 100%	0 ~ 100%	0 ~ 100%
Max. Operating Altitude (m)	4000	4000	4000	4000	4000
Cooling Method			Natural Convection		
User Interface			LED, WLAN + APP		
Communication with BMS	RS485, CAN	RS485, CAN	RS485, CAN	RS485, CAN	RS485, CAN
Communication with Meter	RS485	RS485	RS485	RS485	RS485
Communication with Portal			LAN (4G optional) + Bluetooth + WiFi		
Weight (kg)	23	23	25	25	25
Dimension (W × H × D mm)			496 × 460 × 221		
Topology	Non-isolated	Non-isolated	Non-isolated	Non-isolated	Non-isolated
Ingress Protection Rating	IP66	IP66	IP66	IP66	IP66
Mounting Method	Wall Mounted	Wall Mounted	Wall Mounted	Wall Mounted	Wall Mounted

*1: Max. Input Power, not continuous for 1.6*normal power. Besides, in Australia, for most of the PV module, the max. Input power can achieve 2*Pn, Such as the max. input power of GEH6.0-3U-20 can achieve 12000W.

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

*3: According to the local grid regulation.

*4: Output Voltage Range: phase voltage.

*5: the Max.AC Current Output to on-grid load is 13A, 17.4A, 21.7A, 21.7A, 21.7A, 21.7A separately

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

*7: Optional functions are purchased separately.

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