

GOODWE

EH PLUS+ Series

3.6-6kW | Single Phase |
2 MPPTs | Battery Ready (HV)

The EH Series is an energy storage inverter that is compatible with high voltage Li-Ion batteries ranging from 85 to 460V to provide a highly flexible system design. Its "Battery Ready" design provides a future-proof solution for users who may want to add battery storage in the future, simply by purchasing an activation code. Designed as a highly adaptable and flexible option for residential PV systems, the inverter has its maximum DC input current reached 16A for each string and combines well with high-power PV modules. Featuring UPS-level switching (switching time <10ms) and peak shaving, EH Series ensures a stable and reliable power supply.



Smart Control for Smart Energy

- <10ms UPS-level switching
- Peak shaving



Friendly & Thoughtful Design

- Fanless cooling for quiet operation
- Pre-wired communication cables



Superb Safety & Reliability

- Built-in Type II SPD on DC side
- IP65 ingress protection



Flexible & Adaptable Applications

- Battery ready option
- Maximum 16A DC input current per string

Technical Data	GW3600N-EH	GW5000N-EH	GW6000N-EH
Battery Input Data			
Battery Type		Li-Ion	
Nominal Battery Voltage (V)		350	
Battery Voltage Range (V)		85 ~ 460	
Start-up Voltage (V)		85	
Number of Battery Input		1	
Max. Continuous Charging Current (A)		25	
Max. Continuous Discharging Current (A)		25	
Max. Charging Power (W)		6000	
Max. Discharging Power (W)	3600	5000	6000
PV String Input Data			
Max. Input Power (W) ¹	5400	7500	9000
Max. Input Voltage (V)		580	
MPPT Operating Voltage Range (V)		100 ~ 550	
Start-up Voltage (V)		85	
Nominal Input Voltage (V)		380	
Max. Input Current per MPPT (A)		16	
Max. Short Circuit Current per MPPT (A)		21.2	
Number of MPP Trackers		2	
Number of Strings per MPPT		1	
AC Output Data (On-grid)			
Nominal Output Power (W)	3600	5000	6000
Nominal Apparent Power Output to Utility Grid (VA) ³	3600	5000	6000
Max. Apparent Power Output to Utility Grid (VA) ³	3600 / 3960 ²	5000 / 5500 ²	6000 / 6600 ²
Max. Apparent Power from Utility Grid (VA)	7200 (Charging 3.6kW, Backup Output 3.6kW)	10000 (Charging 5kW, Backup Output 5kW)	12000 (Charging 6kW, Backup Output 6kW)
Nominal Output Voltage (V)		230 / 220 ⁶	
Nominal AC Grid Frequency (Hz)		50 / 60	
Max. AC Current Output to Utility Grid (A)	16 / 18 ²	21.7 / 24 ²	26.1 / 28.7 ² / 27.3 ⁷
Max. AC Current From Utility Grid (A)	32	43.4	52.2
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)	3600	5000	6000
Max. Output Apparent Power without Grid (VA)	3600 (4320@60sec)	5000 (6000@60sec)	6000 (7200@60sec)
Max. Output Apparent Power with Grid (VA)	3600	5000	6000
Max. Output Current (A)	15.7	21.7	26.1
Nominal Output Voltage (V)		230 (±2%)	
Nominal Output Frequency (Hz)		50 / 60 (±0.2%)	
Output THDv (@Linear Load)		<3%	
Efficiency			
Max. Efficiency		97.6%	
European Efficiency		97.0%	
Max. Battery to AC Efficiency		96.6%	
MPPT Efficiency		99.9%	
Protection			
PV String Current Monitoring		Integrated	
PV Insulation Resistance Detection		Integrated	
Residual Current Monitoring		Integrated	
PV Reverse Polarity Protection		Integrated	
Battery Reverse Polarity Protection		Integrated	
Anti-islanding Protection		Integrated	
AC Overcurrent Protection		Integrated	
AC Short Circuit Protection		Integrated	
AC Overvoltage Protection		Integrated	
DC Switch		Integrated	
DC Surge Protection		Type II	
AC Surge protection		Type III	
Remote Shutdown		Integrated	
General Data			
Operating Temperature Range (°C)		-25 ~ +60	
Relative Humidity		0 ~ 95%	
Max. Operating Altitude (m)		3000 ⁸	
Cooling Method		Natural Convection	
User Interface		LED, APP	
Communication with BMS ⁴		RS485, CAN	
Communication with Meter		RS485	
Communication with Portal		WiFi / Ethernet (Optional)	
Weight (kg)		17	
Dimension (W × H × D mm)		354 × 433 × 147	
Topology		Non-isolated	
Self-consumption at Night (W) ⁵		<10	
Ingress Protection Rating		IP65	
Mounting Method		Wall Mounted	

*1: In Australia, for most of the PV module, the max. input power can achieve 2*Pn, Such as the max. input power of GW3600N-EH can achieve 7200W.

*2: For CEI 0-21.

*3: The grid feed in power for VDE-AR-N 4105 and NRS097-2-1 is limited 4600VA.

*4: CAN communication is configured by default. If 485 communication is used, please replace the corresponding communication line.

*5: No Back-up Output.

*6: For Brazil, the voltage is 220V.

*7: For Brazil, the current is 27.3A.

*8: 2000m for Australia.

*: Please visit GoodWe website for the latest certificates.