

EH Series

3.6-6kW | Single Phase | HV Hybrid Inverter

The GoodWe EH Series is a single-phase, grid-tied inverter that includes a "Battery Ready" option for users who might wish to add a full energy storage solution in the future. By simply purchasing an activation code, the EH can easily be upgraded to a complete energy storage solution. The EH is compatible with high voltage batteries (85-460V) and can automatically switch to back-up mode in less than 10 milliseconds (UPS-level), ensuring that critical loads experience no interruption. With a power deviation lower than 20W, this inverter is designed to maximize self-consumption. In addition, the fact that it takes less than 9 seconds to switch from grid to PV, to supply power for heavy loads, helps users to avoid expensive intakes from the grid. The communication cables come pre-wired, reducing installation time significantly. The Plug & Play AC connector also makes operation and maintenance much more convenient.



Large loads on back-up



UPS level automatic switch in <10ms



Maximize self-consumption



Wide battery voltage range 85 ~ 460V



Pre-wired communication cables

Technical Data	GW3600-EH	GW5000-EH	GW6000-EH
Battery Input Data			
Battery Type		Li-Ion	
Nominal Battery Voltage (V)		350	
Battery Voltage Range (V)		85 ~ 460	
Max. Continuous Charging Current (A)		25	
Max. Continuous Discharging Current (A)		25	
Max. Charging Power (W)	3600	5000	6000
Max. Discharging Power (W)	3600	5000	6000
PV String Input Data			
Max. Input Power (W)	4800	6650	8000
Max. Input Voltage (V)		580	
MPPT Operating Voltage Range (V)**		100 ~ 550	
Start-up Voltage (V)		90	
Nominal Input Voltage (V)		380	
Max. Input Current per MPPT (A)		12.5	
Max. Short Circuit Current per MPPT (A)*6		15.2	
Number of MPPTs		2	
Number of Strings per MPPT		1	
AC Output Data (On-grid)			
Nominal Apparent Power Output to Utility Grid (VA)*1	3600	5000	6000
Max. Apparent Power Output to Utility Grid (VA)*1	3600	5000	6000
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*4	
Output Voltage Range (V)		0 ~ 300	
Nominal AC Grid Frequency (Hz)		50 / 60	
AC Grid Frequency Range (Hz)		45 ~ 65	
Max. AC Current Output to Utility Grid (A)	16.0	21.7	26.1 / 27.3*5
Max. AC Current From Utility Grid (A)	32.0	43.4	52.2
Nominal Output Current (A)	15.6	21.7	26.1
Power Factor		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 (VA)	3600 (4320@60sec)	5000 (6000@60sec)	6000 (7200@60sec)
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 Insulation Resistance Detection		Integrated	
Residual Current Monitoring		Integrated	
Battery Reverse Polarity Protection		Integrated	
Anti-islanding Protection		Integrated	
AC Overcurrent Protection		Integrated	
AC Short Circuit Protection		Integrated	
AC Overvoltage Protection		Integrated	
General Data			
Operating Temperature Range (°C)		-25 ~ +60	
Relative Humidity		0 ~ 95%	
Max. Operating Altitude (m)		2000	
Cooling Method		Nature Convection	
Display		LED, APP	
Communication with BMS*2		RS485, CAN	
Communication with Meter		RS485	
Communication with Portal		Wi-Fi / Ethernet (Optional)	
Weight (kg)		17	
Dimension (W × H × D mm)		354 × 433 × 147	
Noise Emission (dB)		<35	
Topology		Non-isolated	
Self-consumption at Night (W)*3		<10	
Ingress Protection Rating		IP65	
Mounting Method		Wall Bracket	
Country of Manufacture		China	

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

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

*3: No Back-up Output.

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

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

*6: For Australia Max. Short Circuit Current per MPPT (A) please refer to 'Manufacturer declaration: short circuit current'.

*: Please visit GoodWe website for the latest certificates.

**: Please refer to the user manual for the MPPT Voltage Range at Nominal Power.