GOODWE

EH Series

3.6-6kW I Single Phase I 2 MPPTs I 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

EH Series

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Technical Data	GW3600-EH	GW5000-EH	GW6000-EH	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	85	85
Number of Battery Input	-	-	-	1	1	1
Max. Continuous Charging Current (A)	25					
Max. Continuous Discharging Current (A)	25					
Max. Charging Power (W)	3600	5000	6000	6000	6000	6000
Max. Discharging Power (W)	3600	5000	6000	3600	5000	6000
PV String Input Data						
Max. Input Power (W)	4800	6650	8000	7200	10000	12000
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)	12.5 / 12.5	12.5 / 12.5	12.5 / 12.5	16.0	16.0	16.0
Max. Short Circuit Current per MPPT (A)	15.2 / 15.2	15.2 / 15.2	15.2 / 15.2	21.2	21.2	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)*2	-	-	-	3600	5000	6000
Max. Apparent Power Output to Utility Grid (VA)*2	3600 / 3960*1	5000 / 5500*1	6000 / 6600*1	3600 / 3960*1	5000 / 5500*1	6000 / 6600*1
Max. Apparent Power from Utility Grid (VA)	7200	10000	12000	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*5					
Output Voltage Range (V)	0 ~ 300					
Nominal AC Grid Frequency (Hz)	50 / 60					
Max. AC Current Output to Utility Grid (A)	16.0 / 18.0*1	21.7 / 24.0*1	26.1 / 28.7*1 / 27.3*6	16.0 / 18.0*1	21.7 / 24.0*1	26.1 / 28.7*1 / 27.3*6
Max. AC Current From Utility Grid (A)	32.0	43.4	52.2	32.0	43.4	52.2
Nominal Output Current (A)	15.6	21.7	26.1	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	3600	5000	6000
Max. Output Apparent Power without Grid (VA)	3600 (4320@60sec)	5000 (6000@60sec)	6000 (7200@60sec)	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	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	Integrated	Integrated
PV Insulation Resistance Detection	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated
Residual Current Monitoring	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated
PV Reverse Polarity Protection	-	-	-	Integrated	Integrated	Integrated
Battery Reverse Polarity Protection	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated
Anti-islanding Protection	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated
AC Overcurrent Protection	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated
AC Short Circuit Protection	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated
AC Overvoltage Protection	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated
DC Switch	-	-	-	Integrated	Integrated	Integrated
DC Surge Protection	-	-	-	Type II	Type II	Type II
AC Surge protection	-	-	-	Type III	Type III	Type III
Remote Shutdown	-	-	-	Integrated	Integrated	Integrated
General Data						
Operating Temperature Range (°C)	-25 ~ +60					
Relative Humidity	0 ~ 95%					
Max. Operating Altitude (m)	3000	3000	3000	2000	2000	2000
Cooling Method	Natural Convection					
User Interface	LED, APP					
Communication with BMS*3	RS485, CAN					
Communication with Meter	RS485					
Communication with Portal	WiFi / 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)*4	<10					
Ingress Protection Rating	IP65					
Mounting Method	Wall Mounted					
Country of Manufacture	China					

*1: For CEI 0-21.
*2: The grid feed in power for VDE-AR-N 4105 and NRS097-2-1 is limited 4600VA.
*3: CAN communication is configured by default. If 485 communication is used, please replace the corresponding communication line.
*4: No Back-up Output.
*5: For Brazil, the voltage is 220V.
*6: For Brazil, the current is 27.3A.
*: Please visit GoodWe website for the latest certificates.