SOLAR POWER SYSTEMS

Solahart
ENERGY Free FROM THE SUN®

GOODWE

HIGH POWER SINGLE-PHASE HYBRID INVERTERS

EHB SERIES | 5KW - 10KW | 3-4 MPPTS

SOLAHART 10 YEAR AUSTRALIAN WARRANTY

The EHB series is a unique single-phase hybrid inverter that offers up to four MPPTs, is compatible with high voltage (80-495V) batteries and has a power capacity ranging from 5 kW to 10 kW. Homeowners can now experience the ultimate solution for maximising generation and self-consumption in comfort and security. Intelligent mechanisms are timely activated to ensure power supply to critical loads when most needed. AFCI (Arc-fault current interrupter) and rapid shutdown options likewise ensure the safety of the whole PV system, offering freedom and security all in one.

How you benefit:

HIGH EFFICIENCY

97% max. Efficiency.

FLEXIBLE DESIGN

Ease of installation and maintenance.
200% PV input oversizing

SAFE OPERATION

AC bypass switch.

INNOVATIVE

Easily add on Solahart Home Energy Management System (HEMS) to control and optimise more appliances such as pool pumps, AC units, etc.

SOLAHART WARRANTY

Enjoy a 10-year warranty, for peace of mind.

TECHNICAL DATA

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Model	GW5K-EHB-AU-G11	GW8.6K-EHB-AU-G11	GW9.99K-EHB-AU-G11[*5]
Battery Input Data			
Battery Type		Li-Ion (GOODWE LX F & LX F G2)	
Nominal Battery Voltage (V)		350	
Battery Voltage Range (V)[*1]		80~495	
Number of Battery Input		1	
Max. Continuous Charging Current (A)		50	
Max. Continuous Discharging Current (A)		50	
Max Charge Power (W)	5000	8600	10000
Max Discharge Power (W)	5250	9030	10500
PV String Input Data			
Max. Input Power (W)	10000	17200	20000
Max. Input Voltage (V)[*2]		600	
MPPT Operating Voltage Range (V)[*3]		80-550	
Start-up Voltage (V)		95	
Nominal Input Voltage (V)		380	
Max. Input Current per MPPT (A)		16	
Max. Short Circuit Current per MPPT (A)		24	
Number of MPP Trackers	3	4	4
Number of Strings per MPPT		1	
AC Output Data (On-grid)			
Nominal Output Power (W)	5000	8600	9990
Nominal Apparent Power Output to Utility Grid (VA)	5000	8600	9990
Max. Apparent Power Output to Utility Grid (VA)[*4]	5000	8600	9990
Max. Apparent Power from Utility Grid (VA)	5750	11500	11500
Nominal Output Voltage (V)		230	
Output Voltage Range (V)		0 ~ 300	
Nominal AC Grid Frequency (Hz)		50	
AC Grid Frequency Range (Hz)		45 ~ 55	
Max. AC Current Output to Utility Grid (A)	21.7	37.4	43.4
Max. AC Current From Utility Grid (A)	25	50	50
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)	5000	8600	9990
Max. Output Apparent Power (VA)[*4]	5250 (7000@10sec)	9030 (14000@10sec)	10500 (14000@10sec)
Max. Output Apparent Power with Grid (VA)	5750	11500	11500
Max. Output Current (A)	22.8	39.3	45.7
Nominal Output Voltage (V)		230 (±2%)	
Nominal Output Frequency (Hz)		50 (±0.2%)	
Output THDv (@Linear Load)		<3%	
Efficiency			
Max. Efficiency		97.6%	
European Efficiency		97.0%	
Max. Battery to AC Efficiency		96.5%	
MPPT Efficiency		99.9%	
Protection			
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	
AC Switch		Integrated	
DC Surge Protection		Type II	
AC Surge Protection		Type II	
General Data			
Operating Temperature Range (°C)		-35 ~ +60	
Relative Humidity		0 ~ 95%	
Max. Operating Altitude (m)		4000	
Cooling Method		Smart Fan Cooling	
User Interface		LED, WLAN + APP	
Communication with BMS		RS485, CAN	
Communication with Meter		RS485	
Communicaiton with Portal		WiFi, LAN, 4G	
Weight (kg)	5000	8600	10000
Dimensions (W × H × D mm)		415 × 791 × 180	
Topology		Non-isolated	
Ingress Protection Rating		IP65	
Mounting Method		Wall Mounted	
Country of Manufacture		China	

[*1] Battery discharge/charge power limited by voltage.
[*2] Inverter will not work when PV input voltage ≥585V.
[*3] When there is no battery connected, inverter starts feeding in only if string voltage is higher than 200V.
[*4] Can be reached only if PV and battery power is enough.
[*5] The model name does not represent the rated power, please refer to the marked parameters for details.
[*6] The system will fully use total 150% PV energy to charge battery and turn to AC.
[*7] When EH is in microgrid application, the maximum battery voltage is 405V.

* Please visit **GoodWe** website for the latest certificates.
* Refer Solahart Warranty for details of the product warranty and Solahart Owner's Guide & Installation Instructions for installation details.

Specifications and designs included in this data sheet are subject to change without notice.