

EHB Series

(South Africa only) 5-10kW
Single phase I up to 4 MPPTs
Hybrid inverter (HV)

EHB Series is a single-phase hybrid inverter specially designed to meet the increasing energy storage needs from the residential segment. It is the ultimate integrated multi-function system, follows a Plug & Play design and has an external communication connector, making the installation process quick and convenient. Supporting up to 50A battery charge/discharge current, EHB can easily supply power to critical loads when the grid is compromised. It is AFCI-ready and can support rapid shutdown function. All these outstanding features make this inverter a perfect match for application in South African households.



Smart Control & Monitoring

- <10ms UPS-level switching
- Smart home integration with multi-protocol communications



Friendly & Thoughtful Design

- Plug & Play connectors
- Fanless cooling for quiet operation



Superb Safety & Reliability

- AFCI ready & Rapid shutdown
- IP65 ingress protection



Flexible & Adaptable Applications

- 4 MPPTs – higher yields
- Strong backup power supply

Technical Data	GW5000-EHB	GW6500-EHB	GW8600-EHB	GW0010-EHB
Battery Input Data				
Battery Type	Li-Ion (BYD HVM & HVS, Pylon H1 & H2, LG RESH10-TypeR, GOODWE LX S-H, GOODWE LX F)			
Nominal Battery Voltage (V)	360	360	360	360
Battery Voltage Range (V) ¹	80 ~ 495	80 ~ 495	80 ~ 495	80 ~ 495
Max. Continuous Charging Current (A)	50	50	50	50
Max. Continuous Discharging Current (A)	50	50	50	50
Max. Charging Power (W)	5000	6500	8600	10000
Max. Discharging Power (W)	5250	6825	9030	10500
PV String Input Data				
Max. Input Voltage (V) ²	600	600	600	600
MPPT Operating Voltage Range (V) ³	80 ~ 550	80 ~ 550	80 ~ 550	80 ~ 550
Start-up Voltage (V)	95	95	95	95
Nominal Input Voltage (V)	380	380	380	380
Max. Input Current per MPPT (A)	13	13	13	13
Max. Short Circuit Current per MPPT (A)	16.3	16.3	16.3	16.3
Number of MPP Trackers	3	4	4	4
Number of Strings per MPPT	1	1	1	1
AC Output Data (On-grid)				
Nominal Apparent Power Output to Utility Grid (VA)	5000	6500	8600	10000
Max. Apparent Power Output to Utility Grid (VA) ⁴	5000	6500	8600	10000
Max. Apparent Power from Utility Grid (VA)	6000	7800	10000	10000
Nominal Output Voltage (V)	230	230	230	230
Nominal AC Grid Frequency (Hz)	50	50	50	50
Max. AC Current Output to Utility Grid (A)	23.0	28.5	39.0	43.5
Max. AC Current From Utility Grid (A)	27.0	34.0	45.5	45.5
Power Factor	~1 (Adjustable from 0.8 leading to 0.8 lagging)			
Max. Total Harmonic Distortion	<3%	<3%	<3%	<3%
AC Output Data (Back-up)				
Back-up Nominal Apparent Power (VA)	5000	6500	8600	10000
Max. Output Apparent Power (VA) ⁵	5000 (6000@60sec)	6500 (7800@60sec)	8600 (10320@60sec)	10000 (12000@60sec)
Max. Output Current (A)	23.0	28.5	39.0	43.5
Nominal Output Voltage (V)	230 (±2%)	230 (±2%)	230 (±2%)	230 (±2%)
Nominal Output Frequency (Hz)	50 (±0.2%)	50 (±0.2%)	50 (±0.2%)	50 (±0.2%)
Output THDv (@Linear Load)	<3%	<3%	<3%	<3%
Efficiency				
Max. Efficiency	97.6%	97.6%	97.6%	97.6%
CEC Efficiency	97.0%	97.0%	97.0%	97.0%
Max. Battery to AC Efficiency	96.5%	96.5%	96.5%	96.5%
MPPT Efficiency	99.9%	99.9%	99.9%	99.9%
Protection				
PV Insulation Resistance Detection	Integrated	Integrated	Integrated	Integrated
Residual Current Monitoring	Integrated	Integrated	Integrated	Integrated
PV Reverse Polarity Protection	Integrated	Integrated	Integrated	Integrated
Battery Reverse Polarity Protection	Integrated	Integrated	Integrated	Integrated
Anti-islanding Protection	Integrated	Integrated	Integrated	Integrated
AC Overcurrent Protection	Integrated	Integrated	Integrated	Integrated
AC Short Circuit Protection	Integrated	Integrated	Integrated	Integrated
AC Overvoltage Protection	Integrated	Integrated	Integrated	Integrated
DC Switch	Integrated	Integrated	Integrated	Integrated
AC Switch	Integrated	Integrated	Integrated	Integrated
DC Surge Protection	Type II	Type II	Type II	Type II
AC Surge Protection	Type II	Type II	Type II	Type II
AFCI	Optional	Optional	Optional	Optional
Rapid Shutdown	Optional	Optional	Optional	Optional
General Data				
Operating Temperature Range (°C)	-35 ~ +60	-35 ~ +60	-35 ~ +60	-35 ~ +60
Relative Humidity	0 ~ 95%	0 ~ 95%	0 ~ 95%	0 ~ 95%
Max. Operating Altitude (m)	4000	4000	4000	4000
Cooling Method	Smart Fan Cooling	Smart Fan Cooling	Smart Fan Cooling	Smart Fan Cooling
User Interface	LED, WLAN + APP	LED, WLAN + APP	LED, WLAN + APP	LED, WLAN + APP
Communication with BMS	RS485, CAN	RS485, CAN	RS485, CAN	RS485, CAN
Communication with Meter	RS485	RS485	RS485	RS485
Communication with Portal	WiFi	WiFi	WiFi	WiFi
Weight (kg)	28.8	32.3	32.3	32.3
Dimension (W x H x D mm)	415 x 791 x 175	415 x 791 x 175	415 x 791 x 175	415 x 791 x 175
Topology	Non-isolated	Non-isolated	Non-isolated	Non-isolated
Self-consumption at Night (W) ⁶	<20	<20	<20	<20
Ingress Protection Rating	IP65	IP65	IP65	IP65
Mounting Method	Wall Mounted	Wall Mounted	Wall Mounted	Wall Mounted

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

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

*6: No Back-up Output.

*: Please visit GoodWe website for the latest certificates.