EHB Series

SOODWE

5-10kW (South Africa Only) I Single-phase Hybrid Inverter I HV Battery I up to 4 MPPT

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.



AFCI Ready & Rapid Shutdown



Installer-friendly

AC Bypass Switch

UPS Strong

Strong Backup Power Supply



4 MPPT – Higher Yields

GOODWE

Technical Data	GW5000-EHB	GW6500-EHB	GW8600-EHB	GW0010-EHB
Battery Input Data				
Battery Type			on*7	
Battery Voltage Range (V)*1			495	
Max. Charging Current (A)	50			
Max. Discharging Current (A)	50			
Charging Strategy for Li-Ion Battery	Self-adaption to BMS			
PV String Input Data				
Max. DC Input Power (W)	7500	9750	12900	15000
Max. DC Input Voltage (V)*2		6	00	
MPPT Range (V)*3	80~550			
Start-up Voltage (V)			95	
MPPT Range for Full Load (V)	200~500	200~500	255~500	300~500
Nominal DC Input Voltage (V) Max. Input Current (A)	13 / 13 / 13	<u>3</u> 	80 13 / 13 / 13 / 13	13 / 13 / 13 / 13
Max. Short Current (A)	16.3 / 16.3 / 16.3	16.3 / 16.3 / 16.3 / 16.3 / 16.		16.3 / 16.3 / 16.3 / 1
No. of MPP Trackers	3	4	4	4
No. of Strings per MPP Tracker	1/1/1	1/1/1/1	1/1/1/1	1/1/1/1
AC Output Data (On-grid)				
		0	20	
Nominal Output Voltage (Vac) Nominal Output Frequency (Hz)	<u>230</u> 50			
Max. Apparent Power Output to Grid (VA)*4	5000	6500	8600	10000
Max. Apparent Power from Grid (VA)	6000	7800	10000	10000
Max. AC Current Output to Grid (A)	23	28.5	39	43.5
Max. AC Current From Grid (A)	27	34	45.5	45.5
Output Power Factor	~1 (Adjustable from 0.8 leading to 0.8 lagging)			
Output THDi (@Nominal Output)	<3%			
AC Output Data (Back-up)				
Nominal Output Voltage (V)		230 (±2%)	
Nominal Output Frequency (Hz)	50 (±0.2%)			
Automatic Switch Time (ms)	<10			
Output THDv (@Linear Load)			3%	
Max. Continuous Output Apparent Power (VA)	5000	6500	8600	10000
Peak Output Apparent Power (VA)* ⁵ Max. Continuous Output Current (A)	6000, 60sec 23	7800, 60sec 28.5	10320, 60sec 39	12000, 60sec 43.5
	23	20.3		40.0
Efficiency				
PV Max. Efficiency	97.6%			
PV CEC Efficiency Battery Charged By PV Max. Efficiency	<u>97.0%</u> 98.2%			
Battery Charge/discharge to AC Max. Efficiency	98.2% 96.5%			
		50		
Protection				
PV Arc Fault Detection	Optional			
Rapid Shutdown System (RSS) Transmitter DC&AC Breaker, AC Bypass Switch	Optional			
AC&DC SPD Type II	Integrated Integrated			
Activity of the second se	Integrated			
PV String Input Reverse Polarity Protection	Integrated			
Insulation Resistor Detection	Integrated			
Residual Current Monitoring Unit	Integrated			
Output Over Current Protection	Integrated			
Back-up Output Short Protection	Integrated			
Output Over Voltage Protection	Integrated			
Battery Input Reverse Polarity Protection	Integrated			
General Data				
Operating Temperature Range (°C)			~60	
Relative Humidity	0~95%			
Operating Altitude (m)	≤4000 Intelligent For			
Cooling Noise (dB)	Intelligent Fan			
Noise (dB) User Interface	<pre><50 LED & APP (Wi-Fi & Bluetooth)</pre>			
DC&AC Power Connect Port	MC4 & ADAPTER WIELAND			
Communication with BMS	RS485; CAN			
Communication with Meter	R\$485			
Communication with EMS	RS485 (Insulated)			
Communicaiton with Portal	Wi-Fi			
Communication with RSD			SPEC	
Weight (Kg)	28.8	32.3	32.3	32.3
Dimensions (W × H × D mm)	415 × 791 × 175 Wall Bracket			
Mounting Protection Degree				
	<u>IP65</u> <20			
Standby Self Consumption (W)*6		/	20	
Standby Self Consumption (W)* ⁶ Topology			20 rmerless	

*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.
 *⁷: EHB Series is compatible with BYD Battery-Box Premium HVM/HVS, PYLON FORCE-H1/H2, LG RESU10H Type-R, DYNESS Tower and GoodWe Lynx Home F (Coming Soon).
 *: Please visit GoodWe website for the latest certificates.

www.goodwe.com