

# EHB Series

## Single Phase Hybrid Inverter (HV Battery)



| Technical Data                                  | GW5000-EHB                                  | GW6500-EHB          | GW8600-EHB   | GW0010-EHB           |
|---|---|---------------------|--------------|----------------------|
| <b>Battery Input Data</b>                       | Battery Type                                |                     |              |                      |
|   | Li-Ion*7                                    |                     |              |                      |
|   | Battery Voltage Range (V)*1                 |                     |              |                      |
|   | 80~495                                      |                     |              |                      |
| Max. Charging Current (A)                       |   |                     |              | 50                   |
| Max. Discharging Current (A)                    |   |                     |              | 50                   |
| Charging Strategy for Li-Ion Battery            |   |                     |              | Self-adaption to BMS |
| <b>PV String Input Data</b>                     | Max. DC Input Power (W)                     |                     |              |                      |
|   | 7500  | 9750                | 12900        | 15000                |
|   | Max. DC Input Voltage (V)*2                 |                     |              |                      |
|   | 600   |                     |              |                      |
|   | 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)                |                     |              |                      |
| 380   |   |                     |              |                      |
| Max. Input Current (A)                          |   |                     |              |                      |
| 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 |              |                      |
| No. of MPP Trackers                             |   |                     |              |                      |
| 3   |   | 4                   |              |                      |
| No. of Strings per MPP Tracker                  |   |                     |              |                      |
| 1/1/1   |   | 1/1/1/1             |              |                      |
| <b>AC Output Data (On-grid)</b>                 | Nominal Output Voltage (Vac)                |                     |              |                      |
|   | 230   |                     |              |                      |
|   | Nominal Output Frequency (Hz)               |                     |              |                      |
|   | 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%   |   |                     |              |                      |
| <b>AC Output Data (Back-up)</b>                 | 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               |   |                     |              |                      |
| 6000, 60sec                                     | 7800, 60sec                                 | 10320, 60sec        | 12000, 60sec |                      |
| Max. Continuous Output Current (A)              |   |                     |              |                      |
| 23  | 28.5  | 39                  | 43.5         |                      |
| <b>Efficiency</b>                               | PV Max. Efficiency                          |                     |              |                      |
|   | 97.6%                                       |                     |              |                      |
|   | PV CEC Efficiency                           |                     |              |                      |
|   | 97.0%                                       |                     |              |                      |
| Battery Charged By PV Max. Efficiency           |   |                     |              |                      |
| 98.2%   |   |                     |              |                      |
| Battery Charge/discharge to AC Max. Efficiency  |   |                     |              |                      |
| 96.5%   |   |                     |              |                      |
| <b>Protection</b>                               | PV Arc Fault Detection                      |                     |              |                      |
|   | Optional                                    |                     |              |                      |
|   | Rapid Shutdown System (RSS) Transmitter     |                     |              |                      |
|   | Optional                                    |                     |              |                      |
|   | DC&AC Breaker, AC Bypass Switch             |                     |              |                      |
|   | Integrated                                  |                     |              |                      |
|   | AC&DC SPD Type II                           |                     |              |                      |
|   | Integrated                                  |                     |              |                      |
|   | Anti-islanding Protection                   |                     |              |                      |
|   | 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                                      |   |                     |              |                      |
| <b>General Data</b>                             | Operating Temperature Range (°C)            |                     |              |                      |
|   | -35~60                                      |                     |              |                      |
|   | Relative Humidity                           |                     |              |                      |
|   | 0~95%                                       |                     |              |                      |
|   | Operating Altitude (m)                      |                     |              |                      |
|   | ≤4000                                       |                     |              |                      |
|   | Cooling                                     |                     |              |                      |
|   | Intelligent Fan                             |                     |              |                      |
|   | Noise (dB)                                  |                     |              |                      |
|   | <50   |                     |              |                      |
|   | User Interface                              |                     |              |                      |
|   | LED & APP (Wi-Fi & Bluetooth)               |                     |              |                      |
|   | DC&AC Power Connect Port                    |                     |              |                      |
|   | MC4 & ADAPTER WIELAND                       |                     |              |                      |
|   | Communication with BMS                      |                     |              |                      |
|   | RS485; CAN                                  |                     |              |                      |
|   | Communication with Meter                    |                     |              |                      |
|   | RS485                                       |                     |              |                      |
|   | Communication with EMS                      |                     |              |                      |
| RS485 (Insulated)                               |   |                     |              |                      |
| Communication with Portal                       |   |                     |              |                      |
| Wi-Fi   |   |                     |              |                      |
| Communication with RSD                          |   |                     |              |                      |
| SUNSPEC   |   |                     |              |                      |
| Weight (kg)                                     |   | 28.8                |              | 32.3                 |
| Dimensions (W*H*D mm)                           |   |                     |              |                      |
| 415*791*175                                     |   |                     |              |                      |
| Mounting  |   |                     |              |                      |
| Wall Bracket                                    |   |                     |              |                      |
| Protection Degree                               |   |                     |              |                      |
| IP65  |   |                     |              |                      |
| Standby Self Consumption (W)*6                  |   |                     |              |                      |
| <20   |   |                     |              |                      |
| Topology  |   |                     |              |                      |
| Transformerless                                 |   |                     |              |                      |

\*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, DYNES Tower and GoodWe Lynx Home F (Coming Soon).

\*: Please visit GoodWe website for the latest certificates.