

# GSB48 HY 3P 10KW HYBRID INVERTER

## Technical Features

- Pure sine wave inverter
- Self-consumption
- Programmable Use Priority for Solar, Battery or Network
- Wide selectable charging currents for compatibility with different battery types
- Various Modes of Use for a wide flexibility: On-Grid, Off-Grid, Hybrid Internal Clock for various on / off options
- Multiple communication ports for USB, RS-232, Modbus and SNMP Real-time Monitoring and Control Software
- Possibility of Parallel Connection up to 6 units





| MODEL  | GSB Solar 3P 10KW                                | GSB Solar 3P 15KW                           |
|--|--|---|
| PHASE  | 3-phase in / 3-phase out                         |   |
| MAXIMUM PV INPUT POWER                         | 14850 W  | 22500 W                                     |
| RATED OUTPUT POWER                             | 10000 W  | 15000 W                                     |
| MAXIMUM CHARGING POWER                         | 9600 W   | 15000 W                                     |
| GRID - TIE OPERATION                           |  |   |
| Nominal DC Voltage / Maximum DC Voltage        | 720 VDC / 900 VDC                                | 720 VDC / 900 VDC                           |
| Start-up Voltage / Initial Feeding Voltage     | 320 VDC / 350 VDC                                | 320 VDC / 350 VDC                           |
| MPP Voltage Range                              | 400 VDC ~ 800 VDC                                | 400 VDC ~ 800 VDC                           |
| Number of MPP Trackers / Maximum Input Current | 2 / 2 x 18.6A                                    | 2 / A: 37.65A; B: 18.6A                     |
| GRID OUTPUT (AC)                               |  |   |
| Nominal Output Voltage                         | 230 VAC (P-N) / 400 VAC (P-P)                    |   |
| Output Voltage Range                           | 184 - 265VAC* per phase                          | 184 - 264.5VAC per phase                    |
| Nominal Output Current                         | 14.5A per phase                                  | 21.7A per phase                             |
| Power Factor                                   | > 0.99   |   |
| EFFICIENCY                                     |  |   |
| Maximum Conversion Efficiency (DC/AC)          | 96%  |   |
| European Efficiency@ Vnominal                  | 95%  |   |
| OFF-GRID OPERATION                             |  |   |
| AC INPUT                                       |  |   |
| AC Start-up Voltage/Auto Restart Voltage       | 120 - 140 VAC per phase / 180 VAC per phase      |   |
| Acceptable Input Voltage Range                 | 170 - 280 VAC per phase                          |   |
| Maximum AC Input Current                       | 40 A   |   |
| PV INPUT (DC)                                  |  |   |
| Maximum DC Voltage                             | 900 VDC  | 900 VDC                                     |
| MPP Voltage Range                              | 400 VDC ~ 800 VDC                                | 350 VDC ~ 850 VDC                           |
| Number of MPP Trackers/Maximum Input Current   | 2 / 2 x 18.6A                                    | 2 / A: 37.65A; B: 18.6A                     |
| BATTERY MODE OUTPUT (AC)                       |  |   |
| Nominal Output Voltage                         | 230 VAC (P-N) / 400 VAC (P-P)                    | 230 VAC (P-N) / 400 VAC (P-P)               |
| Output Waveform                                | Pure Sinewave                                    |   |
| Efficiency (DC to AC)                          | 91%  | 91%   |
| HYBRID OPERATION                               |  |   |
| PV INPUT (DC)                                  |  |   |
| Nominal DC Voltage / Maximum DC Voltage        | 720 VDC / 900 VDC                                | 720 VDC / 900 VDC                           |
| Start-up Voltage / Initial Feeding Voltage     | 320 VDC / 350 VDC                                | 320 VDC / 350 VDC                           |
| MPP Voltage Range                              | 400 VDC ~ 800 VDC                                | 350 VDC ~ 850 VDC                           |
| Number of MPP Trackers/Maximum Input Current   | 2 / 2 x 18.6A                                    | 2 / A: 37.65A; B: 18.6A                     |
| GRID OUTPUT (AC)                               |  |   |
| Nominal Output Voltage                         | 230 VAC (P-N) / 400 VAC (P-P)                    | 230 VAC (P-N) / 400 VAC (P-P)               |
| Output Voltage Range                           | 184 - 265 VAC* per phase                         | 184 - 264.5 VACper phase                    |
| Nominal Output Current                         | 14.5 A per phase                                 | 21.7A per phase                             |
| AC INPUT                                       |  |   |
| AC Start-up Voltage / Auto Restart Voltage     | 120 - 140 VAC per phase / 180 VAC per phase      | 120 - 140 VAC per phase / 180 VAC per phase |
| Acceptable Input Voltage Range                 | 170 - 280 VAC per phase                          | 170 - 280 VAC per phase                     |
| Maximum AC Input Current                       | 40 A   | 40 A  |
| BATTERY MODE OUTPUT                            |  |   |
| Nominal Output Voltage                         | 230 VAC (P-N) / 400 VAC (P-P)                    | 230 VAC (P-N) / 400 VAC (P-P)               |
| Efficiency (DC to AC)                          | 91%  | 91%   |
| BATTERY & CHARGER                              |  |   |
| Nominal DC Voltage                             | 48 VDC   |   |
| Maximum Charging Current                       | Default 60A, 10A - 200A (Adjustable)             | Default 60A, 5A - 300A (Adjustable)         |
| GENERAL  |  |   |
| PHYSICAL                                       |  |   |
| Dimension, D x W x H (mm)                      | 167.2 x 500 x 622                                | 219 x 650 x 820                             |
| Net Weight (kgs)                               | 40   | 62  |
| INTERFACE                                      |  |   |
| Communication Port                             | RS-232/USB                                       | RS-232, USB and Dry contact                 |
| Intelligent Slot                               | Optional SNMP, Modbus and AS-400 cards available |   |
| ENVIRONMENT                                    |  |   |
| Humidity                                       | 0 ~ 90% RH (Non-Condensing)                      |   |
| Operating Temperature                          | -10 to 55°C                                      |   |
| Altitude                                       | 0 ~ 1000 m**                                     |   |