

Datasheet of SLA Hybrid Inverter

| Product Model | SLA-HB-S1-6kW1P | SLA-HB-S1-5kW1P | SLA-HB-S1-3.8kW1P |
|--|---|--------------------|-------------------|
| PV Input | | | |
| Max. PV array power string 1/string 2 [W] | 3750/3750 | | |
| Max. DC voltage[V] | 600 ^{*3} | | |
| Rated DC operating voltage[V] | 360 | | |
| MPPT voltage range[V] | 100-540 | | |
| MPP voltage range for rated power[V] ^{*5} | 225-480 | 185-480 | 141-480 |
| Startup voltage[V] | 120 | | |
| Max. input current(A/B)[A] | 15/15 | | |
| Max. short circuit current(A/B)[A] | 18/18 | | |
| No. of MPP tracks/String per MPP tracker | 2/1 | | |
| BAT Side | | | |
| Battery type | Li-ion | | |
| Battery voltage range[V] | 85 ^{*4} -400 | | |
| Battery voltage range for nominal power[V] | 250-400 | 225-400 | 170-400 |
| Recommended battery voltage[V] | 300 | | |
| Max. charge/discharge current[A] ^{*2} | 25/25 | | |
| Communication interfaces | RS485/CAN | | |
| Reverse connect protection | Yes | | |
| AC Grid Side(On-grid) | | | |
| Rated AC output power[W] | 6000 ^{*1} | 5000 ^{*1} | 3800 |
| Max. Output Power(W) | 6000 ^{*1} | 5000 ^{*1} | 3800 |
| Rated Apparent Power Output to Utility Grid (VA) | 6000 ^{*1} | 5000 ^{*1} | 3800 |
| Max. Apparent Power Output to Utility Grid (VA) | 6000 ^{*1} | 5000 ^{*1} | 3800 |
| Rated Apparent Power from Utility Grid (VA) | 6000 | 5000 | 3800 |
| Max. Apparent Power from Utility Grid (VA) | 6000 | 6000 | 6000 |
| Rated grid voltage[V] | L/N/PE 230Va.c | | |
| Grid Voltage Range[V] | 180-280 | | |
| Rated grid frequency[Hz] | 50 | | |
| AC Grid Frequency Range (Hz) | 50±5 | | |
| Max. Input/output current [Aa.c.] | 26.1/26.1 | 26.1/21.7 | 26.1/16.5 |
| Rate input/output current [Aa.c.] | 26.1/26.1 | 21.7/21.7 | 16.5/16.5 |
| Power factor | ~1 (Adjustable from 0.8 leading to 0.8 lagging) | | |
| I.TH[D][%] | <3@Rated power | | <5@Rated power |

| EPS Side | | | |
|---|-------------------------------|-------------------------------|-------------------------------|
| Back-up Nominal Apparent Power(VA) | 6000 | 5000 | 3800 |
| Nominal power[W] | 6000 | 5000 | 3800 |
| Max. Output Apparent Power without Grid (VA) | 7500@10sec | | |
| Max. Output Apparent Power with Grid (VA) | 7500@10sec | | |
| Nominal output voltage[V] | L/N/PE 230Va.c | | |
| Nominal output frequency[Hz] | 50 | | |
| Rated Output Current (A) | 26.1 | 21.7 | 16.5 |
| Max. output current[A] | 26.1 | 21.7 | 16.5 |
| Max. output overcurrent protection[A] | 32.6@10sec | | |
| Switching from Grid Connected Mode to Standalone Mode[ms] | <20 | | |
| Output THD[%] | <5@Linear Load | | |
| EFFICIENCY | | | |
| MPPT efficiency[%] | 99.9 | | |
| Euro efficiency[%] | 95.2 | 95.2 | 95.0 |
| Max. efficiency[%] | 96.8 | 96.7 | 96.5 |
| Battery charge/discharge efficiency[%] | 97.6(PV-BAT), 96.0(BAT-AC) | 97.6(PV-BAT), 96.0(BAT-AC) | 97.6(PV-BAT), 95.4(BAT-AC) |
| ENVIRONMENT LIMIT | | | |
| Ingress protection | IP65 | | |
| Protection class | Class I | | |
| Pollution degree | PD3 | | |
| Over voltage category | III(MAINS), II(DC) | | |
| Operating temperature range[°C] | -20~+60(debating at +45) | | |
| Operation altitude[m] | <2000 | | |
| Humidity | 0-95% | | |
| Cooling Method | Natural Convection | | |
| User Interface | LED,APP | | |
| Communication with BMS | CAN/RS485 | | |
| Communication with Meter | RS485 | | |
| Communication with Portal | WIFI | | |
| Typical noise emission[dB] | <40 | | |
| Dimension (W*H*D) [mm] | 800*435*160 | | |
| Weight[KG] | 34 | | |
| Topology | Non-isolated | | |
| Method for anti-islanding | Active Frequency Drift (AFD) | | |
| Self-consumption at Night (W) | <25 | | |
| DC Connector | MC4 (4~6mm2) | | |
| AC Connector | Quick Plug | | |
| Storage Temperature (°C) | -40~85 | | |
| Country of manufacture | China | | |

| | |
|---|---|
| Standard warranty[years] | 10 |
| STANDARD | |
| Safety | IEC/EN 62109-1&2, IEC62477 |
| EMC | IEC61000-6-1, IEC61000-6-3 |
| Environment | IEC60529,IEC60068 |
| Efficiency | IEC61683 |
| Certification | EN50549-1,G99,G98,CEI021,VDE4105,AS4777.2 |
| <p>Remark:</p> <p>*1. The grid feed in power for VDE4105 is limited 4600VA.</p> <p>*2. Battery charging current is limited 25A and power is limited 6000W.</p> <p>*3. The machine may be damaged if PV port exceeds this voltage, full power operation voltage should be less than 480V, 480V-540V for limited power operation.</p> <p>*4. Battery port boot voltage must be greater than 95V.</p> <p>*5. The power is 6000W according to the grid port.</p> | |