

SG1100UD-20

Outdoor Inverter for 1500 Vdc System



HIGH YIELD

- Advanced three-level technology, max. inverter efficiency 99 %
- Effective cooling, full power operation at 51 °C



SMART O&M

- Integrated zone monitoring function for online analysis and trouble shooting
- Modular design, easy for maintenance



SAVED INVESTMENT

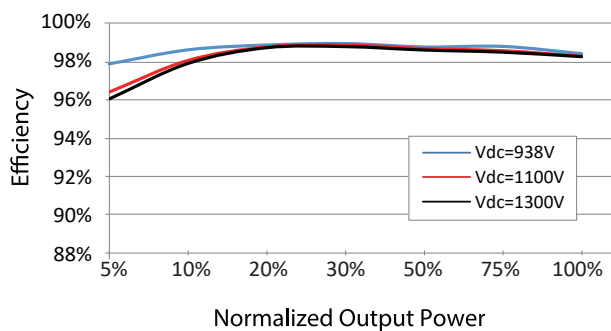
- Low transportation and installation cost due to outdoor design
- DC 1500 V system, low system cost
- Q at night function optional



GRID SUPPORT

- Compliance with standards: IEC 61727, IEC 62116
- Low / High voltage ride through (L/HVRT)
- Active & reactive power control and power ramp rate control

EFFICIENCY CURVE



| Type designation | SG1100UD-20 |
|---|---|
| Input (DC) | |
| Max. PV input voltage | 1500 V |
| Min. PV input voltage / Startup input voltage | 938 V / 950 V |
| MPP voltage range | 938 V – 1500 V |
| No. of independent MPP inputs | 1 |
| No. of DC inputs | 5 (optional: 7) |
| Max. PV input current | 1435 A |
| Max. DC short-circuit current | 3528 A |
| PV array configuration | Negative grounding or floating |
| Output (AC) | |
| AC output power | 1100 kVA @ 51 °C, 1320 kVA @ 23 °C |
| Max. AC output current | 1155 A |
| Nominal AC voltage | 660 V |
| AC voltage range | 561 V – 726 V |
| Nominal grid frequency / Grid frequency range | 50 Hz / 45 Hz – 55 Hz, 60 Hz / 55 Hz – 65 Hz |
| Harmonic (THD) | < 3 % (at nominal power) |
| Power factor at nominal power / Adjustable power factor | > 0.99 / 0.8 leading – 0.8 lagging |
| Feed-in phases / AC connection | 3 / 3 |
| Efficiency | |
| Max. efficiency / European efficiency | 99.0 % / 98.7 % |
| Protection & Function | |
| DC input protection | Load break switch + fuse |
| AC output protection | Circuit breaker |
| Surge protection | DC Type II / AC Type II |
| Grid monitoring / Ground fault monitoring | Yes / Yes |
| Insulation monitoring | Yes |
| Surge protection | Yes |
| Q at night function | Optional |
| General data | |
| Dimensions (W*H*D) | 700 mm * 2290 mm * 1525 mm |
| Weight | 800 kg |
| Topology | Transformerless |
| Degree of protection | IP65 |
| Night power consumption | < 200 W |
| Operating ambient temperature range | - 35 °C to 60 °C (> 51 °C derating) |
| Allowable relative humidity range | 0 % – 100 % |
| Cooling method | Temperature controlled forced air cooling |
| Max. operating altitude | 4000 m (> 2000 m derating) |
| Display | LED Indicators, WLAN+WebHMI |
| Communication | Standard: RS485, Ethernet |
| Compliance | CE, IEC 62109, IEC 61727, IEC 62116, IEC 60068, IEC 61683 |
| Grid support | Q at night function (optional), L/HVRT, active & reactive power control and power ramp rate control |

* : The transformer can operate at full load for 8 hours at 51°C