

# SG3300UD/SG4400UD

Outdoor Inverter for 1500 Vdc System



## HIGH YIELD

- Advanced three-level technology, max. inverter efficiency 99 %
- Effective cooling, full power operation at 45 °C



## SMART O&M

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



## SAVED INVESTMENT

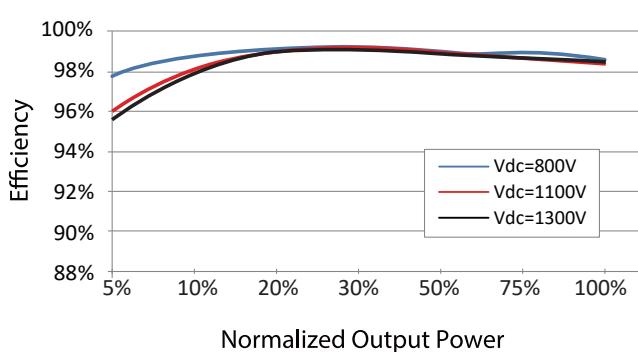
- Low transportation and installation cost due to outdoor design
- DC 1500 V system, low system cost
- Q at night function optional



## 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  | SG3300UD   | SG4400UD   |
|---|--|--|
| <b>Input (DC)</b>                                       |  |  |
| Max. PV input voltage                                   | 1500 V   |  |
| Min. PV input voltage / Startup input voltage           | 895 V / 905 V  |  |
| MPP voltage range                                       | 895 – 1500 V   |  |
| No. of independent MPP inputs                           | 3  | 4  |
| No. of DC inputs  | 15(optional: 18/21 inputs negative grounding)  | 20(optional: 24/28 inputs negative grounding)              |
| Max. PV input current                                   | 3 * 1435 A   | 4 * 1435 A   |
| Max. DC short-circuit current                           | 3 * 3528 A   | 4 * 3528 A   |
| PV array configuration                                  | Negative grounding or floating   |  |
| <b>Output (AC)</b>                                      |  |  |
| AC output power   | 3300 kVA @ 45 °C<br>3399 kVA @ 40 °C<br>3795 kVA @ 22.5 °C   | 4400 kVA @ 45 °C<br>4532 kVA @ 40 °C<br>5060 kVA @ 22.5 °C |
| Max. AC output current                                  | 3 * 1160 A   | 4 * 1160 A   |
| Nominal AC voltage                                      | 630 V  |  |
| AC voltage range  | 536 – 693 V  |  |
| Nominal grid frequency / Grid frequency range           | 50 Hz / 45 – 55 Hz, 60 Hz / 55 – 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  |  |
| <b>Efficiency</b>                                       |  |  |
| Max. efficiency / European efficiency                   | 99.0 % / 98.8 %  |  |
| <b>Protection &amp; Function</b>                        |  |  |
| DC input protection                                     | Load break switch + fuse   |  |
| AC output protection                                    | Circuit breaker  |  |
| Oversupply 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   |  |
| <b>General Data</b>                                     |  |  |
| Dimensions (W*H*D)                                      | 2340*2300*1550 mm  | 2900*2300*1550 mm  |
| Weight  | 2.5 T  | 3.3T   |
| Topology  | Transformerless  |  |
| Degree of protection                                    | IP65   |  |
| Night power consumption                                 | < 200 W  |  |
| Operating ambient temperature range                     | -35 to 60 °C (> 45 °C derating)  |  |
| Allowable relative humidity range                       | 0 – 100 %  |  |
| Cooling method  | Temperature controlled forced air cooling  |  |
| Max. operating altitude                                 | 4000 m (> 3000 m derating)   |  |
| Display   | LED indicators, WLAN+WebHMI  |  |
| Communication   | Standard: RS485, Ethernet; Optional: optical fiber; MPLC   |  |
| Compliance  | CE, IEC 62109, IEC 61727, IEC 62116, IEC 60068, IEC 61683, VDE-AR-N 4110:2018, VDE-AR-N 4120:2018, EN 50549-2, UNE 206007-1:2013, P.O.12.3, UTE C15-712-1:2013 |  |
| Grid support  | Q at night function (optional), L/HVRT, active & reactive power control and power ramp rate control, Q-U control, P-f control                                  |  |