

# SG3300UD-MV

# SG4400UD-MV

Turnkey Station for 1500 Vdc System MV Transformer Integrated



## HIGH YIELD

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



## SMART O&M

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



## SAVED INVESTMENT

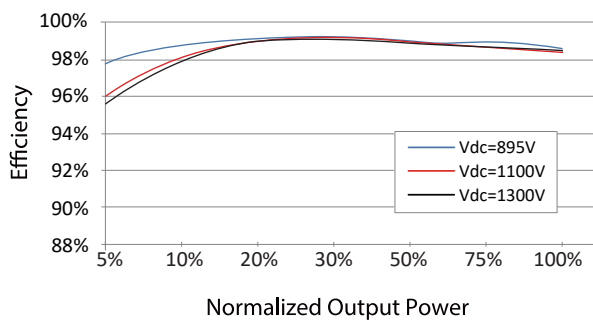
- Low transportation and installation cost due to 20-foot container design
- DC 1500V system, low system cost
- Integrated MV transformer, switchgear, and LV auxiliary power supply
- Q at night function optional



## GRID SUPPORT

- Compliance with standards: IEC 61727, IEC 62116, IEC 62271-202, IEC 62271-200, IEC 60076
- Low/High voltage ride through (L/HVRT)
- Active & reactive power control and power ramp rate control

## EFFICIENCY CURVE



Type Designation	SG3300UD-MV	SG4400UD-MV
<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 * 1400 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 3399 kVA @ 40°C 3795 kVA @ 20°C	4400 kVA @ 45 °C 4532 kVA @ 40°C 5060 kVA @ 20°C
Max. inverter output current	3 * 1160 A	4 * 1160 A
Max. AC output current	219.2 A	292.2 A
AC voltage range	10 kV – 35 kV	
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-PE	
<b>Efficiency</b>		
Inverter max. efficiency / Inverter European efficiency	99.0 % / 98.7 %	
<b>Transformer</b>		
Transformer rated power	3300 kVA	4400 kVA
Transformer max. power	3795 kVA	5060 kVA
LV / MV voltage	0.63 kV / (10 – 35) kV	
Impedance	7 % (0 ~ ± 10 %) @ 3300 kVA	8 % (0 ~ ± 10 %) @ 4400 kVA
Transformer vector	Dy11	
Transformer cooling type	ONAN / Optional: ONAF	
Oil type	Mineral oil (PCB free) or degradable oil on request	
<b>Protection &amp; Function</b>		
DC input protection	Load break switch + fuse	
Inverter output protection	Circuit breaker	
AC MV output protection	Circuit breaker	
Surge protection	DC Type II / AC Type II	
Grid monitoring / Ground fault monitoring	Yes / Yes	
Insulation monitoring	Yes	
Overheat protection	Yes	
Q at night function	Optional	
<b>General Data</b>		
Dimensions (W*H*D)	6058 mm * 2896 mm * 2438 mm	
Weight	≤ 16 T	≤ 17.5 T
Degree of protection	Inverter: IP65 / Others: IP54	
Auxiliary power supply	5 kVA (optional: max. 40 kVA)	
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	1000 m (standard) / > 1000 m (optional)	
Display	LED indicators, WLAN + WebHMI	
Communication	Standard: RS485, Ethernet; Optional: optical fiber; MPLC	
Compliance	CE, IEC 62109, IEC 61727, IEC 62116, IEC 62271-202, IEC 62271-200, IEC 60076	
Grid support	Q at night (Optional), L/HVRT, active & reactive power control and power ramp rate control	