

SG3300/4400UD

Outdoor Inverter for 1500 Vdc System

Preliminary



LOW LCOE

- Effective cooling, full power operation at 40 °C
- Wireless communication in block, '0' networking cost
- Q at night function (optional), saving investment



SMART O&M

- Modular equipment, 1.1 – 8.8 MW block flexible design
- Modular system, flexible PV DC/AC ratio and ESS capacity
- Modular component, plug and play, No professional technician required



SAFETY & RELIABLE

- DC arc fault protection, fault out-off in 200ms
- 24h real-time AC insulation monitoring
- IP65 protection, adapt to harsh environment



GRID SUPPORT

- SCR ≥ 1.02 , stable operation in extremely weak grid
- Reactive power response time < 20 ms
- Compliant with global grid codes

Type designation	SG3300UD	SG4400UD
Input (DC)		
Max. PV input voltage	1500 V	
Min. PV input voltage / Startup input voltage	905 V / 945 V	
MPP voltage range	905 – 1300 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 * 1400 A
Max. DC short-circuit current	3 * 5000 A	4 * 5000 A
PV array configuration	Negative grounding or floating	
Output (AC)		
AC output power	3300 kVA @ 40 °C (104 °F), 3795 kVA @ 20 °C (68 °F)	4400 kVA @ 40 °C (104 °F), 5060 kVA @ 20 °C (68 °F)
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-PE	
Efficiency		
Max. efficiency	99.0 %	
European efficiency	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	
Overheat protection	Yes	
Q at night function	Optional	
General Data		
Dimensions (W*H*D)	2160*2260*1700 mm (85''*89''*66.9'')	2860*2260*1700 mm (112.6''*89''*66.9'')
Weight	≤ 2500 kg (≤ 5512 lbs)	≤ 3300 kg (≤ 7275 lbs)
Topology	Transformerless	
Degree of protection	IP55 (optional: IP65) / NEMA 3R (optional: NEMA 4X)	
Night power consumption	< 200 W	
Operating ambient temperature range	-35 to 60 °C (> 40 °C derating) / -31 to 140 °F (> 104 °F derating)	
Allowable relative humidity range	0 – 100 %	
Cooling method	Temperature controlled forced air cooling	
Max. operating altitude	4000 m (> 3000 m derating) / 13123 ft (> 9843 ft derating)	
Display	LED indicators, WLAN+WebHMI	
Communication	Standard: RS485, Ethernet; Optional: optical fiber	
Compliance	CE, IEC 62109, IEC 61727, IEC 62116, IEC 62109, IEC 61727, IEC 62116, IEC 60068, IEC 61683, VDE-AR-N 4110:2018, VDE-AR-N 4120:2018, EN 50549-1/2, UNE 206007-1:2013, TED 749, UTE C15-712-1:2013, UL1741, UL1741SA, G99, CEI-016, IEEI1547, IEEI1547.1, CSA C22.2 107.1-01-2001, California Rule 21	
Grid support	Q at night function (optional), L/HVRT, active & reactive power control and power ramp rate control, Q-U control, P-F control	