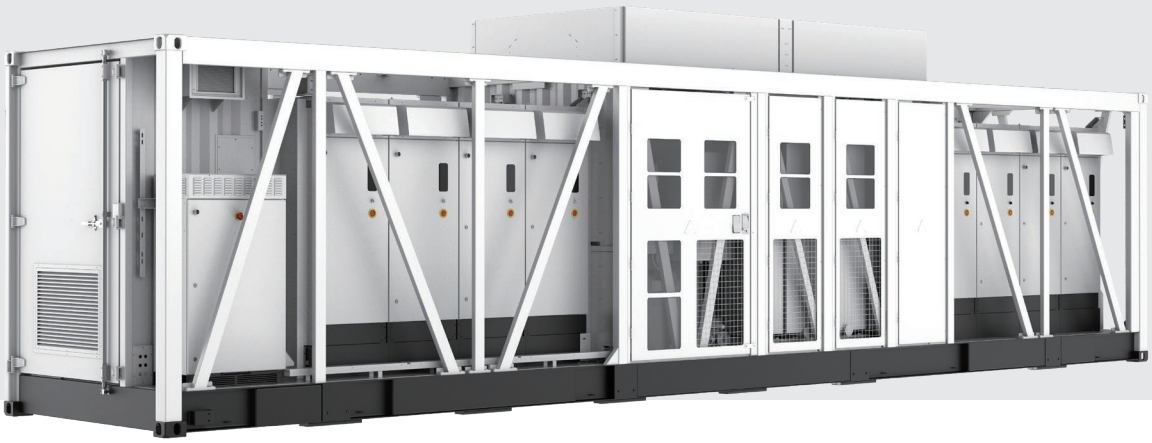
SG6600UD-MV
SG8800UD-MV

MV Grid-connected PV Inverter for 1500 Vdc System



HIGH YIELD

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

SAVED INVESTMENT

- Low transportation and installation cost due to 40-foot container design
- DC 1500V system, low system cost
- Integrated MV transformer, switchgear, and LV auxiliary power supply
- Q at night function optional

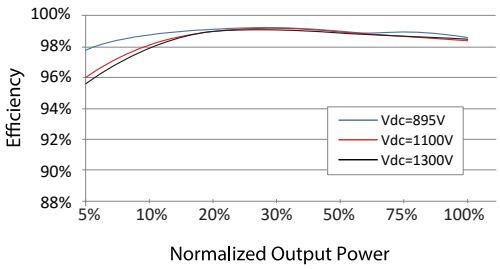
SMART O&M

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

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



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Type Designation	SG6600UD-MV	SG8800UD-MV
Input (DC)		
Max. PV input voltage	1500 V	
Min. PV input voltage / Startup input voltage	895 V / 905 V	
MPP voltage range	895 V – 1500 V	
No. of independent MPP inputs	6	8
No. of DC inputs	30 (optional: 42)	40 (optional: 56)
Max. PV input current	6 * 1435 A	8 * 1435 A
Max. DC short-circuit current	6 * 3528 A	8 * 3528 A
PV array configuration	Negative grounding or floating	
Output (AC)		
AC output power	6600 kVA @ 45 ℃ 6798 kVA @ 40 ℃ 7590 kVA @ 22.5 ℃	8800 kVA @ 45 ℃ 9064 kVA @ 40 ℃ 10120 kVA @ 22.5 ℃
Max. inverter output current	6 * 1160 A	8 * 1160 A
Max. AC output current	438.3 A	292.2 A
Rated voltage range	10 kV – 35 kV	20 kV – 35 kV
Nominal grid frequency / Grid frequency range	50 Hz / 45 Hz – 55 Hz, 60 Hz / 55 Hz – 65 Hz	
Harmonic (THD)	< 1.5 % (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		
Inverter max. efficiency / Inverter European efficiency	99.0 % / 98.8 %	
Transformer		
Transformer rated power	6600 kVA	8800 kVA
Transformer max. power	7590 kVA	10120 kVA
LV / MV voltage	0.63 kV / 0.63 kV / (10 – 35) kV	0.63 kV / 0.63 kV / (20 – 35) kV
Impedance	8 % (0 – ±10 %) @ 6600 kVA	9.5 % (0 – ±10 %) @ 8800 kVA
Transformer vector	Dy11y11	
Transformer cooling type	ONAN	
Oil type	Mineral oil (PCB free)	
Protection & Function		
DC input protection	DC load switch + fuse	
Inverter output protection	AC circuit breaker	
AC MV output protection	AC 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		
Shipping dimensions (W*H*D)	12192 mm * 2896 mm * 2438 mm	
Unfolding dimensions (W*H*D)	12192 mm * 3392 mm * 2438 mm	
Weight	27.5 T	31.5 T
Degree of protection	Inverter: IP65 / Others: IP54	
Auxiliary power supply	15 kVA (optional: max. 30 kVA)	
Operating ambient temperature range *	-20 ℃ to 60 ℃ (optional: -30 ℃ to 60 ℃, > 45 ℃ 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, Ethernet+WebHMI	
Communication	Standard: RS485, Ethernet, Optical fiber	
Compliance	CE, IEC 62109, IEC 61727, IEC 62116, IEC 60068, IEC 61683, IEC62271-202, VDE-AR-N 4110:2018, VDE-AR-N 4120:2018, EN 50549-2, UNE 206007-1:2013, NTS 631, UTE C15-712-1:2013	

* The ambient temperature is determined as the average temperature obtained from at least four temperature monitoring points located at a distance of 1 meter from the equipment, at a height halfway up the machine. The temperature sensors must be shielded from airflow, thermal radiation, and rapid temperature fluctuations to prevent display inaccuracies. If the ambient temperature is below -30°C, pls contact Sungrow.

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