SG3300UD-MV
SG4400UD-MV

MV Grid-connected PV Inverter for 1500Vdc System



HIGH YIELD

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

SMART O&M

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

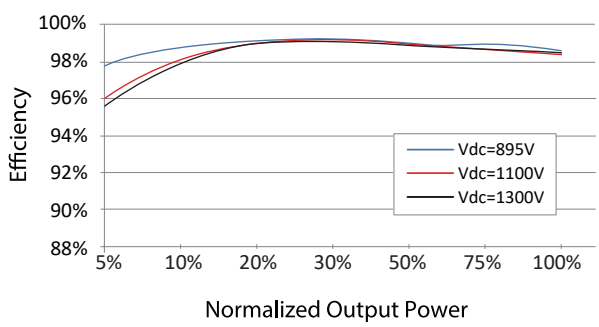
SAVED INVESTMENT

- 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



SUNGROW
Clean power for all

Type Designation	SG3300UD-MV	SG4400UD-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	3	4
No. of DC inputs	15 (optional: 21)	20 (optional: 28)
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	
Output (AC)		
AC output power	3300 kVA @ 45 ℃ 3399 kVA @ 40 ℃ 3795 kVA @ 22.5 ℃	4400 kVA @ 45 ℃ 4532 kVA @ 40 ℃ 5060 kVA @ 22.5 ℃
Max. inverter output current	3 * 1160 A	4 * 1160 A
Max. AC output current	219.2 A	292.2 A
Rated voltage range	10 kV – 35 kV	
Nominal grid frequency / Grid frequency range	50 Hz / 45 Hz – 55 Hz, 60 Hz / 55 Hz – 65 Hz	
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	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	
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		
Dimensions (W*H*D)	6058 mm * 2896 mm * 2438 mm	
Weight	17.5 T	20 T
Degree of protection	Inverter: IP65 / Others: IP54	
Auxiliary power supply	15 kVA (optional: max. 40 kVA)	
Operating ambient temperature range *	-35 ℃ – 60 ℃ **	
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	
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.
** When the temperature is below -20℃, optional configuration is required.

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