SG3300/4400UD-MV

MV Grid-connected PV Inverter for 1500 Vdc System System



HIGH YIELD

- Advanced three-level technology
- Effective cooling, full power operation at 45℃

SMART O&M

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

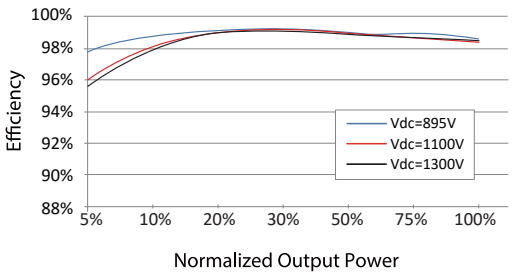
SAVED INVESTMENT

- Low transportation and installation cost due to 20-foot container design
- DC 1500V system, low system cost
- 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



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Type designation	SG3300UD-MV	SG3300UD-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. AC output current [1]	219.2 A	292.2 A
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	
Nominal AC voltage	10 kV – 35 kV [2]	
Efficiency		
Max. inverter unit efficiency	99.0 %	
Inverter unit European efficiency	98.8 %	
Max. efficiency(including transformer)	98.4 %	
European efficiency(including transformer)	97.9 %	
Protection & Function		
DC input protection	DC load switch + fuse	
AC 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
Transformer vector	Dy11	
Oil type	Mineral oil (PCB free)	
Impedance	7 % (0 ~ ±10 %) @ 3300 kVA	8 %(0 ~ ±10 %) @ 4400 kVA
Degree of protection	Inverter: IP65 / Others: IP54	
Auxiliary power supply	15 kVA (optional: max. 40 kVA)	
Operating ambient temperature range [3]	-35 ℃ to 60 ℃ [4]	
Allowable relative humidity range	0 % – 100 %	
Cooling method	Temperature controlled forced air cooling + ONAN	
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	

1) Calculated based on the minimum nominal AC voltage.
2) For detailed AC voltage ratings, refer to the product configuration table provided by SUNGROW.
3) 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.
4) When the temperature is below -20℃, optional configuration is required.

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