

SG8800UD-MV-20

MV Grid-connected PV Inverter for 1500 Vdc System



HIGH YIELD

- Advanced three-level technology
- Effective cooling, full power operation at 51°C



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



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 40-foot container design
- DC 1500V system, low system cost
- Q at night function optional



Type designation	SG8800UD-MV-20
Input (DC)	
Max. PV input voltage	1500 V
Min. PV input voltage / Startup input voltage	938 V / 950 V
MPP voltage range	938 V – 1500 V
No. of independent MPP inputs	8
No. of DC inputs	40 (optional: 56)
Max. PV input current	8 * 1435 A
Max. DC short-circuit current	8 * 3528 A
PV array configuration	Negative grounding or floating
Output (AC)	
AC output power	8800 kVA @ 51 °C, 10560 kVA @ 23 °C
Max. AC output current ¹⁾	305 A
Rated voltage range	20 kV – 35 kV
Nominal grid frequency / Grid frequency range	50 Hz / 45 Hz – 55 Hz, 60 Hz / 55 Hz – 65 Hz
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	
Max. inverter unit efficiency	99.0 %
Inverter unit European efficiency	98.7 %
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	
Shipping dimensions (W*H*D)	12192 mm * 2896 mm * 2438 mm
Unfolding dimensions (W*H*D)	12192 mm * 3392 mm * 2438 mm
Weight	≤ 32 T
Impedance	9.5 % (0 ~ ±10 %) @ 8800 kVA
Transformer vector	Dy11y11
Oil type	Mineral oil (PCB free)
Degree of protection	Inverter: IP65 / Others: IP54
Auxiliary power supply	15 kVA (optional: max. 30 kVA)
Operating ambient temperature range ²⁾	-35 °C to 60 °C (> 51 °C derating)
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
Compliance	CE, IEC 62109, IEC 61727, IEC 62116, IEC 60068, IEC 61683, IEC62271-202

1) Calculated based on the minimum nominal AC voltage.

2) The ambient temperature is determined as the average temperature obtained from at least four evenly distributed 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.

EFFICIENCY CURVE

