

SG6600UD-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



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



SAVED INVESTMENT

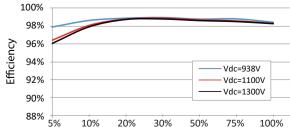
- Low transportation and installation cost due to 40-foot container design
- DC 1500V system, low system cost
- Q at night function optional



Type designation	SG6600UD-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	6
No. of DC inputs	30 (optional: 42)
Max. PV input current	6 * 1435 A
Max. DC short-circuit current	6 * 3528 A
PV array configuration	Negative grounding or floating
Output (AC)	
AC output power	6600 kVA @ 51 °C, 7920 kVA @ 23 °C
Max. AC output current ¹⁾	229 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	3/3
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	91.9 %
DC input protection	DC load switch + fuse
	AC circuit breaker
AC protection	
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 Optional
General data	20100 * 0005 * 0.770
Shipping dimensions (W*H*D)	12192 mm * 2896 mm * 2438 mm
Unfolding dimensions (W*H*D)	12192 mm * 3392 mm * 2438 mm
Weight	≤ 28 T
Impedance	8 % (0 ~ ±10 %) @ 6600 kVA
Transformer vector	Dyllyll Dyllyll
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

¹⁾ Calculated based on the minimum nominal AC voltage.

EFFICIENCY CURVE



Normalized Output Power

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.