

SG1100UD-20

PV Inverter for 1500Vdc System



HIGH YIELD

- Advanced three-level technology, max. inverter efficiency 99 %
- Effective cooling, full power operation at 52 °C



SMART O&M

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



GRID SUPPORT

- Compliance with standards: IEC 61727, IEC 62116
- 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 outdoor design
- DC 1500 V system, low system cost
- Q at night function optional



Type designation		SG1100UD-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		1
No. of DC inputs		5 (optional: 7)
Max. PV input current		1435 A
Max. DC short-circuit current		3528 A
PV array configuration		Negative grounding or floating
Output (AC)		
AC output power		1100 kVA @ 52 °C, 1320 kVA @ 23 °C
Max. AC output current		1155 A
Nominal AC voltage		660 V
AC voltage range		561 V – 726 V
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		
Max. efficiency / European efficiency		99.0 % / 98.7 %
Protection & Function		
DC input protection		Load break switch + fuse
AC output protection		Circuit breaker
Surge protection		DC Type II / AC Type II
Grid monitoring / Ground fault monitoring		Yes / Yes
Insulation monitoring		Yes
Surge protection		Yes
Q at night function		Optional
General data		
Dimensions (W*H*D)		700 mm * 2290 mm * 1525 mm
Weight		800 kg
Topology		Transformerless
Degree of protection		IP65
Night power consumption		< 200 W
Operating ambient temperature range *		-35 °C – 60 °C
Allowable relative humidity range		0 % – 100 %
Cooling method		Temperature controlled forced air cooling
Max. operating altitude		4000 m (> 2000 m derating)
Display		LED Indicators, Ethernet+WebHMI
Communication		Standard: RS485, Ethernet
Compliance		CE, IEC 62109, IEC 61727, IEC 62116, IEC 60068, IEC 61683

* 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.

EFFICIENCY CURVE

