

SG4400UD-20

Outdoor Inverter for 1500 Vdc System



HIGH YIELD

- Advanced three-level technology, max. inverter efficiency 99 %
- Effective cooling, full power operation at 51 °C

SMART O&M

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

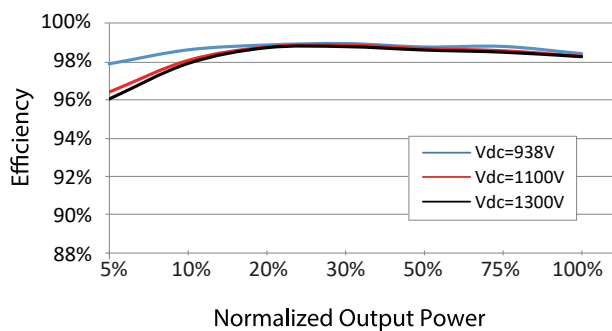
SAVED INVESTMENT

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

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

EFFICIENCY CURVE



Type designation	SG4400UD-20
Input (DC)	
Max. PV input voltage	1500 V
Min. PV input voltage / Startup input voltage	938 V / 950 V
MPP voltage range	938 – 1500 V
No. of independent MPP inputs	4
No. of DC inputs	20 (optional: 24 / 28 inputs negative grounding)
Max. PV input current	4 * 1435 A
Max. DC short-circuit current	4 * 3528 A
PV array configuration	Negative grounding or floating
Output (AC)	
AC output power	4400 kVA @ 51 °C, 5280 kVA @ 23 °C
Max. AC output current	4 * 1155 A
Nominal AC voltage	660 V
AC voltage range	561 – 726 V
Nominal grid frequency / Grid frequency range	50 Hz / 45 – 55 Hz, 60 Hz / 55 – 65 Hz
Harmonic (THD)	< 3 % (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
Overvoltage 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)	2900 * 2300 * 1550 mm
Weight	3,3 T
Topology	Transformerless
Degree of protection	IP65
Night power consumption	< 200 W
Operating ambient temperature range	- 35 to 60 °C (> 51 °C derating)
Allowable relative humidity range	0 – 100 %
Cooling method	Temperature controlled forced air cooling
Max. operating altitude	4000 m (> 2000 m derating)
Display	LED indicators, WLAN+WebHMI
Communication	Standard: RS485, Ethernet; Optional: optical fiber, MPLC
Compliance	CE, IEC 62109, IEC 61727, IEC 62116, IEC 62109, IEC 61727, IEC 62116, IEC 60068, IEC 61683
Grid support	Q at night function (optional), L/HVRT, active & reactive power control and power ramp rate control