SUNGROW
Clean power for all

SG4400UD-20

PV Inverter for 1500Vdc System

HIGH YIELD

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

SMART O&M

- Integrated zone monitoring function for onlione 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

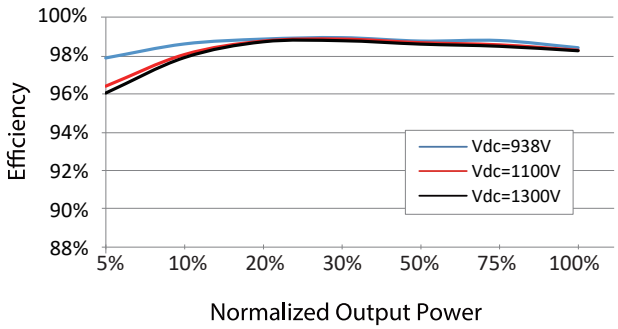
GRID SUPPORT

- Compliance with standards: IEC 61727, IEC 62116
- Low / High voltage ride through (L/HVRT)
- Active & reactive power control and power ramp rate control

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 V – 1500 V
No. of independent MPP inputs	4
No. of DC inputs	20 (optional: 28)
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 @ 52 ℃, 5280 kVA @ 23 ℃
Max. AC output current	4 * 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)	2900 mm * 2300 mm * 1550 mm
Weight	3.3 T
Topology	Transformerless
Degree of protection	IP65
Night power consumption	< 200 W
Auxiliary power supply	Optional: 5 kVA – 40kVA
Operating ambient temperature range *	-35 ℃ – 60 ℃
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



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