SG1100UD

Outdoor Inverter for 1500 Vdc System



HIGH YIELD

- Advanced three-level technology, max. inverter efficiency 99 %
- Effective cooling, full power operation at 45 ℃

SMART O&M

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

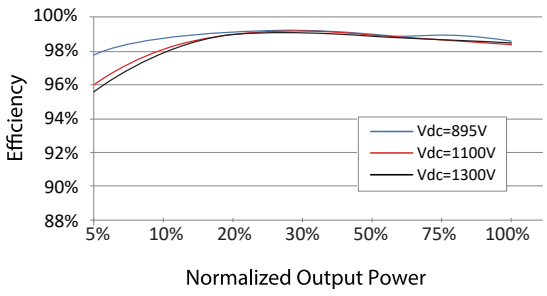
SAVED INVESTMENT

- 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



© 2025 Sungrow Power Supply Co., Ltd. All rights reserved. Subject to change without notice. Version 1.1

Type designation	SG1100UD
Input (DC)	
Max. PV input voltage	1500 V
Min. PV input voltage / Startup input voltage	895 V / 905 V
MPP voltage range	895 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 @ 45 ℃, 1133 kVA @ 40 ℃, 1265 kVA @ 22.5 ℃
Max. AC output current	1160 A
Nominal AC voltage	630 V
AC voltage range	536 V – 693 V
Nominal grid frequency / Grid frequency range	50 Hz / 45 Hz – 55 Hz, 60 Hz / 55 Hz – 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 % / 98.8 %
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
Q at night function	Optional
General data	
Dimensions (W*H*D)	700 * 2290 * 1525 mm
Weight	900 kg
Topology	Transformerless
Degree of protection	IP65
Night power consumption	< 200 W
Operating ambient temperature range	- 35 ℃ to 60 ℃ (> 45 ℃ derating)
Allowable relative humidity range	0 % – 100 %
Cooling method	Temperature controlled forced air cooling
Max. operating altitude	4000 m (> 3000 m derating)
Display	LED Indicators, WLAN+WebHMI
Communication	Standard: RS485, Ethernet
Compliance	CE, IEC 62109, IEC 61727, IEC 62116, IEC 60068, IEC 61683, VDE-AR-N 4110:2018, VDE-AR-N 4120:2018, EN 50549-2, UNE 206007-1:2013, NTS 631, UTE C15-712-1:2013
Grid support	Q at night function (optional), L/HVRT, active & reactive power control and power ramp rate control, Q-U control, P-f control

© 2025 Sungrow Power Supply Co., Ltd. All rights reserved. Subject to change without notice. Version 1.1