

SG3425UD/SG3600UD

Central Inverter for 1500 Vdc System



HIGH YIELD

- Advanced three-level technology, max. efficiency 98.9%
- Inverter full power operation up to 45 °C (113 °F)
- Max. DC / AC ratio up to 2.0

Saved Investment

- Low transportation and installation cost due to outdoor design
- DC-coupled storage interface and charging power from the grid, low system cost
- Q at night optional

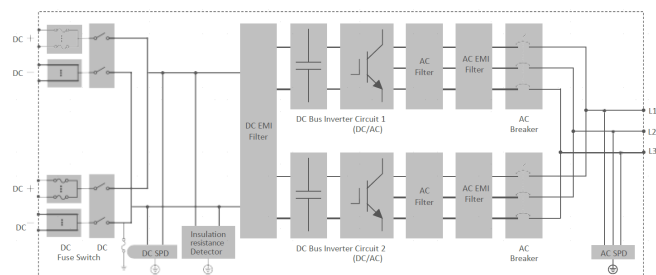
EASY O&M

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

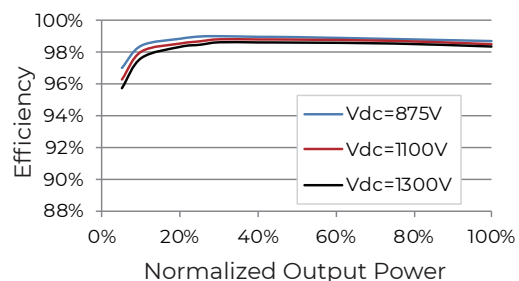
GRID SUPPORT

- Compliance with standards:UL 1741,UL 1741 SA, IEEE 1547, Rule 21 and NEC code
- Low / High voltage ride through (L/HVRT), L/HFRT, soft start/stop
- Active & reactive power control and power ramp rate control

CIRCUIT DIAGRAM



EFFICIENCY CURVE



Type designation	SG3425UD	SG3600UD
Input (DC)		
Max. PV input voltage	1500 V	
Min. PV input voltage / Start-up input voltage	875 V / 915 V	915 V / 955 V
Available DC fuse sizes	250 A - 630 A	
MPP voltage range	875 V - 1500 V	915 V - 1500 V
Full power mpp voltage range@ 45 °C	875 V - 1300 V *	915 V - 1300 V *
No. of independent MPP inputs	1	
No. of DC inputs	24 (optional:28)	
Max. PV input current	4000 A	4015 A
Max. DC short-circuit current	10000 A	
PV array configuration	Negative grounding or floating	
Output (AC)		
AC output power	3425 kVA @ 45 °C (113 °F) 3083 kVA @ 50 °C (122 °F)	3600 kVA @ 45 °C (113 °F) 3240 kVA @ 50 °C (122 °F)
Max. AC output current	3296 A	3300 A
Nominal AC voltage	600 V	630 V
AC voltage range	528 V - 660 V	554 V - 690 V
Nominal grid frequency / Grid frequency range	60 Hz / 57 - 63 Hz	
THD	< 3 % (at nominal power)	
DC current injection	< 0.5 % In	
Power factor at nominal power / Adjustable power factor	> 0.99 / 0.8 leading - 0.8 lagging	
Feed-in phases / AC connection	3 / 3 -PE	
Efficiency		
Inverter max. efficiency	98.9 %	
Inverter CEC efficiency	98.5 %	
Protection		
DC input protection	Load switch + fuse	
Inverter output protection	Circuit breaker	
Overvoltage protection	DC Type II / AC Type II	
Grid monitoring / Ground fault monitoring	Yes / Yes	
Zone monitoring	Yes	
Insulation monitoring	Yes	
Overheat protection	Yes	
Q at night function	Optional	
General data		
Dimensions (W * H * D)	2280 mm * 2280 mm * 1600 mm	89.8" * 89.8" * 63"
Weight	3200 kg	7055 lbs
Topology	Transformerless	
Degree of protection	NEMA 4X (Electronic for Inverter) / NEMA 3R (Others)	
Night power consumption	< 200 W	
Operating ambient temperature range (it refers to the ambient temperature of 1m around the inverter)	-35 °C - 60 °C (> 45 °C derating) / optional: -40 °C - 60 °C (> 45 °C derating) -31 °F - 140 °F (> 113 °F derating) / optional: -40 °F - 140 °F (> 113 °F derating)	
Allowable relative humidity range	0 % - 100 %	
Cooling method	Temperature controlled forced air cooling	
Max. operating altitude	4000 m (> 2000 m derating)	13123 ft (> 6561 ft derating)
DC-Coupled storage interface	Optional	
Charging power from the grid	Optional	
Communication	Standard: RS485, Ethernet	
Compliance	UL 1741, IEEE 1547, UL 1741 SA, NEC 2017, CSA C22.2 No.107.1-01	
Grid support	Q at night function (optional), L/HVRT, L/HFRT, Active & reactive power control and power ramp rate control, Volt-var, Frequency-watt	

*Full power MPP range is temperature dependent, check the characteristic curve of the inverter for more information.

