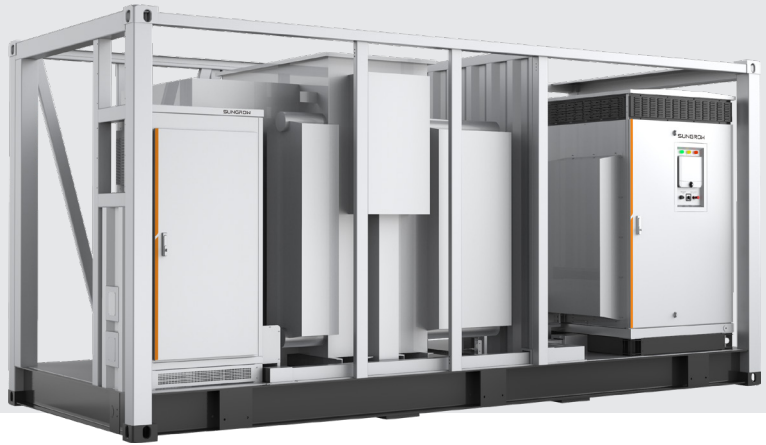


SG3425UD-MV/ SG3600UD-MV

MV Grid-connected PV Inverter for North America 1500 Vdc System



HIGH YIELD

- Advanced three-level technology
- Full power operation at 40 °C(104 °F)
- Effective cooling, wide operation temperature
- Max. DC/AC ratio up to 2.0



EASY O&M

- Integrated current, voltage and MV parameters monitoring function for online analysis and trouble shooting
- Modular design, easy for maintenance



SAVED INVESTMENT

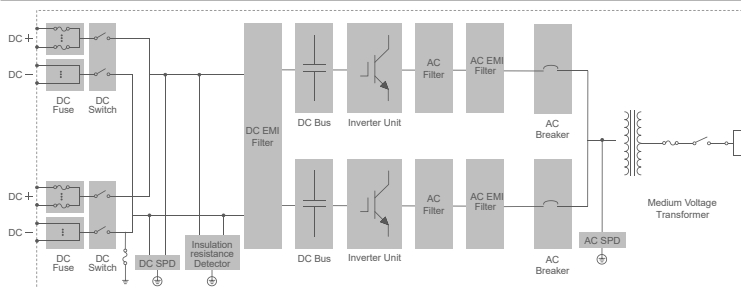
- Low transportation and installation cost due to 20-foot container size design
- DC 1500V system, low system cost
- Q at night optional



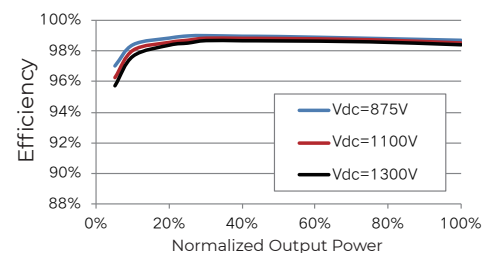
GRID SUPPORT

- 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-MV	SG3600UD-MV
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 ¹⁾	875 V – 1300 V	915 V – 1300 V
No. of DC inputs	24 (optional: 28)	
Max. PV input current	3994A	4014A
Max. DC short-circuit current	10000 A	
PV array configuration	Negative grounding or floating	
Output (AC)		
AC output power	3425 kVA @ 40 °C(104 °F), Optional: 3425 kVA @ 45 °C(113 °F)	3600 kVA @ 40°C(104 °F), Optional: 3600 kVA @ 45°C(113 °F)
Max. AC output current ²⁾	165 A	173 A
Nominal grid frequency / Grid frequency range	60 Hz / 57 Hz – 63 Hz	
THD	< 3 % (at nominal power)	
Power factor at nominal power / Adjustable power factor	> 0.99 / 0.8 leading – 0.8 lagging	
Nominal AC voltage	12 kV – 35 kV ³⁾	
Efficiency		
Max. inverter unit efficiency	98.9 %	
CEC inverter unit efficiency	98.5 %	
Max. efficiency (including transformer)	98.2 %	
CEC efficiency (including transformer)	97.5 %	
Protection		
DC protection	DC load switch + fuse	
AC protection	MV load switch + fuse	
Surge protection	DC Type II / AC Type II	
Grid monitoring / Ground fault monitoring	Yes / Yes	
Insulation monitoring	Yes	
Overheat protection	Yes	
General data		
Dimensions (W*H*D)	6058 mm * 2896 mm * 2438 mm 238.5" * 114.0" * 96.0"	
Weight	18000 kg 39683.2 lbs	
Transformer vector	Dy1 (Optional: Dy11, Yny0)	
Degree of protection	NEMA 4X (Electronic enclosure) / NEMA 3R (Others)	
Auxiliary power supply	5 kVA, 120 Vac; Optional: 30 KVA 480 Vac + 5 KVA 120 Vac	
Operating ambient temperature range ⁴⁾	-35 °C – 60 °C / optional: -40 °C – 60 °C -31 °F – 140 °F / optional: -40 °F – 140 °F	
Allowable relative humidity range	0 % – 100 %	
Cooling method	Forced air cooling + KNAN (Optional: ONAN)	
Max. operating altitude	1000 m (Standard) / > 1000 m (Customized) (3280.8 ft (standard) / > 3280.8 ft (Customized))	
DC-Coupled storage interface	Optional	
Night reactive power function	Optional	
Charging power from the grid	Optional	
Communication	Standard: RS485, Ethernet	
Compliance	UL 1741, IEEE 1547, UL1741 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	

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

2) Calculated based on the minimum nominal AC voltage.

3) For detailed AC voltage ratings, refer to the product configuration table provided by SUNGROW.

4) The ambient temperature is determined as the average temperature obtained from at least four evenly distributed 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.