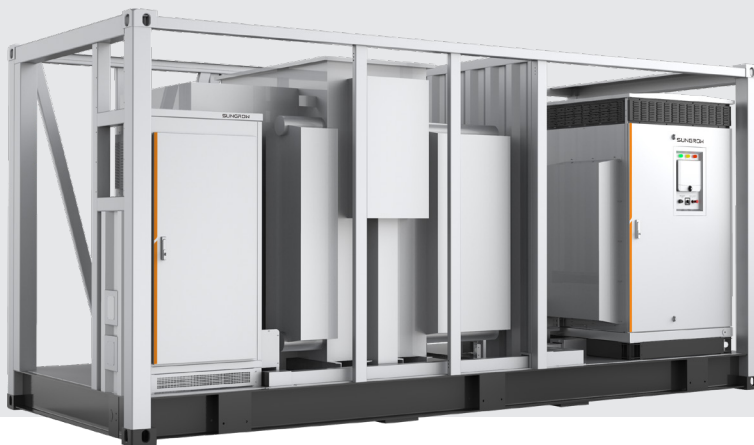


# SG3425UD-MV/ SG3600UD-MV

Turnkey Station for North America 1500 Vdc System - MV  
Transformer Integrated



## HIGH YIELD

- Advanced three-level technology, max. efficiency 98.9%
- Inverter full power operation up to 45 °C ( 113 °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

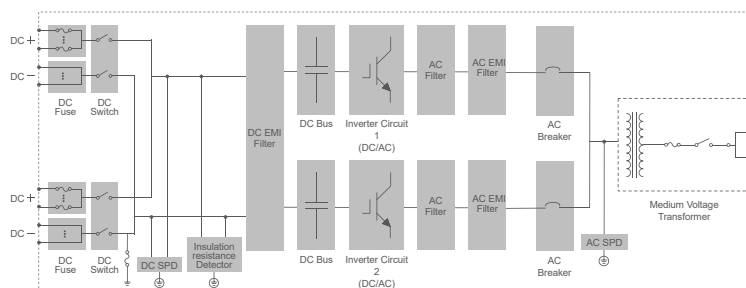
- Low transportation and installation cost due to 20-foot container size design
- DC 1500V system, low system cost
- Integrated MV transformer and LV auxiliary power supply
- Q at night optional



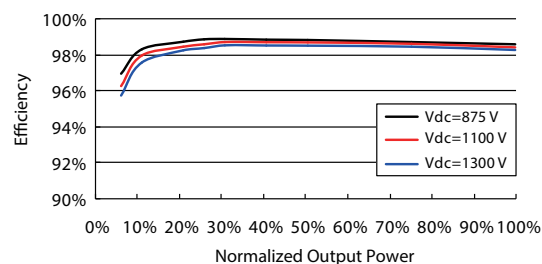
## GRID SUPPORT

- 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 (SG3425UD)



Type designation	SG3425UD-MV	SG3600UD-MV
<b>Input (DC)</b>		
Max. PV input voltage	1500 V	
Min. PV input voltage / Startup 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. DC short-circuit current	2 Switches / 5000 A ( Optional : 4 Switches / 10000 A )	
PV array configuration	Negative grounding ( Optional : Floating )	
<b>Output (AC)</b>		
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 )**
Nominal grid frequency / Grid frequency range	50 Hz / 45 - 55 Hz, 60 Hz / 50 - 65 Hz	
THD	< 3 % ( at nominal power )	
Power factor at nominal power / Adjustable power factor	> 0.99 / 0.8 leading - 0.8 lagging	
<b>Efficiency</b>		
Inverter Max. efficiency	98.9 %	
Inverter CEC efficiency	98.5 %	
<b>Transformer</b>		
Transformer rated power	3425 kVA	3600 kVA
Transformer Max. power	3425 kVA	3600 kVA
LV / MV voltage	0.6 kV / ( 12 - 35 ) kV	0.63 kV / ( 12 - 35 ) kV
Transformer vector	Dy 1 ( Optional: Dy 11, Yny 0 )	
Transformer cooling type	KNAN ( Optional : ONAN )	
<b>Protection</b>		
DC input protection	Load switch + fuse	
Inverter output protection	Circuit breaker	
AC MV output protection	Load switch + fuse	
Overvoltage protection	DC Type II / AC Type II	
Grid monitoring / Ground fault monitoring	Yes / Yes	
Insulation monitoring	Yes	
Overheat protection	Yes	
<b>General Data</b>		
Dimensions (W*H*D)	6058 mm * 2896 mm * 2438 mm 238.5" * 114.0" * 96.0"	
Weight	18000 kg 39683.2 lbs	
Degree of protection	NEMA 4X ( Electronic for Inverter ) / NEMA 3R ( Others )	
Auxiliary power supply	5 kVA , 120 Vac ; Optional : 30 kVA 480 Vac + 5 KVA 120 Vac	
Operating ambient temperature range(it refers to the ambient temperature of 1m around the inverter.)	-35 to 60 °C ( > 45 °C derating ) / optional: -40 to 60 °C ( > 45 °C derating ) -22 to 140 °F ( > 113 °F derating ) / optional: -40 to 140 °F ( > 113 °F derating )	
Allowable relative humidity range	0 - 100 %	
Cooling method	Temperature controlled forced air cooling	
Max. operating altitude	1000 m ( Standard ) / > 1000 m ( Customized ) ( 3280.8 ft ( standard ) / > 3280.8 ft ( Customized ) )	
DC-coupled storage interface	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	

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

\*\*For sustained operation above 40°C, an optional 60 °C temperature rise transformer is recommended.