

SG2500U

Turnkey Station for North America **1500 Vdc** System



SUNGROW Inverter, Designed For TrinaPro



High Yield

- Advanced three-level technology,max.efficiency 98.8%
- Effective cooling,1.1 overload capacity,no derating up to 50°C
- Max.DC/AC ratio more than 1.5



Easy O&M

- Integrated current and voltage monitoring function for online analysis and fast trouble shooting
- Module design ,easy for maintenance
- Convenient external LCD



Saved Investment

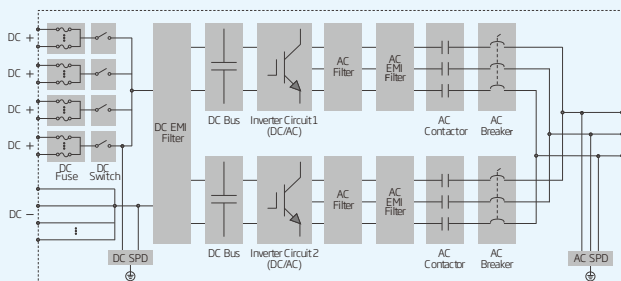
- Low transportation and installation cost due to 10-foot container design
- DC 1500V system,low system cost
- Integrated LV auxiliary power supply



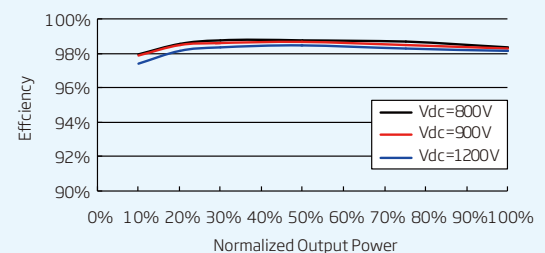
Grid Support

- Compliance with UL 1741,UL 1741 SA,IEEE 1547,Rule 21 and NEC code
- Grid support including L/HVRT,L/HFRT,soft star/stop,specified power factor control and reactive power support

Circuit Diagram



CEC Efficiency Curve



Input(DC)

Max.PV input voltage	1500V
Min.PV input voltage/Startup input voltage	800V/840V
MPP voltage range for nominal power	800-1300V
No.of independent MPP inputs	1
No.of DC inputs	16-24
Max.PV input current	3508A
Max.DC short-circuit current	4210A
PV array configuration	Negative grounding

Output(AC)

Nominal AC power(at 50°C)	2500KW
Max.AC output power at PF=1(at 50°C)	2750KW
Max.AC apparent power(at 50°C)	2750KVA
Max.AC output current	2886A
Nominal AC voltage	550V
AC voltage range	495-605V
Nominal grid frequency/Grid frequency range	50Hz/45-55Hz,60Hz/55-65Hz
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/Connection phases	3/3

Efficiency

Max. efficiency/CEC efficiency	98.8%/98.5%
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Protection

DC input protection	Load switch+fuse
AC output protection	Circuit breaker
Overvoltage protection	DC Type II/AC Type II
Grid monitoring/Ground fault monitoring	Yes/Yes
Insulation monitoring	Optional
Overheat monitoring	Yes

General Data

Dimensions(W*H*D)	2991*2896*2438mm 117.8"*114.0"*96.0"
Weight	6.9T 15211.9lb
Isolation method	Transformerless
Degree of protection	NEMA 3R
Auxiliary power supply	220Vac,110Vac, 5/Optional:480Vac,30KVA
Operating ambient temperature range	-35 to 60°C(>50°C derating) -22 to 140°F(>122°F derating)
Allowable relative humidity range(non-condensing)	0-95%
Cooling method	Temperature controlled forced air cooling
Max.operating altitude	4000m(>2000m derating) 13123 ft(>6561 ft derating)
Display	Touch screen
Connection	Standard:RS485,Ethernet;Optional:optical fiber
Compliance	UL 1741,IEEE 1547,UL 1741 SA,NEC Standard
Grid Support	Night SVG function(optional),LHVRT,L/HVRT,active & reactive power control and power ramp rate control