SUNGROW

SG1000MX

High Yield

- Max. efficiency up to 98.8%
- Long-term overload at 1.1 Pn
- Full power operation without derating at 55 ℃

Easy O&M

- Integrated zone current monitoring function for fast trouble shooting
- All components front accessible easy for maintenance

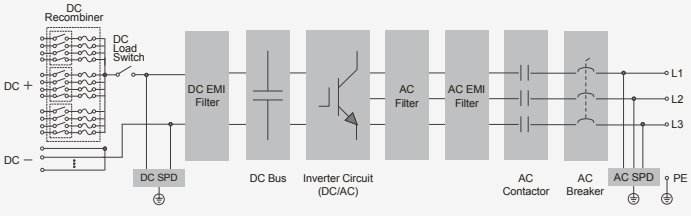
Saved Investment

- Max. DC/AC ratio up to 1.5
- Integrated with recombiner

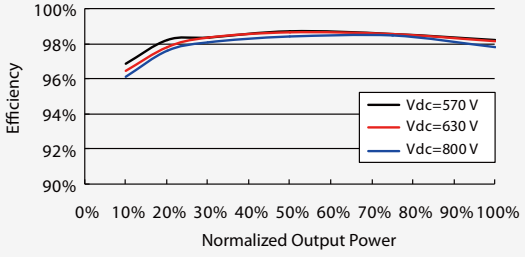
Grid Support

- Compliance with standards: UL1741, IEEE 1547, IEEE 1547.1, CSA C22.2 107.1-01
- Low/High voltage ride through (L/HVRT)

Circuit Diagram



CEC Efficiency Curve



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SG 1000MX

Input (DC)	SG1000MX
Max. PV input voltage	1000 V
Min. PV input voltage / Startup input voltage	550 V / 570 V
MPP voltage range for nominal power	570 – 850 V
No. of independent MPP inputs	1
No. of DC inputs	1, 8 – 12
Max. PV input current	2000 A
Max. DC short-circuit current	2400 A
PV array configuration	Negative grounding (standard), positive grounding or floating (optional)

Output (AC)	
Nominal AC power (at 55 ˚C)	1000 kW
Max. AC output power at PF=1 (at 50 ˚C)	1100 kW
Max. AC apparent power (at 50 ˚C)	1100 kVA
Max. AC output current	1650 A
Nominal AC voltage	385 V
AC voltage range	338 – 424 V
Nominal grid frequency / Grid frequency range	50 Hz / 45 – 55 Hz, 60 Hz / 55 – 65 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 to 0.8 lagging
Feed-in phases / Connection phases	3 / 3

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

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	Yes
Overheat protection	Yes

General Data	
Dimensions (W*H*D)	102.3''*85.2''*39.4" 2598*2164*1000 mm
Weight	4519.5 lb 2050 kg
Isolation method	Transformerless
Degree of protection	NEMA 3R
Night power consumption	< 20 W
Operating ambient temperature range	-22 to 140 ℉ (> 131 ℉ derating) -30 to 60 ℃ (> 55 ℃ derating)
Allowable relative humidity range (non-condensing)	0 – 95 %
Cooling method	Temperature controlled forced air cooling
Max. operating altitude	13123 ft (> 6561 ft derating) 4000 m (> 2000 m derating)
Display	Touch screen
Communication	RS485, Ethernet
Compliance	UL 1741, IEEE 1547, CSA C22.2 #107.1-01
Grid support	LVRT, HVRT, active & reactive power control and power ramp rate control