SG33CX/SG40CX/SG50CX New

SUNGROW
Clean power for all

Multi-MPPT String Inverter for 1000 Vdc System

HIGH YIELD

- Up to 5 MPPTs with max. efficiency 98.7%
- Compatible with bifacial module
- Built-in PID recovery function

SMART O&M

- Touch free commissioning and remote firmware upgrade
- Online IV curve scan and diagnosis*
- Fuse free design with smart string current monitoring

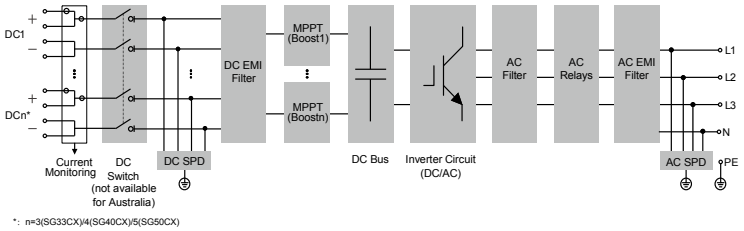
LOW COST

- Compatible with Al and Cu AC cables
- DC 2 in 1 connection enabled
- Cable free communication with optional Wi-Fi

PROVEN SAFETY

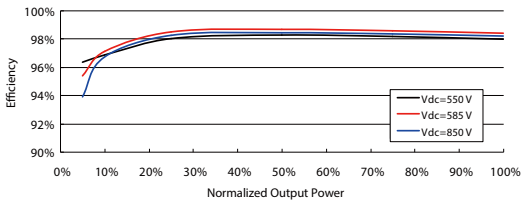
- IP66 and C5 anti-corrosion grade
- Type II SPD for both DC and AC
- Satisfied global safety and grid code

CIRCUIT DIAGRAM



*: n=3(SG33CX)/4(SG40CX)/5(SG50CX)

EFFICIENCY CURVE (SG50CX)



Type designation	SG33CX	SG40CX	SG50CX
Input (DC)			
Max. PV input voltage		1100 V	
Min. PV input voltage / Start-up input voltage		200 V / 250 V	
Nominal PV input voltage		585 V	
MPP voltage range		200 – 1000 V	
MPP voltage range for nominal power		550 – 850V	
No. of independent MPP inputs	3	4	5
Max. number of PV strings per MPPT		2	
Max. PV input current	78 A	104 A	130 A
Max. current for input connector		30 A	
Max. DC short-circuit current	120 A	160 A	200 A
Output (AC)			
AC output power	33 kVA @45 ℃, 400 Vac / 36.3 kVA @ 40 ℃,400 Vac 33 KVA@50 ℃, 415 Vac / 36.3 KVA@45 ℃, 415 Vac	40 kVA @45 ℃, 400 Vac / 44 kVA @ 40 ℃,400 Vac 40 KVA@50 ℃, 415 Vac / 44 KVA@45 ℃, 415 Vac	50 kVA @45 ℃, 400 Vac / 55kVA @ 40 ℃,400 Vac 50KVA@50 ℃, 415 Vac / 55kVA @ 45 ℃,415 Vac (Australia: max. 50 kVA)
Max. AC output current	55.2 A	66.9 A	83.6 A
Nominal AC voltage		3 / N / PE, 230 / 400 V	
AC voltage range		312 – 528 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 – 0.8 lagging	
Feed-in phases / connection phases		3 / 3	
Efficiency			
Max. efficiency / European efficiency	98.6 % / 98.3 %	98.6% / 98.3%	98.7% / 98.4%
Protection			
DC reverse connection protection		Yes	
AC short circuit protection		Yes	
Leakage current protection		Yes	
Grid monitoring		Yes	
DC switch		Yes (not available for Australia)	
AC switch		No	
PV String current monitoring		Yes	
Q at night		Yes	
PID recovery function		Yes	
Overvoltage protection		DC Type II / AC Type II	
General Data			
Dimensions (W*H*D)	702*595*310mm	782*645*310mm	782*645*310mm
Weight	50 kg	58 kg	62 kg
Isolation method		Transformerless	
Degree of protection		IP66	
Night power consumption		≤ 2 W	
Operating ambient temperature range		-30 to 60 ℃	
Allowable relative humidity range (non-condensing)		0 – 100 %	
Cooling method		Smart forced air cooling	
Max. operating altitude		4000 m (> 3000 m derating)	
Display		LED, Bluetooth+APP	
Communication		RS485 / Optional: Wi-Fi, Ethernet	
DC connection type		MC4 (Max. 6 mm²)	
AC connection type		OT or DT terminal (Max.70 mm²)	
Compliance		IEC 62109, IEC 61727, IEC 62116, IEC 60068, IEC 61683, VDE-AR-N 4105:2018, VDE-AR-N 4110:2018, IEC 61000-6-3, EN 50549, AS / NZS 4777.2:2015, CEI 0-21, VDE 0126-1-1 / A1 VFR 2014, UTE C15-712-1:2013, DEWA	
Grid Support		Q at night function, LVRT, HVRT, active & reactive power control and power ramp rate control	

*: Only compatible with Sungrow logger and iSolarCloud