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

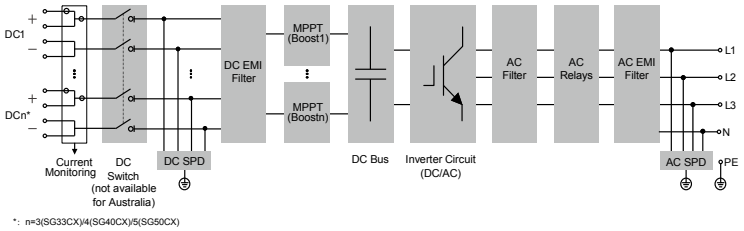
LOW COST

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

PROVEN SAFETY

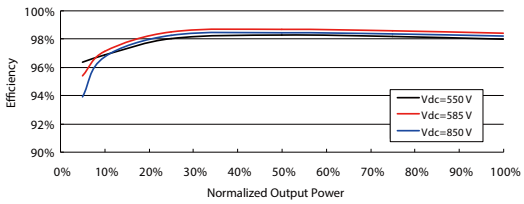
- IP66 and C5 anti-corrosion grade
- Type II SPD for both DC and AC
- Satisfied global safety and grid code

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)	
DC switch / 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