

SG25/30/33CX-P2

Multi-MPPT String Inverter for **1000 Vdc** System



HIGH YIELD

- DC 15A current input, compatible with over 500W+ PV module
- Dynamic shading optimization mode
- Built-in PID recovery function



SMART O&M

- Key component diagnosis and protection
- Smart IV Curve Diagnosis
- Grid fault record function, easy for remote O&M



LOWER INVESTMENT

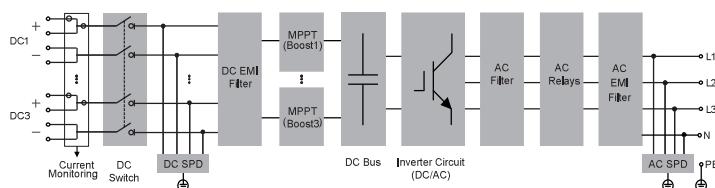
- Easy to handle thanks to 34% weight reduced
- Plug and Play with Buckle Design



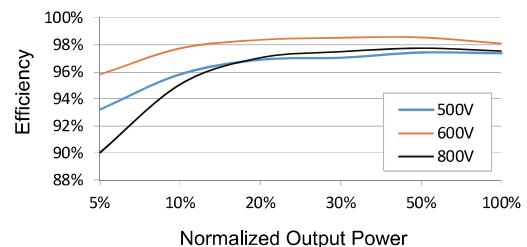
PROVEN SAFETY

- IP66 protection and C5 Anti-corrosion
- DC Type I+II SPD, AC Type II SPD
- Support AFCI 2.0 function

CIRCUIT DIAGRAM



EFFICIENCY CURVE (SG33CX-P2)



Type designation	SG25CX-P2	SG30CX-P2	SG33CX-P2
Input (DC)			
Recommended max. PV input power	35 kWp	42 kWp	46.2 kWp
Max. PV input voltage		1100 V	
Min. PV input voltage / Startup input voltage		160 V / 200 V	
Rated PV input voltage		600 V	
MPP voltage range		160 V - 1000 V	
No. of independent MPP inputs		3	
No. of PV strings per MPPT		2	
Max. PV input current		90 A (30 A * 3)	
Max. DC short-circuit current		120 A (40 A * 3)	
Max. current for DC connector		20A	
Output (AC)			
Rated AC output power	25 kW	30 kW	33 kW
Max. AC output apparent power	27.5 kVA	33 kVA *	36.3 kVA
Max. AC output current	41.8 A	50.2 A	55.2 A
Rated AC output current(at 230V)	36.2 A	43.5 A	47.8 A
Rated AC voltage		3 / N / PE, 220 / 380 V, 230 / 400 V	
AC voltage range		312 - 480 V	
Rated grid frequency		50 Hz / 60 Hz	
Grid frequency range		45 - 55 Hz / 55 - 65 Hz	
Harmonic (THD)		< 3 % (at rated power)	
Power factor at rated power / Adjustable power factor		> 0.99 / 0.8 leading - 0.8 lagging	
Feed-in phases / connection phases		3 / 3-N-PE	
Efficiency			
Max. efficiency / European efficiency	98.4% / 98.2%	98.5% / 98.3%	98.5% / 98.3%
Protection			
Grid monitoring		Yes	
DC reverse connection protection		Yes	
AC short-circuit protection		Yes	
Leakage current protection		Yes	
Surge protection		DC Type I+II / AC Type II	
Ground fault monitoring		Yes	
DC switch		Yes	
PV String current monitoring		Yes	
Arc fault circuit interrupter (AFCI)		Yes	
PID recovery function		Yes	
General Data			
Dimensions (W*H*D)		645*575*245 mm	
Mounting Method		Wall-mounting bracket	
Weight		38 kg	
Topology		Transformerless	
Degree of protection		IP66	
Corrosion		C5	
Night power consumption		< 5W	
Operating ambient temperature range		-30 to 60 °C	
Allowable relative humidity range (non-condensing)		0 - 100 %	
Cooling method		Smart forced air cooling	
Max. operating altitude		4000 m	
Display		LED, Bluetooth+APP	
Communication		RS485 / Optional: WLAN, Ethernet	
DC connection type		EVO2 (Max. 6 mm ²)	
AC connection type		OT terminal (16~35 mm ²)	
AC Cable specification		Outside diameter 18~38mm	
Grid Compliance		IEC 62109, IEC 61727, IEC 62116, VDE-AR-N 4105:2018, IEC 61000-6-3, EN 50549-1, CEI 0-21 2019, CEI 0-16 2019, VDE 0126-1-1/A1 VFR 2019, UTE C15-712-1:2013, UNE 206007-1/RD 1699, UNE 217002, G99	
Grid Support		Q at night function, LVRT, HVRT, active & reactive power control and power ramp rate control	

*:30kVA for Germany, Belgium, Austria, Ukraine and Denmark, 33kVA for others