SG33/50CX-P2

Multi-MPPT String Inverter for 1000 Vdc System



HIGH YIELD

- DC 30A current input, compatible with over 500Wp+ 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

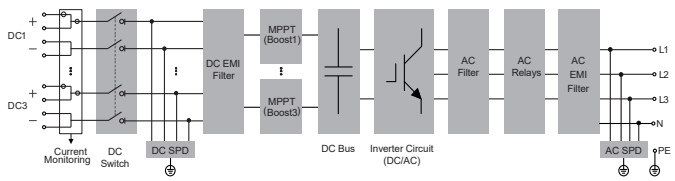
LOWER INVESTMENT

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

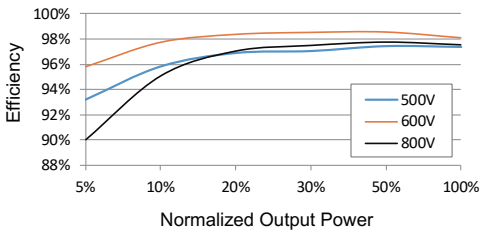
PROVEN SAFETY

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

CIRCUIT DIAGRAM (SG33CX-P2)



EFFICIENCY CURVE (SG33CX-P2)



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SUNGROW
Clean power for all

Type designation	SG33CX-P2	SG50CX-P2
Input (DC)		
Recommended max. PV input power	46.2 kWp	70 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	4
No. of PV strings per MPPT	2	2
Max. PV input current	90 A (30 A * 3)	120 A (30 A * 4)
Max. DC short-circuit current	120 A (40 A * 3)	160 A (40 A * 4)
Max. current for DC connector	20 A	
Output (AC)		
Rated AC output power	33 kVA	50 kVA
Max. AC output apparent power	36.3 kVA [1]	55 kVA [1]
Max. AC output current	55.2 A	83.6 A
Rated AC output current(at 230V)	47.8 A	72.5 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	98.5% / 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	41 kg
Topology	Transformerless	
Degree of protection	IP66	
Corrosion	C5	
Night power consumption	< 5W	
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	
Display	LED, Bluetooth+APP	
Communication	RS485 / Optional: WLAN, Ethernet	
DC connection type	EVO2 (Max. 6 mm²)	
AC connection type	OT terminal (16~35 mm²)	OT or DT terminal (35~50 mm²)
AC Cable specification	Outside diameter 18~38mm	
Grid Compliance	IEC 62109, IEC 61727, IEC 62116, VDE-AR-N 4105:2018, VDE AR-N 4110, IEC 61000-6-3, EN 50549-1, EN50549-2, CEI 0-21 2019,CEI0-16 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	

[1] 33 kVA and 50 kVA for Germany, Belgium, Austria, Ukraine and Denmark

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