SG36/40/50CX-P2

Multi-MPPT String Inverter for 1000 Vdc System

Preliminary

HIGH YIELD

- DC 15A current input, compatiable 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

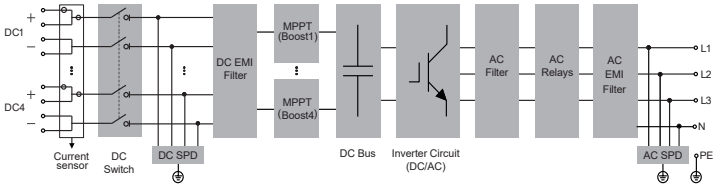
LOWER INVESTMENT

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

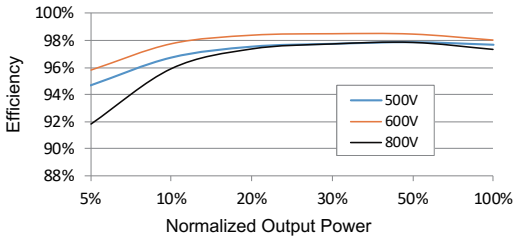
PROVEN SAFETY

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

CIRCUIT DIAGRAM



EFFICIENCY CURVE (SG50CX-P2)



SUNGROW
Clean power for all

Type designation	SG36CX-P2	SG40CX-P2	SG50CX-P2
Input (DC)			
Recommended max. PV input power	50.4 kWp	56 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		4	
No. of PV strings per MPPT		2	
Max. PV input current		120 A (30 A * 4)	
Max. DC short-circuit current		160 A (40 A * 4)	
Max. current for DC connector		20A	
Output (AC)			
Rated AC output power	36 kVA	40 kVA	50 kVA
Max. AC output apparent power	40 kVA	44 kVA	55 kVA
Max. AC output current	60.2 A	66.9 A	83.6 A
Rated AC output current(at 230V)	52.17 A	58 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 efficiencyEuro. Efficiency		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	40 kg	40 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, IEC 61000-6-3, EN 50549-1, 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	