

SG36/40/50CX-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

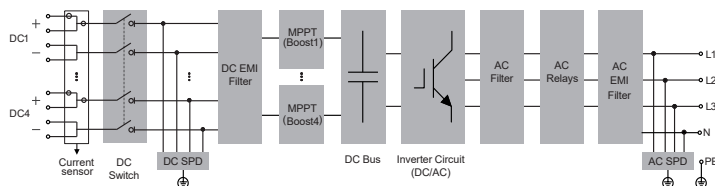
LOWER INVESTMENT

- Reduced inverter 34% weight and save more man-hours
- Plug and Play with Buckle Design

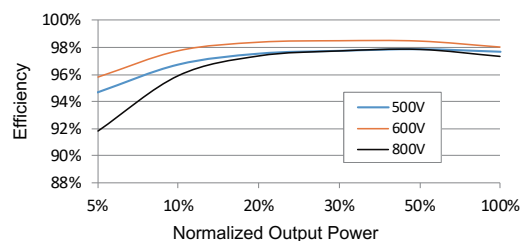
PROVEN SAFETY

- 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)



Type designation	SG36CX-P2	SG40CX-P2	SG50CX-P2
Input (DC)			
Max. PV input voltage		1100 V	
Min. PV input voltage / Start-up input voltage		160 V / 200 V	
Nominal PV input voltage		600 V	
MPP voltage range		160 V - 1000 V	
MPP voltage range for nominal power		500V - 800 V	
No. of independent MPP inputs		4	
Max. number of PV strings per MPPT		2	
Max. PV input current		30 A * 4	
Max. DC short-circuit current		40 A * 4	
Output (AC)			
Norminal AC output power	36 kVA @ 45 °C	40 kVA @ 45 °C	50 kVA @ 45 °C
Max. AC output power	40 kVA @ 40 °C	44 kVA @ 40 °C	55 kVA @ 40 °C
Max. AC output current	60.2 A	66.9 A	83.6 A
Nominal AC voltage	3 / N / PE, 220 / 380 V, 230 / 400 V		
AC voltage range	312~480 V		
Nominal grid frequency / Grid frequency range	50 Hz / 45 – 55 Hz, 60 Hz / 55 – 65 Hz		
Harmonic (THD)	< 3 % (at nominal power)		
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		98.50%	
Euro. Efficiency		98.30%	
Protection			
Grid monitoring		Yes	
DC reverse connection protection		Yes	
AC short-circuit protection		Yes	
Leakage current protection		Yes	
Overvoltage 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)		Optional	
PID recovery function		Yes	
General Data			
Dimensions (W*H*D)		645*575*245 mm	
Weight	40 kg	40 kg	41 kg
Topology		Transformerless	
Ingress protection rating		IP66	
Corrosivity class		C5	
Night power consumption		< 5W	
Operating ambient temperature range		-30 to 60 °C (> 45 °C derating)	
Allowable relative humidity range (non-condensing)		0 – 100 %	
Cooling method		Smart forced air cooling	
Max. operating altitude		4000 m (> 2000 m derating)	
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 25-50mm	
Grid Compliance		IEC 62109, IEC 61727, IEC 62116	
Grid Support		Q at night function, LVRT, HVRT, active & reactive power control and power ramp rate control	

*: Only compatible with Sungrow logger and iSolarCloud

