

SG20T-P2-CN

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

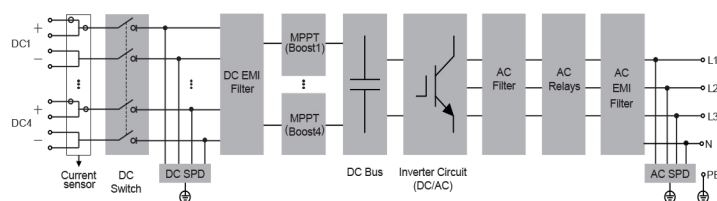
- Easy to handle thanks to 34% weight reduced
- Plug and Play with Buckle Design



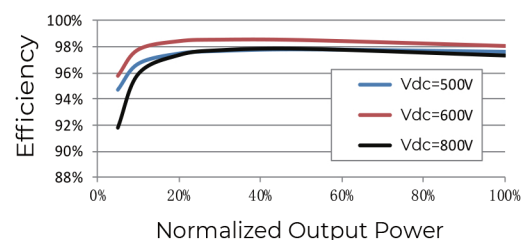
PROVEN SAFETY

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

CIRCUIT DIAGRAM



EFFICIENCY CURVE (SG50CX-P3)



Type designation	SG20T-P2-CN
Input (DC)	
Maximum input voltage*	1100 V
Minimum input voltage / Start-up voltage	160 V / 180 V
Rated input voltage	680 V
MPPT voltage range**	160 V - 1000 V
Max number of incoming strings per MPPT channel	2 / 2
Maximum input current per channel	40 A / 40 A
Maximum input current	80 A (40 A / 40 A)
Number of MPPTs	2
Maximum allowable current at input terminals	25 A
Maximum DC short-circuit current	100 A (50 A / 50 A)
Output (AC)	
Rated AC output power	20000 W
Maximum output power	22000 W
Maximum output apparent power	22000 VA
Maximum output current	33.3 A
Rated mains voltage	3/N/PE, 230V/400V, 220V/380V
Grid voltage range	156 V - 300 V (phase voltage)
Rated grid frequency / Grid frequency range	50 Hz / 45 Hz - 55 Hz
Total current waveform distortion rate	< 3% (at rated power)
DC component	< 0.5 % In
Power factor	> 0.99 (at rated power)
Power factor adjustable range	0.8 Leading - 0.8 Lagging
Num of power supply phases / Num of output phases	3 / 3 - N - PE
Efficiency	
Max. efficiency / China efficiency	98.5 % / 98.3 %
Protection	
Grid monitoring	Yes
DC reverse polarity protection	Yes
AC short-circuit protection	Yes
Leakage current protection	Yes
Surge protection	DC Type 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)	510 mm * 420 mm * 226 mm
Weight	19 kg
Isolation method	Transformerless
Protection level	IP66
Nighttime losses	≤ 1 W
Operating temperature range	- 25 °C - 60 °C
Operating humidity range (non-condensing)	0 % - 100 %
Cooling method	Intelligent air cooling
Max. operating altitude	4000 m (> 2000 m, derated)
noise	< 50 dB
show	LED, APP
communication	4G + RS485 * 1
DC connection type	MC4 compatible terminals
AC connection type	OT screw fastener
Meets the standards	NB/T 32004-2018、GB/T 37408-2019
Grid support	Anti-isolation