

SP600S

Optimizer



MORE PRODUCTION

- Up to 30 % increased power generation
- Up to 0.5 % increased system efficiency with smart Shade-Proof technology



FLEXIBLE DESIGN AND EASY TO INSTALL

- Patented structure to save installation time up to 45 %
- Optimize rooftops with different orientations and tilt angles to increase solar systems capacity



SAFE AND RELIABLE

- Rapid shutdown to 30 V within 20 seconds
- IP68 protection and C5 anti-corrosion



EFFICIENT O&M

- Rapid data refresh in 10 seconds
- Module-level IV scanning and diagnosis *



Type designation	SP600S
Input	
Recommend input power	450 W - 695 W **
Max. input voltage	80 V
MPPT voltage range	8 V - 80 V
Max. DC short-circuit current (Isc)	20 A
Overtoltage category	II
Output	
Rated output power	600 W
Max. output voltage	80 V
Max. output current	16 A
Bypass working mode	Yes
Safety output voltage per optimizer	1V
Efficiency	
Max. efficiency	99.5 %
Weighted efficiency	99.0 %
General data	
Dimensions (W * H * D)	86 mm * 108 mm * 25 mm
Weight (including cables)	0.5 kg
Degree of protection	IP 68
Allowable relative humidity range (non-condensing)	0 % - 100 %
Operating ambient temperature range	-40 °C - 85 °C
Max. operating altitude	4000 m
Mounting method	Push-in or bolt installation
Communication	PLC (< 350 m)
PV input / output connector	MC4 or MC4 Compatible
PV wire length (short version)	Input : 150 mm (PV+) 150 mm (PV-) Output : 1200 mm
PV wire length (long version)	Input : 600 mm (PV+) 150 mm (PV-) Output : 1600 mm
Standard compliance	IEC61000-6-2, IEC61000-6-3, IEC62109-1 (class II safety) SG2.0 / 2.5 / 3.0RS-S ***
Compatible products	SG3.0 / 3.6 / 4.0 / 5.0 / 6.0 / 8.0 / 9.0 / 10RS *** SH3.0 / 3.6 / 4.0 / 5.0 / 6.0RS *** SG5.0 / 6.0 / 7.0 / 8.0 / 10 / 12 / 15 / 17 / 20RT-P2 SG25 / 30 / 33 / 36 / 40 / 50 / 125CX-P2 ***

* Currently 4 kinds of typical diagnosis at module level are available.

** The rated power of modules under standard test conditions (STC) is recommended to be within 5% higher than the rated input power of the optimizer. If the rated power of modules under standard test conditions (STC) is higher than 630 W, the DC/AC ratio should be higher than 1.2.

*** Please consult Sungrow before placing an order on optimizers and compatible inverters.

