

SG5.0/6.0RS

Suitable for 50Hz / 60Hz grid, could be used in Asia, Africa, South America, Australia and Europe. Available for hand installation, no need for lifting machinery assistance



HIGH YIELD

- Compatible with high power PV modules and bifacial modules
- Lower startup & wider MPPT voltage range
- Built-in smart PID Zero function



SAFE AND RELIABLE

- Integrated arc fault circuit interrupter
- Built-in Type II DC&AC SPD
- Corrosion protection rating at C5



USER FRIENDLY SETUP

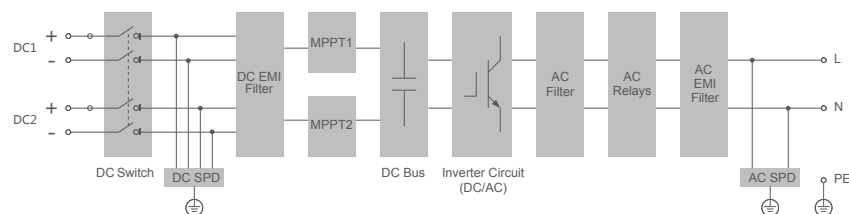
- Plug and play installation
- One-click access to iSolarCloud monitoring platform
- Light and compact with optimized heat dissipation design



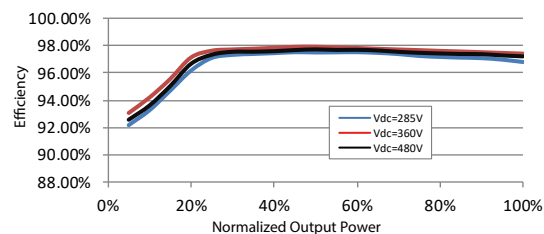
SMART MANAGEMENT

- Real time data (10 seconds refresh sample)
- 24/7 live online monitoring and with integrated display
- Online IV curve scan and diagnosis

CIRCUIT DIAGRAM



EFFICIENCY CURVE(SG5.0RS)



Type designation	SG5.0RS		SG6.0RS	
Input (DC)				
Recommended max. PV input power	7.5 kWp		9 kWp	
Max. PV input voltage			600 V	
Min. operating PV voltage / Start-up input voltage			40 V / 50 V	
Rated PV input voltage			360 V	
MPP voltage range			40 V – 560 V	
No. of independent MPP inputs			2	
Default No. of PV strings per MPPT			1	
Max. PV input current			32 A (16 A / 16 A)	
Max. DC short-circuit current			40 A (20 A / 20 A)	
Output (AC)				
Rated AC output power	5000 W *		6000 W	
Max. AC Output power	5000 VA *		6000 VA	
Rated AC output current (at 230 V)	21.8 A **		26.1 A	
Max. AC output current	22.8 A **		27.3 A	
Rated AC voltage			220 V / 230 V / 240 V	
AC voltage range			154 V – 276 V	
Rated grid frequency / Grid frequency range			50 Hz / 45 – 55 Hz	
			60 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			1 / 1	
Efficiency				
Max. efficiency / European efficiency	97.9 % / 97.3 %		97.9 % / 97.5%	
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	
DC switch			Yes	
PV string current monitoring			Yes	
Arc fault circuit interrupter (AFCI)			Yes	
PID Zero function			Yes	
Optimizer compatibility ***			Optional	
General Data				
Dimensions (W * H * D)			410 mm * 270 mm * 150 mm	
Weight			10 kg	
Mounting method			Wall-mounting bracket	
Topology			Transformerless	
Degree of protection			IP65	
Operating ambient temperature range			-25 °C to 60 °C	
Allowable relative humidity range (non-condensing)			0 % - 100 %	
Cooling method			Natural cooling	
Max. operating altitude			4000 m	
Display			LED digital display & LED indicator	
Communication			Ethernet / WLAN / RS485 / DI (Ripple control & DRM)	
DC connection type			MC4 (Max. 6 mm²)	
AC connection type			Plug and play connector (Max. 6 mm²)	
Grid compliance			IEC / EN62109-1/2, IEC / EN62116, IEC / EN61727, IEC / EN61000-6-2/3, EN50549-1, AS4777.2, ABNT NBR 16149, ABNT NBR 16150, UNE 217002:2020, NTS V2 TypeA, CEI 0-21:2020, VDE0126-1-1/A1 (VFR-2019), UTE C15-712, C10/11, G98/G99,	
Grid Support			Active & reactive power control and power ramp rate control	

* AS 4777.2 4999 W , 4999 VA

** AS 4777.2 :Rated and Max. AC current is 21.7 A

*** For optimizer compatibility, please consult Sungrow before placing an order

