

SG3.0/5.0RS

Double-MPPT String Inverter for 600 Vdc System

AU



HIGH YIELD

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



SAFE AND RELIABLE

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



USER FRIENDLY SETUP

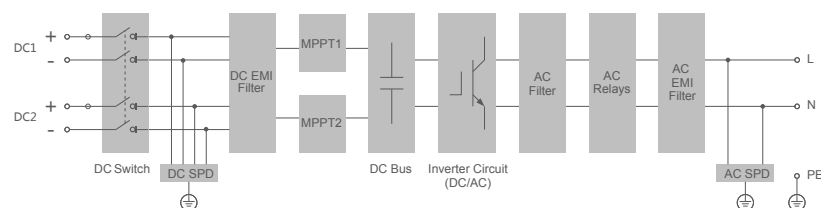
- Plug and play installation*
- One-click access to iSolarCloud monitoring platform
- Light and compact with optimized heat dissipation design



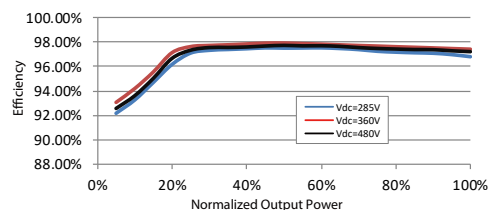
SMART MANAGEMENT

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

CIRCUIT DIAGRAM



EFFICIENCY CURVE(SG5.0RS)



Type designation	SG3.0RS	SG5.0RS
Input (DC)		
Recommended max. PV input power	4.5 kWp	7.5 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 – 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	3000 W	4999 W
Max. AC Output power	3000 VA	4999 VA
Rated AC output apparent power	3000 VA	4999 VA
Rated AC output current (at 230V)	13.1 A	21.7 A
Max. AC output current	13.7 A	21.7 A
Rated AC voltage	220 / 230 / 240V	
AC voltage range	154 – 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	97.9 %	97.9 %
European efficiency	97.0 %	97.3 %
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	
DC switch	Yes	
PV string current monitoring	Yes	
Arc fault circuit interrupter (AFCI)	Yes	
PID recovery function	Yes	
General Data		
Dimensions (W*H*D)	410* 270* 150mm	
Weight	10 kg	
Mounting method	Wall-mounting bracket	
Topology	Transformerless	
Degree of protection	IP65	
Operating ambient temperature range	-25 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, AS4777.2:2020, 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	
Country of manufacture	China	

* Country code needs to be set before grid connection



SG5.0RS-ADA/SG8.0/10RS

Multi-MPPT String Inverter for 600 Vdc System

ADA



HIGH YIELD

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

SAFE AND RELIABLE

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

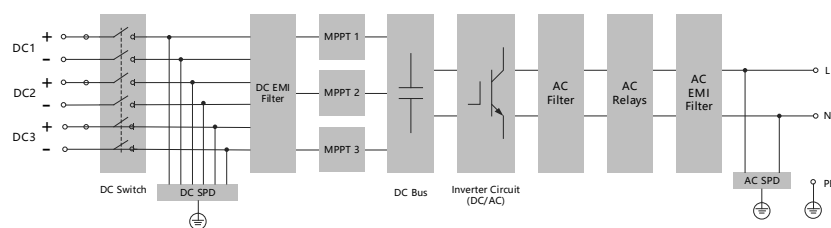
USER FRIENDLY SETUP

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

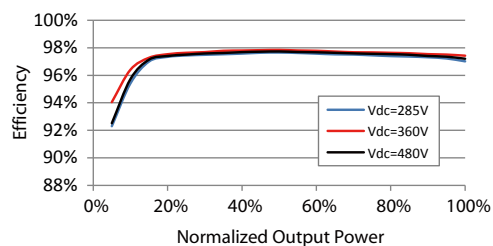
SMART MANAGEMENT

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

CIRCUIT DIAGRAM



EFFICIENCY CURVE (SG10RS-ADA)



Type designation	SG5.0RS-ADA	SG8.0RS	SG10RS
Input (DC)			
Recommended max. PV input power	7.5 kWp	12 kWp	15 kWp
Max. PV input voltage		600 V	
Min. PV input voltage / Startup input voltage		40 V / 50 V	
Rated PV input voltage		360 V	
MPP voltage range		40-560 V	
No. of independent MPP inputs		3	
No. of PV strings per MPPT		1	
Max. PV input current		48 A (16 A / 16 A / 16 A)	
Max. DC short-circuit current		60 A (20 A / 20 A / 20 A)	
Max. current for DC connector		30A	
Output (AC)			
Rated AC output power	4999 W	8000 W	9999 W
Max. AC output apparent power	4999 VA	8000 VA	9999 VA
Rated AC output apparent power	4999 VA	8000 VA	9999 VA
Max. AC output current	22.7 A	36.4 A	43.5 A
Rated AC output current (at 230V)	21.7 A	34.8 A	45.5 A
Rated AC voltage		220 / 230 / 240V	
AC voltage range		154 - 276 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		1 / 1	
Efficiency			
Max. efficiency / European efficiency	97.8 % / 96.9 %	97.8 % / 97.3 %	97.8 % / 97.4%
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	
DC terminal protective cover		Yes	
General Data			
Dimensions (W*H*D)		490* 340 * 170 mm	
Weight		19 kg	
Mounting method		Wall-mounting bracket	
Topology		Transformerless	
Degree of protection		IP65	
Corrosion		C5	
Operating ambient temperature range		-25 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 mm ²)	
AC connection type		Plug and play connector (Max. 16 mm ²) *	
Grid compliance		IEC 62109-1/2, AS/NZS 4777.2:2020	
Grid Support		Active & reactive power control and power ramp rate control	
Country of manufacture		China	

* Country code needs to be set before grid connection