SG3.0/3.6/4.0/5.0/6.0RS

Double-MPPT String Inverter for 600 Vdc System

NEW

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

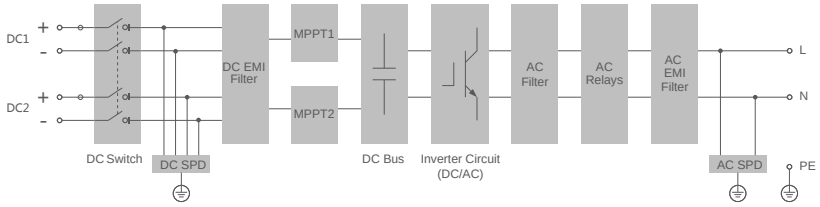
USER FRIENDLY SETUP

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

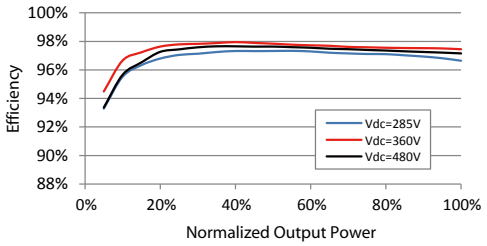
SMART MANAGEMENT

- 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



SUNGROW
Clean power for all

Type designation	SG3.0RS	SG3.6RS	SG4.0RS	SG5.0RS	SG6.0RS
Input (DC)					
Recommended max. PV input power	4.5 kWp	5.4 kWp	6 kWp	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 – 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	3680 W	4000 W	5000 W*	6000 W
Max. AC Output power	3000 VA	3680 VA	4000 VA	5000 VA*	6000 VA
Rated AC output current (at 230 V)	13.1 A	16 A	17.4 A	21.8 A**	26.1 A
Max. AC output current	13.7 A	16 A	18.2 A	22.8 A**	27.3 A
Rated AC voltage	220 / 230 / 240 V				
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 %				
European efficiency	97.0 %	97.0 %	97.2 %	97.3 %	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)	Optional				
PID recovery function	Yes				
General Data					
Dimensions (W*H*D)	410 * 270* 150 mm				
Weight	10 kg				
Mounting method	Wall-mounting bracket				
Topology	Transformerless				
Degree of protection	IP65				
Operating ambient temperature range	-25 to 60 ℃				
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. 6 mm^2)				
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 0-21:2019, 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: 4999W, 4999VA
**: AS 4777.2 :Rated and Max. AC current is 21.7A

SG8.0/9.0/10RS

Multi-MPPT String Inverter for 600 Vdc System

NEW

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

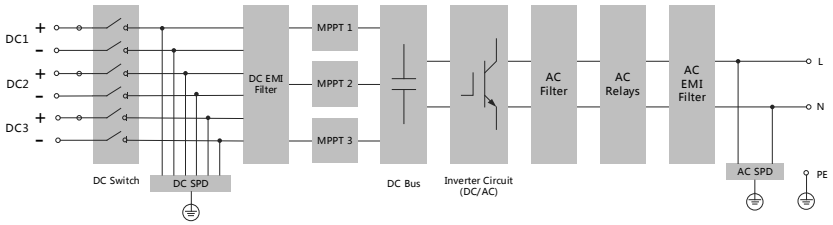
USER FRIENDLY SETUP

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

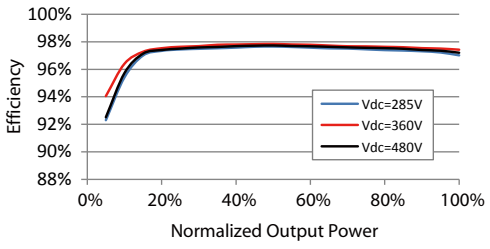
SMART MANAGEMENT

- 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



SUNGROW
Clean power for all

Type designation	SG8.0RS	SG9.0RS	SG10RS
Input (DC)			
Recommended max. PV input power	12 kWp	13.5 kWp	15 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		3	
Default 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)	
Output (AC)			
Rated AC output power	8000 W	9000 W	10000 W
Max. AC Output power	8000 VA	9000 VA	10000 VA
Rated AC output current (at 230 V)	34.8 A	39.2 A	43.5 A
Max. AC output current	36.4 A	41 A	45.5 A
Rated AC voltage		220 / 230 / 240 V	
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		97.8 %	
European efficiency	97.3 %	97.4 %	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	
DC switch		Yes	
PV string current monitoring		Yes	
Arc fault circuit interrupter (AFCI)		Optional	
PID recovery function		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	
Operating ambient temperature range		-25 to 60 ℃	
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. 16 mm²)	
Grid compliance		IEC / EN62109-1/2, IEC / EN62116, IEC / EN61727, IEC / EN61000-6-2/3, AS/NZS 4777.2, ABNT NBR 16149, ABNT NBR 16150, G99	
Grid Support		Active & reactive power control and power ramp rate control	