

# SG3.0RS-L

Single-MPPT String Inverter for 600 Vdc System



## ☀️ HIGH YIELD

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

## 🛡️ SAFE AND RELIABLE

- Built-in Type II DC & AC SPD
- IP65, indoor & outdoor installation

## 💡 USER FRIENDLY SETUP

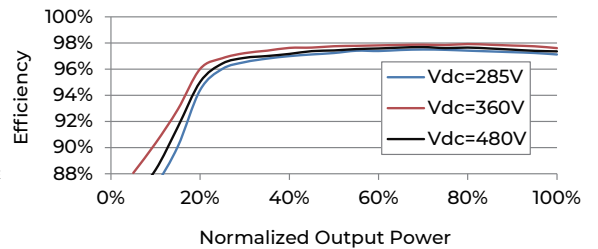
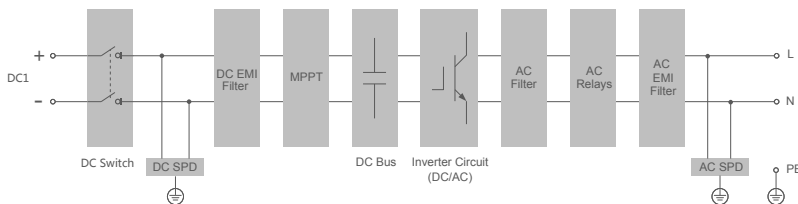
- Plug and play installation
- One-click access to iSolarCloud monitoring platform
- Light and compact ( A4 Size ) with optimized heat dissipation design

## ⚙️ SMART MANAGEMENT

- Real time data ( 10 seconds refresh sample )
- Remote firmware updates

## CIRCUIT DIAGRAM

## EFFICIENCY CURVE ( SG3.0RS-L )



Type designation	SG3.0RS-L
<b>Input ( DC )</b>	
Recommended max. PV input power	4.5 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 V - 560 V
No. of independent MPP inputs	1
Default No. of PV strings per MPPT	1
Max. PV input current	16 A
Max. DC short-circuit current	20 A
<b>Output ( AC )</b>	
Rated AC output power	3000 W
Max. AC Output power	3000 VA
Rated AC output current ( at 220 V )	13.7 A
Max. AC output current	13.7 A
Rated AC voltage	220 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
<b>Efficiency</b>	
Max. efficiency / European efficiency	97.8 % / 97.3 %
<b>Protection</b>	
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
PID Zero function	Yes
<b>General Data</b>	
Dimensions ( W * H * D )	360 mm * 263 mm * 125.5 mm
Weight	6 kg
Mounting method	Wall-mounting bracket
Topology	Transformerless
Degree of protection	IP65
Operating ambient temperature range	-25 °C - 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	WLAN
DC connection type	MC4 Compatible Connector ( Max. 6 mm <sup>2</sup> )
AC connection type	Plug and play connector ( Max. 6 mm <sup>2</sup> )
Grid compliance	ABNT NBR 16150, PORTARIA N° 140, DE 21 DE MARÇO DE 2022 IEC/EN 62109-1/2, IEC 61000-6-1/2/3/4, IEC 62116, IEC 61683, IEC 61727, IEC 60068-2-1/2/14/30/64/27, IEC 60529, EN 50530, IS 16169 / IS 16221(BIS)
Grid Support	Active & reactive power control and power ramp rate control

# SG3.3/4.6RS-L

Single-MPPT String Inverter for 600 Vdc System



## ☀️ HIGH YIELD

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

## 🛡️ SAFE AND RELIABLE

- Built-in Type II DC & AC SPD
- IP65, indoor & outdoor installation

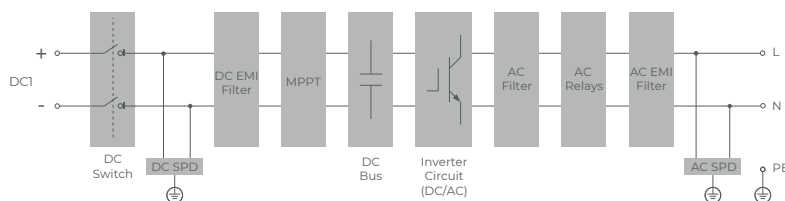
## 💡 USER FRIENDLY SETUP

- Plug and play installation
- One-click access to iSolarCloud monitoring platform
- Light and compact(A4 Size)with optimized heat dissipation design

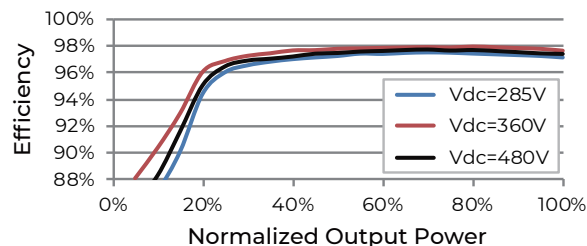
## ⚙️ SMART MANAGEMENT

- Real time data (10 seconds refresh sample)
- Remote firmware updates

## CIRCUIT DIAGRAM ( SG3.3RS-L )



## EFFICIENCY CURVE ( SG3.3RS-L )



Type designation	SG3.3RS-L	SG4.6RS-L
<b>Input ( DC )</b>		
Recommended max. PV input power	4.95 kWp	6.9 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	
MPPT operating voltage range **	40 V - 560 V	
No. of independent MPP trackers	1	2
No. of PV strings per MPPT	1	
Max. PV input current	16 A	32 A ( 16 A / 16 A )
Max. DC short-circuit current	20 A	40 A ( 20 A / 20 A )
<b>Output ( AC )</b>		
Rated AC output power	3300 W	4600 W
Max. AC output apparent power	3300 VA	4600 VA
Rated AC output current ( at 220 V )	15 A	21 A
Max. AC output current	15 A	21 A
Rated AC voltage	220 V / 240 V	
AC voltage range	154 V - 276 V	
Rated grid frequency / Grid frequency range	50 Hz / 45 Hz - 55 Hz 60 Hz / 55 Hz - 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	
<b>Efficiency</b>		
Max. efficiency / European efficiency	97.8 % / 97.1 %	97.9 % / 97.3 %
<b>Protection</b>		
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	
PID Zero	Yes	
<b>General data</b>		
Dimensions ( W * H * D )	360 mm * 263 mm * 125.5 mm	445 mm * 325 mm * 150 mm
Weight	6 kg	10.5 kg
Mounting method	Wall-mounting bracket	
Topology	Transformerless	
Degree of protection	IP 65	
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	WLAN	
DC connection type	MC4 Compatible Connector ( Max. 6 mm <sup>2</sup> )	
AC connection type	Plug and play connector ( Max. 6 mm <sup>2</sup> )	
Grid compliance	IEC/EN 62109-1/2, IEC 61000-6-1/2/3/4, IEC 62116, IEC 61683, IEC 61727, IEC 60068-2-1/2/14/27/30/64, IEC 60529, EN 50530, IS 16169 / IS 16221( BIS )	
Grid Support	Active & reactive power control and power ramp rate control	

\* Input voltage exceeding the MPPT operating voltage range triggers inverter protection

\*\* Please refer to the user manual for the full load MPPT voltage range



# SG4.0/5.0/6.0RS-L

Double-MPPT String Inverter for 600 Vdc System



## ☀️ 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

- Built-in Type II DC & AC SPD
- IP65, indoor & outdoor installation

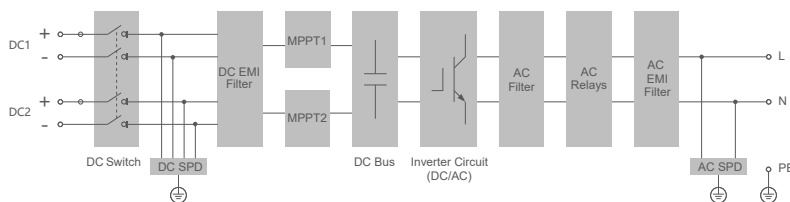
## 💡 USER FRIENDLY SETUP

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

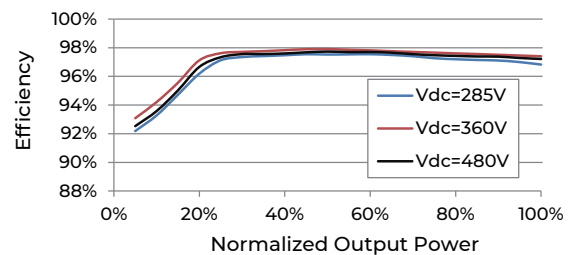
## ⚙️ SMART MANAGEMENT

- Real time data (10 seconds refresh sample)
- Remote firmware updates

## CIRCUIT DIAGRAM



## EFFICIENCY CURVE (SG5.0RS-L)



Type designation	SG4.0RS-L	SG5.0RS-L	SG6.0RS-L
<b>Input (DC)</b>			
Recommended max. PV input power	6 kWp	7.5 kWp	9 kWp
Max. PV input voltage	600 V	600 V	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)		
<b>Output (AC)</b>			
Rated AC output power	4000 W	5000 W	6000 W
Max. AC Output power	4000 VA	5000 VA	6000 VA
Rated AC output current (at 220V)	18.2 A	22.8 A	27.3 A
Max. AC output current	18.2 A	22.8 A	27.3 A
Rated AC voltage	220 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		
<b>Efficiency</b>			
Max. efficiency / European efficiency	97.9 % / 97.2 %	97.9 % / 97.3 %	97.9 % / 97.5 %
<b>Protection</b>			
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		
PID Zero function	Yes		
<b>General Data</b>			
Dimensions (W*H*D)	445 mm * 325 mm * 150 mm		
Weight	10.5 kg		
Mounting method	Wall-mounting bracket		
Topology	Transformerless		
Degree of protection	IP65		
Operating ambient temperature range	-25 °C - 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	WLAN		
DC connection type	MC4 Compatible Connector ( Max. 6 mm <sup>2</sup> )		
AC connection type	Plug and play connector ( Max. 6 mm <sup>2</sup> )		
Grid compliance	ABNT NBR 16150, PORTARIA N° 140, DE 21 DE MARÇO DE 2022 IEC/EN 62109-1/2, IEC 61000-6-1/2/3/4, IEC 62116, IEC 61683, IEC 61727, IEC 60068-2-1/2/14/30/64/27, IEC 60529, EN 50530, IS 16169 / IS 16221(BIS)		
Grid Support	Active & reactive power control and power ramp rate control		