

SG4.0/5.0/6.0RS-L

Double-MPPT String Inverter for 600 V_{dc} 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

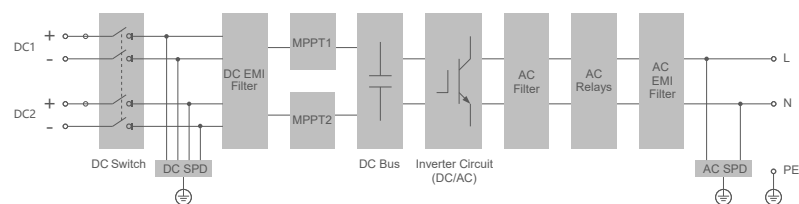
- Plug and play installation
- One-click access to iSolarCloud monitoring platform
- Light and compact with optimized heat dissipation design



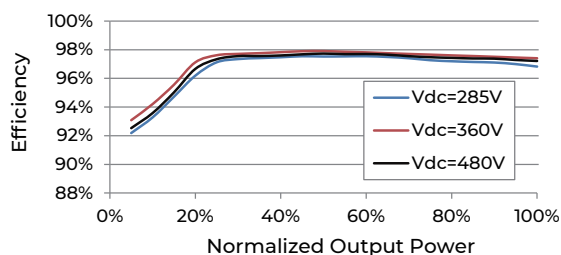
SMART MANAGEMENT

- 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
Input (DC)			
Recommended max. PV input power	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		
MPPT operating voltage range **	40 V - 560 V		
No. of independent MPP trackers	2		
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	4000 W	5000 W	6000 W
Max. AC output apparent 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 / 230V / 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 / AC connection	1 / 1		
Efficiency			
Max. efficiency / European efficiency	97.9 % / 97.2 %	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		
PID Zero	Yes		
General data			
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 ºC - 60 ºC		
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 mm²)		
AC connection type	Plug and play connector (Max. 6 mm²)		
Grid compliance	ABNT NBR 16150, PORTARIA Nº 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		

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

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