

SG2.0/2.5/3.0RS-S

Single-MPPT String Inverter for 600 Vdc System

Preliminary



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

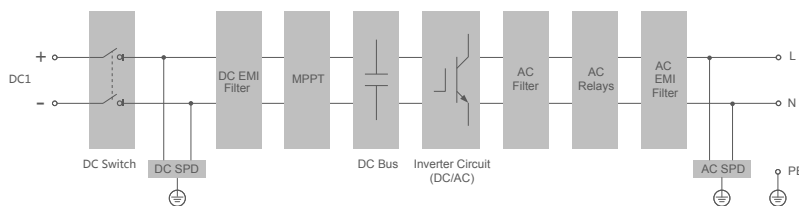
USER FRIENDLY STEUP

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

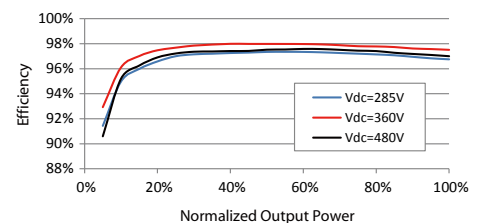
SMART MANAGEMENT

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

CIRCUIT DIAGRAM



EFFICIENCY CURVE



Type designation	SG2.0RS-S	SG2.5RS-S	SG3.0RS-S
Input (DC)			
Recommended max. PV input power	3 kWp	3.75 kWp	4.5 kWp
Max. PV input voltage		600 V	
Min. PV input voltage / Start-up input voltage		40 V / 50 V	
Nominal PV input voltage		360 V	
MPP voltage range		40 – 560 V	
No. of independent MPP inputs		1	
Default No. of PV strings per MPPT		1	
Max. PV input current		16A	
Max. DC short-circuit current		20A	
Output (AC)			
Nominal AC output power	2000 W	2500 W	3000 W
Max. AC Output power	2000 VA	2500 VA	3000 VA
Max. AC output current	9.1 A	11.4 A	13.7 A
Nominal AC voltage		220 / 230 / 240 V	
AC voltage range		154 – 286 V	
Nominal grid frequency / Grid frequency range		50 Hz / 45 – 55 Hz, 60 Hz / 55 – 65 Hz	
Harmonic (THD)		< 3 % (at nominal power)	
Power factor at nominal power / Adjustable power factor		> 0.99 / 0.8 leading – 0.8 lagging	
Feed-in phases / Connection phases		1 / 1	
Efficiency			
Max. efficiency	98.0 %	98.0 %	98.0 %
European efficiency	97.3 %	97.5 %	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 recovery function		Yes	
General Data			
Dimensions (W*H*D)		320 * 225* 120 mm	
Weight		6 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 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, UNE 217002:2020, NTS V2 TypeA, CEI 0-21:2019, VDE0126-1-1/A1 (VFR-2019), UTE C15-712, C10/11, G98	
Grid Support		Active & reactive power control and power ramp rate control	