

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

Double-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

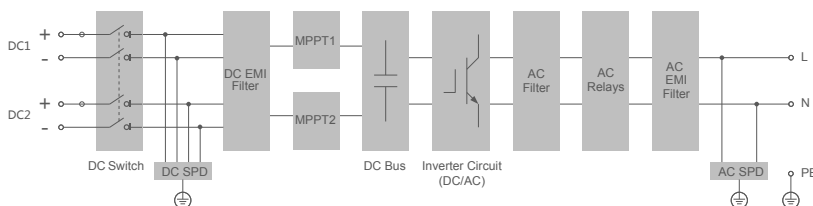
USER FRIENDLY STEUP

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

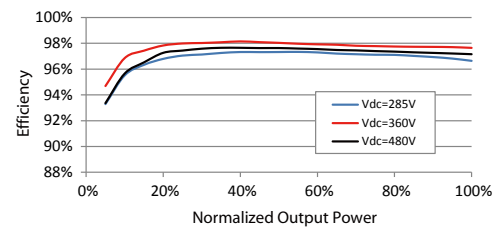
SMART MANAGEMENT

- 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	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. 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	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)					
Nominal 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
Max. AC output current	13.7 A	16 A	18.2 A	22.8 A**	27.3 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	98.1 %	98.1 %	98.1 %	98.1 %	98.1 %
European efficiency	97.0 %	97.1 %	97.4 %	97.5 %	97.8 %
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* 150 mm				
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 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: 21.7A