

# SG2.0/2.5/3.0RS-S

Single-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

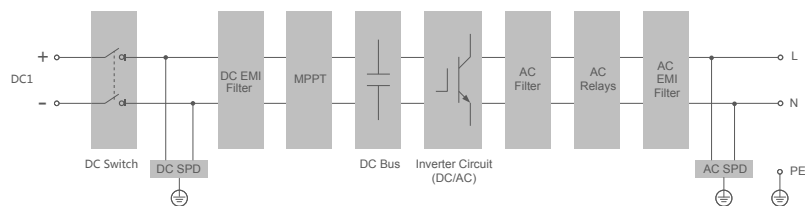
- Plug and play installation
- One-click access to iSolarCloud monitoring platform
- Light and compact (A4 Size) with optimized heat dissipation design



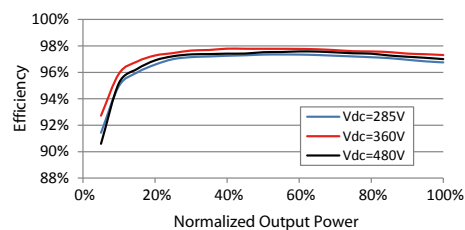
## SMART MANAGEMENT

- 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 |
|-------------------------------------------------------|-----------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|
| <b>Input (DC)</b>                                     |           |                                                                                                                                                                                                 |           |
| Recommended max. PV input power                       | 3 kWp     | 3.75 kWp                                                                                                                                                                                        | 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 – 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                                                                                                                                                                                             |           |
| <b>Output (AC)</b>                                    |           |                                                                                                                                                                                                 |           |
| Rated AC output power                                 | 2000 W    | 2500 W                                                                                                                                                                                          | 3000 W    |
| Max. AC Output power                                  | 2000 VA   | 2500 VA                                                                                                                                                                                         | 3000 VA   |
| Rated AC output current (at 230V)                     | 8.7 A     | 10.9 A                                                                                                                                                                                          | 13.1 A    |
| Max. AC output current                                | 9.1 A     | 11.4 A                                                                                                                                                                                          | 13.7 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                                                                                                                                                                                           |           |
| <b>Efficiency</b>                                     |           |                                                                                                                                                                                                 |           |
| Max. efficiency                                       |           | 97.8 %                                                                                                                                                                                          |           |
| European efficiency                                   | 96.9 %    | 97.2 %                                                                                                                                                                                          | 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                                                                                                                                                                                             |           |
| Arc fault circuit interrupter (AFCI)                  |           | Optional                                                                                                                                                                                        |           |
| PID recovery function                                 |           | Yes                                                                                                                                                                                             |           |
| <b>General Data</b>                                   |           |                                                                                                                                                                                                 |           |
| 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 <sup>2</sup> )                                                                                                                                                                   |           |
| AC connection type                                    |           | Plug and play connector (Max. 6 mm <sup>2</sup> )                                                                                                                                               |           |
| 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 0-21:2020, VDE0126-1-1/A1(VFR-2019), UTE C15-712, C10/11, G98/G99 |           |
| Grid Support                                          |           | Active & reactive power control and power ramp rate control                                                                                                                                     |           |