

# 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

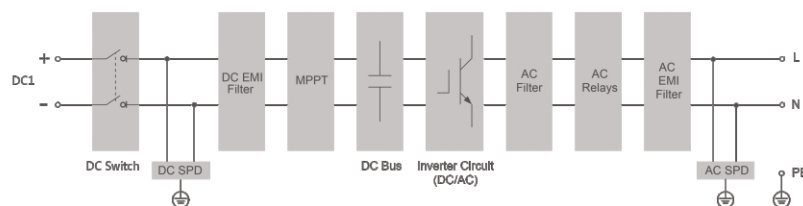
- Plug and play installation
- One-click access to iSolarCloud monitoring platform
- Light and compact ( A4 Size ) with optimized heat dissipation design



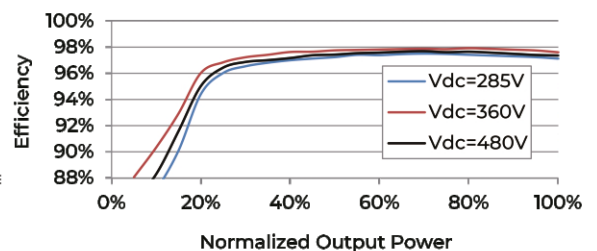
## SMART MANAGEMENT

- 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 Nº 140, DE 21 DE MARÇO DE 2022<br>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                                                                                                                                                   |