

SG5.0/6.0RS

Suitable for 50Hz / 60Hz grid, could be used in Asia, Africa, South America, Australia and Europe. Available for hand installation, no need for lifting machinery assistance



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

- Integrated arc fault circuit interrupter
- Built-in Type II DC&AC SPD
- Corrosion protection rating at C5

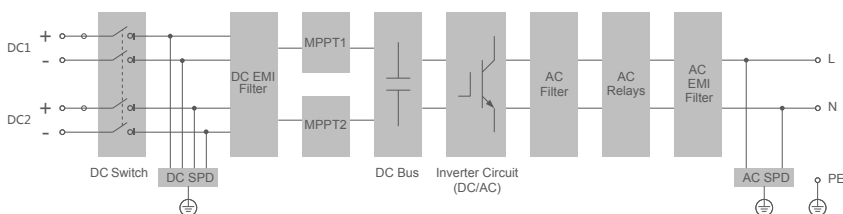
USER FRIENDLY SETUP

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

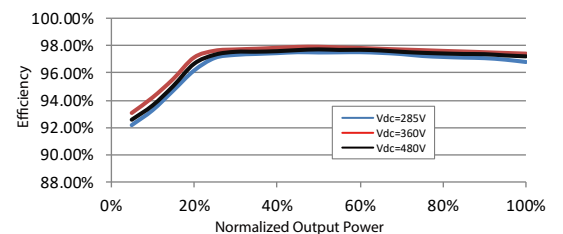
SMART MANAGEMENT

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

CIRCUIT DIAGRAM



EFFICIENCY CURVE(SG5.0RS)



| Type designation | SG5.0RS | SG6.0RS |
|---|---|----------------|
| Input (DC) | | |
| Recommended max. PV input power | 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 | |
| MPP voltage range | 40 V – 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) | | |
| Rated AC output power | 5000 W * | 6000 W |
| Max. AC Output power | 5000 VA * | 6000 VA |
| Rated AC output current (at 230 V) | 21.8 A ** | 26.1 A |
| Max. AC output current | 22.8 A ** | 27.3 A |
| Rated AC voltage | 220 V / 230 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 | |
| Efficiency | | |
| Max. efficiency / European efficiency | 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 | |
| Arc fault circuit interrupter (AFCI) | Yes | |
| PID Zero function | Yes | |
| Optimizer compatibility *** | Optional | |
| General Data | | |
| Dimensions (W * H * D) | 410 mm * 270 mm * 150 mm | |
| Weight | 10 kg | |
| Mounting method | Wall-mounting bracket | |
| Topology | Transformerless | |
| Degree of protection | IP65 | |
| Operating ambient temperature range | -25 °C 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 0-21:2020, VDE0126-1-1/A1 (VFR-2019), UTE C15-712, C10/11, C98/G99, | |
| Grid Support | Active & reactive power control and power ramp rate control | |

* AS 4777.2 4999 W , 4999 VA

** AS 4777.2 :Rated and Max. AC current is 21.7 A

*** For optimizer compatibility, please consult Sungrow before placing an order

