# SG5.0RS-ADA/SG8.0/10RS

Multi-MPPT String Inverter for 600 Vdc System

ADA




## 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

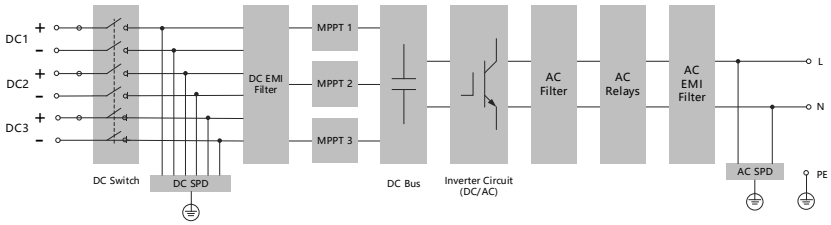
## USER FRIENDLY SETUP

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

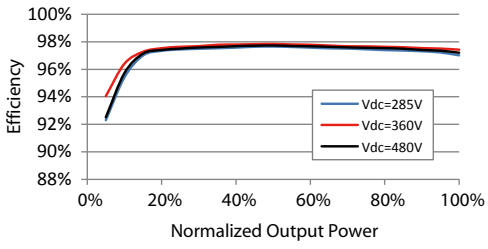
## SMART MANAGEMENT

- 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（SG10RS-ADA)

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SUNGROW
Clean power for all

| Type designation | SG5.0RS-ADA | SG8.0RS | SG10RS |
|---|---|---|---|
| **Input (DC)** | | | |
| Recommended max. PV input power | 7.5 kWp | 12 kWp | 15 kWp |
| Max. PV input voltage | | 600 V | |
| Min. PV input voltage / Startup input voltage | | 40 V / 50 V | |
| Rated PV input voltage | | 360 V | |
| MPP voltage range | | 40-560 V | |
| No. of independent MPP inputs | | 3 | |
| No. of PV strings per MPPT | | 1 | |
| Max. PV input current | | 48 A (16 A / 16 A / 16 A) | |
| Max. DC short-circuit current | | 60 A (20 A / 20 A / 20 A) | |
| Max. current for DC connector | | 30A | |
| **Output (AC)** | | | |
| Rated AC output power | 4999 W | 8000 W | 9999 W |
| Max. AC output apparent power | 4999 VA | 8000 VA | 9999 VA |
| Rated AC output apparent power | 4999 VA | 8000 VA | 9999 VA |
| Max. AC output current | 22.7 A | 36.4 A | 43.5 A |
| Rated AC output current (at 230V) | 21.7 A | 34.8 A | 45.5 A |
| Rated AC voltage | | 220 / 230 / 240V | |
| AC voltage range | | 154 - 276 V | |
| Rated grid frequency | | 50 Hz / 60 Hz | |
| Grid frequency range | | 45 – 55 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 | 97.8 % / 96.9 % | 97.8 % / 97.3 % | 97.8 % / 97.4% |
| **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 | |
| Ground fault monitoring | | Yes | |
| DC switch | | Yes | |
| PV string current monitoring | | Yes | |
| Arc fault circuit interrupter (AFCI) | | Yes | |
| PID recovery function | | Yes | |
| DC terminal protective cover | | Yes | |
| **General Data** | | | |
| Dimensions (W*H*D) | | 490* 340 * 170 mm | |
| Weight | | 19 kg | |
| Mounting method | | Wall-mounting bracket | |
| Topology | | Transformerless | |
| Degree of protection | | IP65 | |
| Corrosion | | C5 | |
| Operating ambient temperature range | | -25 to 60 ℃ | |
| 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 mm² ) | |
| AC connection type | | Plug and play connector (Max. 16 mm² ) * | |
| Grid compliance | | IEC 62109-1/2, AS/NZS 4777.2:2020 | |
| Grid Support | | Active & reactive power control and power ramp rate control | |
| Country of manufacture | | China | |

* Country code needs to be set before grid connection

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