

# SG15/20RT

Multi-MPPT String Inverter for 1000 Vdc System



NEW



## HIGH YIELD

- Lower startup & wider MPPT voltage
- Compatible with bifacial modules



## SMART MANAGEMENT

- Optional Smart IV curve scanning
- Remote firmware updates



## SAFE AND DURABLE

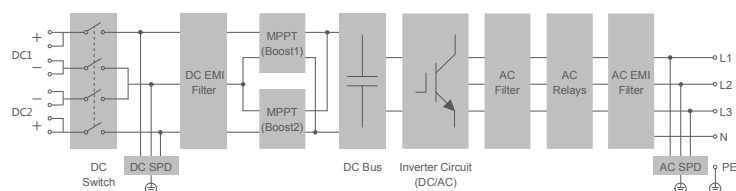
- Build-in Type II DC&AC SPD
- High anti-corrosion rating C5



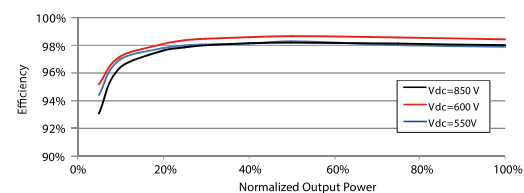
## EASY AND USER FRIENDLY

- 21kg compact design
- Fast and easy commissioning via App

## CIRCUIT DIAGRAM



## EFFICIENCY CURVE



| Type designation   | SG15RT   | SG20RT   |
|--|--|----------|
| <b>Input (DC)</b>  |  |          |
| Recommended max. PV input power                            | 22.5kW   | 30 kW    |
| Max. PV input voltage                                      | 1100 V *   |          |
| Min. PV input voltage / Start-up input voltage             | 180V / 180V  |          |
| Nominal input voltage                                      | 600 V  |          |
| MPP voltage range  | 160V-1000V   |          |
| No. of independent MPP inputs                              | 2  |          |
| No. of PV strings per MPPT                                 | 2 / 2  |          |
| Max. PV input current                                      | 50 A (25 A / 25 A)   |          |
| Max. DC short-circuit current                              | 64 A (32 A / 32 A)   |          |
| <b>Output (AC)</b>   |  |          |
| Nominal AC power (@230 V, 50 Hz)                           | 15000 W  | 20000 W  |
| Max. AC output power                                       | 16500 VA   | 22000 VA |
| Max. AC output current                                     | 25 A   | 31.9 A   |
| Nominal AC voltage   | 3 / N / PE, 220 / 380 V<br>3 / N / PE, 230 / 400 V<br>3 / N / PE, 240 / 415 V                        |          |
| AC voltage range   | 180 V – 276 V  |          |
| Nominal grid frequency /<br>Grid frequency range           | 50 Hz / 45 – 55 Hz<br>60 Hz / 55 – 65 Hz   |          |
| Harmonic(THD)  | <3 % (at nominal power)  |          |
| Power factor at nominal power /<br>Adjustable power factor | >0.99 / 0.8 leading – 0.8 lagging  |          |
| Feed-in phases / AC connection                             | 3 / 3  |          |
| <b>Efficiency</b>  |  |          |
| Max. efficiency  | 98.50 %  |          |
| European efficiency  | 98.10 %  |          |
| <b>Protection&amp;Function</b>                             |  |          |
| Grid monitoring  | Yes  |          |
| DC reverse connection protection                           | Yes  |          |
| AC short-circuit protection                                | Yes  |          |
| Leakage current protection                                 | Yes  |          |
| Surge Protection   | DC Type II / AC Type II  |          |
| DC switch  | Yes  |          |
| <b>General Data</b>  |  |          |
| Dimensions (W*H*D)   | 370*480*195 mm   |          |
| Mounting method  | Wall-mounting bracket  |          |
| Weight   | 21 kg  |          |
| Topology   | Transformerless  |          |
| Degree of protection                                       | IP65   |          |
| Night power consumption                                    | < 1 W  |          |
| Operating ambient temperature range                        | -25 °C to 60 °C  |          |
| Allowable relative humidity range (non-condensing)         | 0% – 100%  |          |
| Cooling method   | Smart forced air cooling   |          |
| Max. operating altitude                                    | 4000 m (>2000 m derating)  |          |
| Noise(Typical)   | 45 dB(A)   |          |
| Display  | LED  |          |
| Communication  | WLAN, Ethernet, RS485, DI, DO  |          |
| DC connection type   | MC4  |          |
| AC connection type   | Plug and play  |          |
| Compliance   | EN 61000-6-1/-3, EN 61000-3-11/-12, IEC62109-2, IEC 61727, IEC 62116, IEC 61683, IEC 60068, EN 50530 |          |

\*: The inverter enters the standby state when the input voltage ranges between 1,000V and 1,100V. If the maximum DC voltage in the system can exceed 1000V, the MC4 connectors included in the scope of delivery must not be used. In this case MC4 Evo2 connectors must be used.