

# SG15/20RT

Multi-MPPT String Inverter for 1000 Vdc System



## HIGH YIELD

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

## SMART MANAGEMENT

- Smart IV curve scanning
- Remote firmware updates

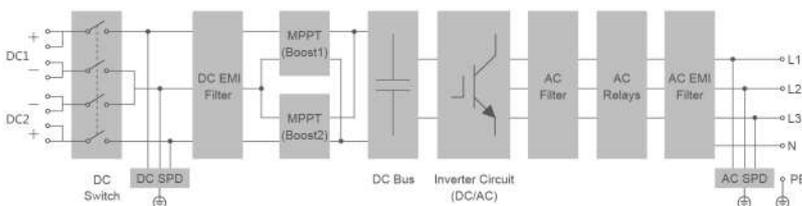
## SAFE AND DURABLE

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

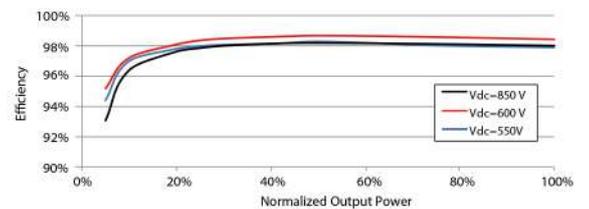
## EASY AND USER FRIENDLY

- 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	22.5 kWp	30 kWp
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 3 / N / PE, 230 / 400 V 3 / N / PE, 240 / 415 V
AC voltage range		180 V – 276 V / 311 V – 478 V
Nominal grid frequency /		50 Hz / 45 – 55 Hz
Grid frequency range		60 Hz / 55 – 65 Hz
Harmonic(THD)		<3 % (at nominal power)
Power factor at nominal power /		>0.99 / 0.8 leading – 0.8 lagging
Adjustable power factor		
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
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 (Max. 6 mm <sup>2</sup> )
AC connection type		Plug and play
Compliance		IEC / EN 61000-6-1/2/3/4, EN 61000-3-11/-12, IEC / EN62109-1/2, 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.