

# 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

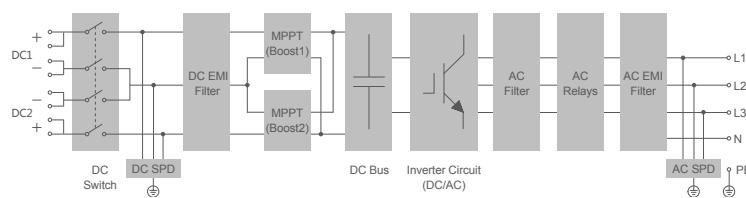
- Built-in Type II DC&AC SPD
- High anti-corrosion rating C5



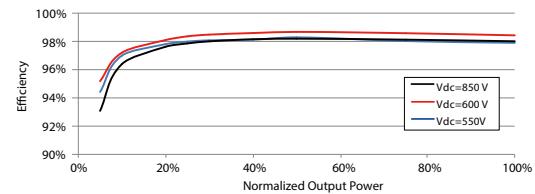
## EASY AND USER FRIENDLY

- 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.