

# SG15/17/20RT

Multi-MPPT String Inverter for 1000 Vdc System



## HIGH YIELD

- Lower startup & wider MPPT voltage
- Compatible with bifacial modules
- Built-in PID recovery function



## SMART MANAGEMENT

- Smart IV curve scanning
- 24 / 7 Live monitoring
- Remote firmware updates



## SAFE AND DURABLE

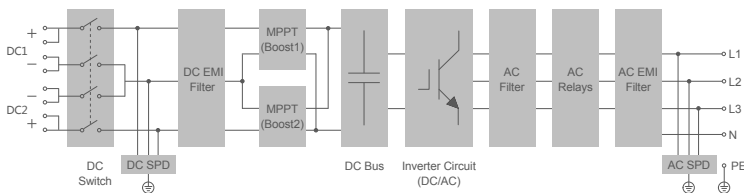
- Quick arc fault circuit interrupter
- Built-in Type II DC & AC SPD
- High anti-corrosion rating C5



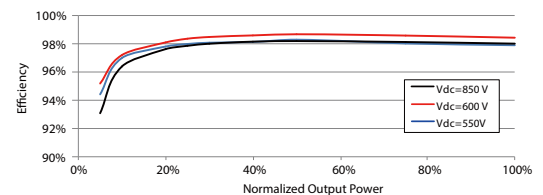
## EASY AND USER FRIENDLY

- 21 kg compact design
- Unique push-in connectors
- Fast and easy commissioning via App

## CIRCUIT DIAGRAM



## EFFICIENCY CURVE



Type designation	SG15RT	SG17RT	SG20RT
<b>Input (DC)</b>			
Recommended max. PV input power	22.5 kWp	25.5 kWp	30 kWp
Max. PV input voltage		1100 V*	
Min. PV input voltage / Start-up input voltage		180 V	
Nominal input voltage		600 V	
MPP voltage range		160 V – 1000 V	
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. current for input connector		30A	
Max. DC short-circuit current		64 A (32 A / 32 A)	
<b>Output (AC)</b>			
Nominal AC power (@230 V, 50 Hz)	15000 W	17000 W	20000 W
Max. AC output power	16500 VA**	18700 VA**	22000 VA**
Max. AC output current	25 A	28.3 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 / Grid frequency range		50 Hz / 45 – 55 Hz 60 Hz / 55 – 65 Hz	
Harmonic(THD)		<3 % (at nominal power)	
Power factor at nominal power / 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</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	
Arc fault circuit interrupter (AFCI)		Yes	
PID recovery function		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		0% – 100%	
Cooling method		Smart forced air cooling	
Max. operating altitude		4000 m (> 2000 m derating)	
Noise (Typical)		45dB(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, IEC / EN62109-1/2, IEC 61727, IEC 62116, IEC 61683, EN50530, AS/NZS 4777.2:2015, VDE-AR-N-4105, DIN VDE0126-1-1, EN50549-1	

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

\*\*: For Australia & Belgium & Germany, max. AC output power: SG15RT is 15000VA, SG17RT is 17000VA, SG20RT is 20000VA.