

# SG5.0/7.0/8.0/10RT

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

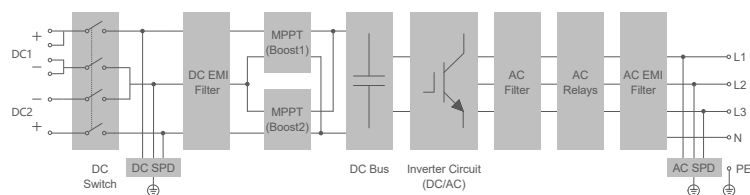
## SAFE AND DURABLE

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

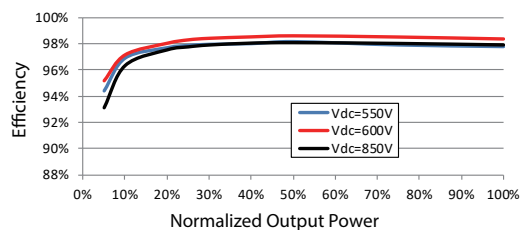
## EASY AND USER FRIENDLY

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

## CIRCUIT DIAGRAM(SG10RT)



## EFFICIENCY CURVE



Type designation	SG5.0RT	SG7.0RT	SG8.0RT	SG10RT
<b>Input (DC)</b>				
Recommended max. PV input power	7.5 kWp	10.5 kWp	12 kWp	15 kWp
Max. PV input voltage	1100 V *			
Min. PV input voltage / Start-up input voltage	180V / 180V			
Rated PV input voltage	600 V			
MPP voltage range	160 V – 1000 V			
No. of independent MPP inputs	2			
No. of PV strings per MPPT	1 / 1	2 / 1	2 / 1	2 / 1
Max. PV input current	25 A (12.5 A / 12.5 A)	37.5 A (25 A / 12.5 A)		
Max. DC short-circuit current	36 A (18 A / 18 A)	54 A (36 A / 18 A)		
Max. current for input connector	30 A			
<b>Output (AC)</b>				
Rated AC output power	5000 W	6999 W	8000 W	9999 W
Max. AC output apparent power	5500 VA	6999 VA	8000 VA	9999 VA
Rated AC output apparent power	5500 VA	6999 VA	8000 VA	9999 VA
Max. AC output current	7.6 A	10.6 A	12.2 A	15.2 A
Rated AC output current(at 230V)	7.2 A	10.1 A	11.6 A	14.5 A
Rated AC voltage	3 / N / PE, 230 / 400 V			
AC voltage range	180V – 276 V / 311 V – 478 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	3 / 3-N-PE			
<b>Efficiency</b>				
Max. efficiency / European efficiency	98.4% / 97.4%	98.4% / 97.7%	98.5% / 97.8%	98.5% / 97.9%
<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			
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			
<b>General Data</b>				
Dimensions (W*H*D)	370 * 480 * 195 mm			
Weight	18 kg			
Mounting method	Wall-mounting bracket			
Topology	Transformerless			
Degree of protection	IP65			
Corrosion	C5			
Operating ambient temperature range	-25 °C to 60 °C			
Allowable relative humidity range (non-condensing)	0% – 100%			
Cooling method	Natural cooling			
Max. operating altitude	4000 m			
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 62109-1/2, AS/NZS 4777.2:2020			
Country of manufacture	China			

\* 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.

# 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

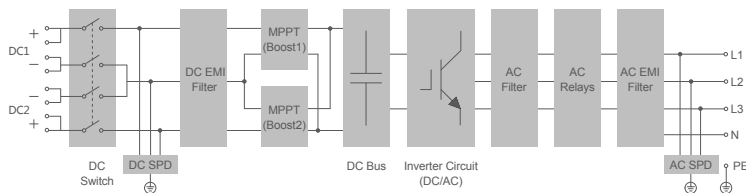
- Quick arc fault circuit interrupter
- Built-in Type II DC & AC SPD
- High anti-corrosion rating C5



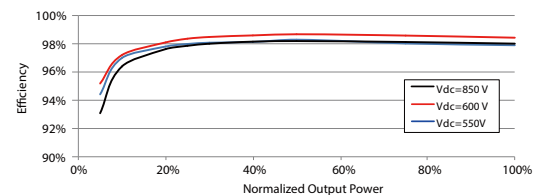
## EASY AND USER FRIENDLY

- 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	22.5kW	25.5 kW	30 kW
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**	
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	
AC connection type		Plug and play	
Compliance		EN 61000-6-1/-3, IEC62109-2, IEC 61727, IEC 62116, AS/NZS 4777.2:2015, VDE-AR-N-4105, DIN VDE0126-1-1, CEI 0-21, EN50549-1	

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

\*\* : Phase to neutral voltage