

# 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

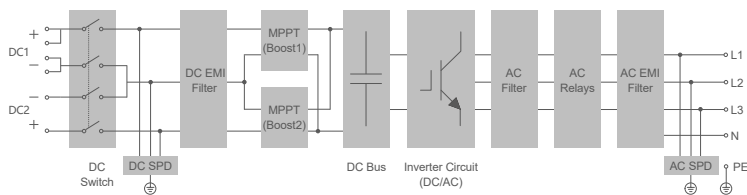
## SAFE AND DURABLE

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

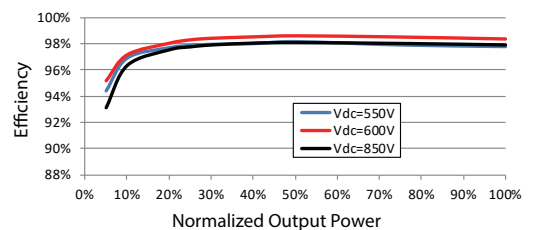
## EASY AND USER FRIENDLY

- 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	180 V / 180 V			
Rated PV input voltage	600 V			
MPPT operating 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 V / 400 V			
AC voltage range	180 V – 276 V / 311 V – 478 V			
Rated grid frequency	50 Hz / 60 Hz			
Grid frequency range	45 Hz – 55 Hz / 55 Hz – 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 mm * 480 mm * 195 mm			
Weight	18 kg			
Mounting method	Wall-mounting bracket			
Topology	Transformerless			
Degree of protection	IP65			
Corrosion	C5			
Operating ambient temperature range	-25 °C - 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			

\* Input voltage exceeding the MPPT operating voltage range triggers inverter protection.

\*\* Please refer to the user manual for the full load MPPT voltage range