

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

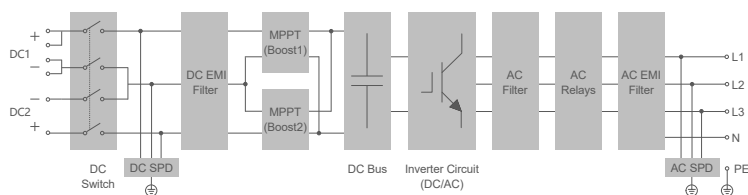
SAFE AND DURABLE

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

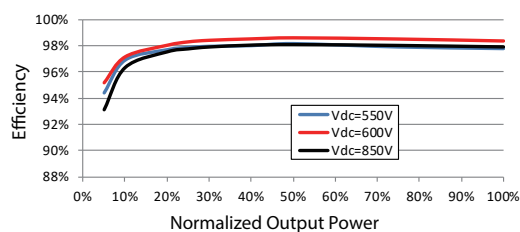
EASY AND USER FRIENDLY

- 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	
Input (DC)								
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	32 A (16 A / 16 A)		48 A (32 A / 16 A)					
Max. DC short-circuit current	45 A (22.5 A / 22.5 A)		67.5 A (45 A / 22.5 A)					
Max. current for input connector	30 A							
Output (AC)								
Rated AC output power	5000 W		6999 W		8000 W		9999 W	
Max. AC output apparent power	5000 VA		6999 VA		8000 VA		9999 VA	
Rated AC output apparent power	5000 VA		6999 VA		8000 VA		9999 VA	
Max. AC output current	7.6 A		10.6 A		12.1 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							
Efficiency								
Max.efficiency / European efficiency	98.4% / 97.4%		98.4% / 97.7%		98.5% / 97.8%		98.5% / 97.9%	
Protection&Function								
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							
General data								
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 mm²)							
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