

SG5.0/6.0/8.0/10/12RT-P2

Multi-MPPT String Inverter for 1000 Vdc System



HIGH YIELD

- Lower startup & wider MPPT voltage
- Compatible with 500W+ PV modules



EASY AND USER FRIENDLY

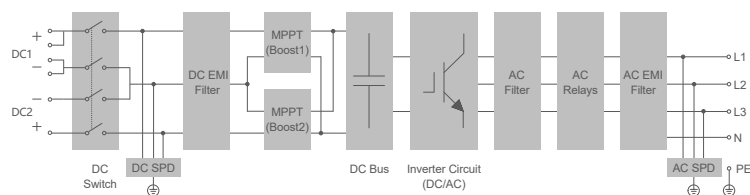
- 18kg compact design
- Plug and play connectors
- Fast and easy commissioning via iSolarCloud App



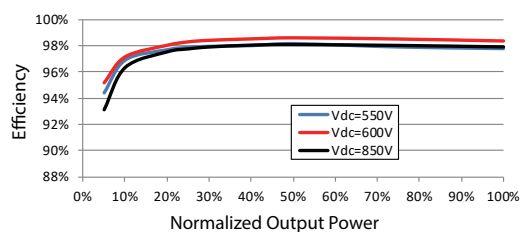
SAFE AND RELIABLE

- Build-in Type II DC & AC SPD
- C5 anti-corrosion & IP65
- Remote firmware updates

CIRCUIT DIAGRAM(SG10RT)



EFFICIENCY CURVE



Type designation	SG5.0RT-P2		SG6.0RT-P2		SG8.0RT-P2		SG10RT-P2		SG12RT-P2	
Input (DC)										
Recommended max. PV input power	7.5 kWp		9 kWp		12 kWp		15 kWp		18 kWp	
Max. PV input voltage*	1100 V **									
Min. PV input voltage / Start-up input voltage	160 V / 180 V									
Rated input voltage	600 V									
MPPT operating voltage range***	160 V – 1000 V									
No. of independent MPP trackers	2									
No. of PV strings per MPPT	1 / 1				2 / 1					
Max. PV input current	32 A (16 A / 16 A)				48 A (32 A / 16 A)					
Max. DC short-circuit current	40 A (20 A / 20 A)				60 A (40 A / 20 A)					
Output (AC)										
Rated AC power	5000 W		6000 W		8000 VA		10000 W		12000 W	
Max. AC output apparent power	5500 VA		6600 VA		8800 VA		11000 VA		13200 VA	
Rated AC output apparent power	5500 VA		6600 VA		8800 VA		11000 VA		13200 VA	
Max. AC output current	8.3 A		10 A		13.3 A		16.7 A		20 A	
Rated AC voltage	3 / N / PE, 220 / 380 V 3 / N / PE, 230 / 400 V 3 / N / PE, 240 / 415 V									
AC voltage range	175 V – 276 V / 304 V – 478 V									
Rated grid frequency / Grid frequency range	50 Hz / 45 Hz – 55 Hz 60 Hz / 55 Hz – 65 Hz									
Harmonic (THD)	< 3 % (at rated power)									
Power factor at rated power / Ajustable power factor	> 0.99 / 0.8 leading – 0.8 lagging									
Feed-in phases / AC connection	3 / 3-PE									
Efficiency										
Max. efficiency	98.3 %									
European efficiency	97.2 %		97.4 %		97.7 %		97.8 %		97.9 %	
Protection & Function										
Grid monitoring	Yes									
DC reverse polarity protection	Yes									
AC short-circuit protection	Yes									
Leakage current protection	Yes									
Surge Protection	DC Type II / AC Type II									
DC switch	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	IP 65									
Night power consumption	< 1 W									
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 Compatible Connector (Max. 6 mm²)									
AC connection type	Plug and play									
Grid compliance	PORTARIA N° 140, DE 21 DE MARÇO DE 2022, EC/EN 62109-1/-2, IEC/EN 61000-6-1/-2/-3/-4 EMC, IEC 61727, IEC 62116, IEC 61683, EN 50530, IEC 60068-1/-2/-14/-27/-30/-64, IEC 61000-3-2:2006 IEC/EN - 61000-3-12, IEC 60529 IP									
Country of manufacture	China									

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

** 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

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