

SG5.0/6.0/7.0/8.0/10/12RT

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

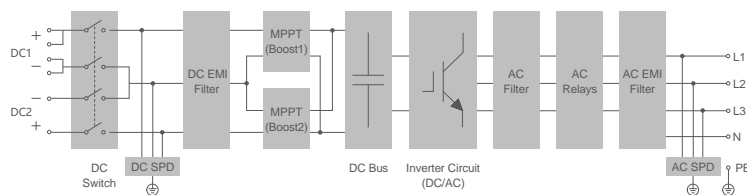
SAFE AND DURABLE

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

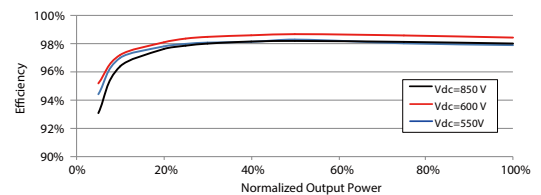
EASY AND USER FRIENDLY

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

CIRCUIT DIAGRAM



EFFICIENCY CURVE



Type designation	SG5.0RT	SG6.0RT	SG7.0RT	SG8.0RT	SG10RT	SG12RT
Input (DC)						
Recommended max. PV input power	7.5 kWp	9.0 kWp	10.5 kWp	12 kWp	15 kWp	18 kWp
Max. PV input voltage			1100 V *			
Min. PV input voltage / Start-up input voltage			180 V			
Rated 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	1 / 1	2 / 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	32 A (16 A / 16 A)		48 A (32 A / 16 A)			
Max. current for input connector	30 A					
Output (AC)						
Rated AC power (@230V,50Hz)	5000 W	6000 W	7000 W***	8000 W	10000 W	12000 W
Max. AC output power	5500 VA**	6600 VA**	7700 VA**	8800 VA**	11000 VA**	13200 VA**
Rated AC output apparent power	5500 VA**	6600 VA**	7700 VA**	8800 VA**	11000 VA**	13200 VA**
Max. AC output current	8.3 A	10 A	11.7 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	180 V – 276 V / 311 V – 478 V					
Rated grid frequency / Grid frequency range	50 Hz / 45 – 55 Hz 60 Hz / 55 – 65 Hz					
Harmonic(THD)	<3 % (at rated power)					
Power factor at nominal power / Adjustable power factor	>0.99 / 0.8 leading – 0.8 lagging					
Feed-in phases / Connection phases	3 / 3-PE					
Efficiency						
Max. efficiency	98.40 %	98.40 %	98.40 %	98.50 %	98.50 %	98.50 %
European efficiency	97.40 %	97.40 %	97.70 %	97.80 %	97.90 %	97.90 %
Protection						
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					
General Data						
Dimensions (W*H*D)	370*480*195 mm					
Mounting method	Wall-mounting bracket					
Weight	18 kg					
Topology	Transformerless					
Degree of protection	IP65					
Operating ambient temperature range	-25 °C to 60 °C					
Allowable relative humidity range	0% – 100 %					
Cooling method	Natural cooling					
Max. operating altitude	4000 m (> 2000 m derating)					
Noise(Typical)	35 dB (A)					
Display	LED					
Communication	WLAN / Ethernet / RS485 / DI / DO					
DC connection type	MC4 (Max. 6 mm ²)					
AC connection type	Plug and play					
Compliance	IEC / EN 61000-6-1/2/3/4, IEC 61000-3-2/3/11/12, IEC / EN62109-1/2, IEC 61727, IEC 62116, IEC 61683, IEC 60068-2-1/2/14/30/64/27, IEC TS 62910, EN50530, AS/NZS 4777.2:2020, VDE-AR-N-4105, DIN VDE0126-1-1/A1, EN50549-1, DEWA, VFR 2019, UTE C15-712-1, PSE NC RfG, NTS 2.0, UNE 206006/7 IN, UNE 217002, MEA/PEA, G98					
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.

** : For Germany, max. AC output power: SG5.0RT is 5000VA, SG6.0RT is 6000VA, SG8.0RT is 8000VA, SG10RT is 10000VA, SG12RT is 12000VA.

***: For Germany: SG7.0RT is 7000VA.