

SG5.0RT/SG6.0RT/SG7.0RT/ SG8.0RT/SG10RT/SG12RT

SUNGROW
Clean power for all

Multi-MPPT String Inverter for 1000 Vdc System



ATONERGI

TURN ON YOUR SOLAR ENERGY

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
- Over-the-air firmware updates

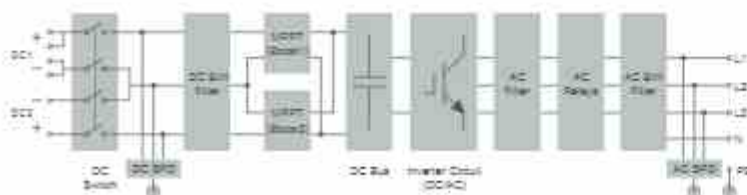
SAFE AND DURABLE

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

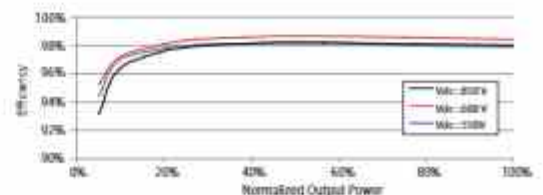
EASY AND USER FRIENDLY

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

CIRCUIT DIAGRAM



EFFICIENCY CURVE



SG5.0RT/SG6.0RT/SG7.0RT/SG8.0RT/SG10RT/SG12RT

Type designation	SG5.0RT	SG6.0RT	SG7.0RT	SG8.0RT	SG10RT	SG12RT
Input (DC)						
Recommended max. PV input power	75 kW	90 kW	105 kW	12 kW	15 kW	18 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	1/1	1/1	2/1	2/1	2/1	2/1
Max. PV input current	25A (12.5A/12.5A)	25A (12.5A/12.5A)	37.5A (25A/12.5A)	37.5A (25A/12.5A)	37.5A (25A/12.5A)	37.5A (25A/12.5A)
Max. current for Input connector	30A					
Max. DC short-circuit current	32 A (16 A / 16 A)	32 A (16 A / 16 A)	48 A (32 A / 16 A)	48 A (32 A / 16 A)	48 A (32 A / 16 A)	48 A (32 A / 16 A)
Output (AC)						
Nominal AC power (⑤ 230 V, 50 Hz)	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*
Max. AC output current	8.3 A	10 A	11.7 A	13.3 A	16.7 A	20 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					
Efficiency						
Max. efficiency	98.40%	98.40%	98.40%	98.50%	98.50%	98.50%
European efficiency	97.40%	97.40%	97.10%	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 I+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)	35dB(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: SG5.0RT is 5000VA, SG6.0RT is 6000VA, SG8.0RT is 8000VA, SG10RT is 10000VA, SG12RT is 12000VA.

** For Australia, 6999W, 6999 VA

