

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

SUNGROW
Clean power for all

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
- Over-the-air firmware updates

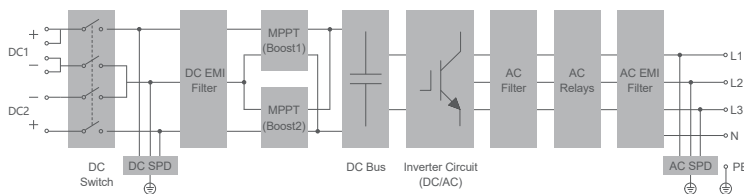
SAFE AND DURABLE

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

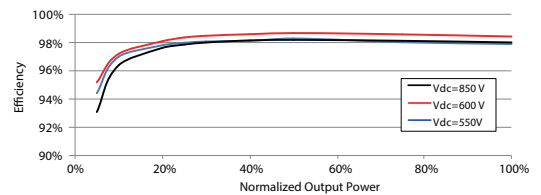
EASY AND USER FRIENDLY

- 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	7.5 kW	9.0 kW	10.5 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	1/1	1/1	2/1	2/1
Max. PV input current	25 A (12.5 A/12.5 A)	25 A (12.5 A/12.5 A)	25 A (12.5 A/12.5 A)	25 A (12.5 A/12.5 A)	37.5 A (25 A/12.5 A)	37.5 A (25 A/12.5 A)
Max. DC short-circuit current	32 A (16 A / 16 A)	32 A (16 A / 16 A)	32 A (16 A / 16 A)	32 A (16 A / 16 A)	48 A (32 A / 16 A)	48 A (32 A / 16 A)
Output (AC)						
Nominal AC power (@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%	97.70%	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)			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

