

SG5.0RT/SG7.0RT/SG10RT/ SG15RT/SG20RT **New**

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

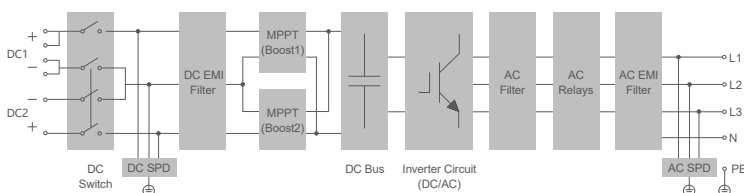
SAFE AND DURABLE

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

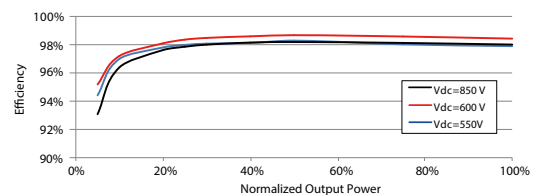
EASY AND USER FRIENDLY

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

CIRCUIT DIAGRAM



EFFICIENCY CURVE



SG5.0RT/SG7.0RT/SG10RT/SG15RT/SG20RT

Type designation	SG5.0RT	SG7.0RT	SG10RT	SG15RT	SG20RT
Input (DC)					
Recommended max. PV input power	7.5 kW	10.5 kW	15 kW	22.5kW	30 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	2/1	2/1	2/2	2/2
Max. PV input current	25 A (12.5 A/12.5 A)	37.5 A (25 A/12.5 A)	37.5 A (25 A/12.5 A)	50 A (25 A / 25 A)	50 A (25 A / 25 A)
Max. current for input connector			30A		
Max. DC short-circuit current	32 A (16 A /16 A)	48 A (32 A /16 A)	48 A (32 A /16 A)	64 A (32 A / 32 A)	64 A (32 A / 32 A)
Output (AC)					
Nominal AC power (@230 V, 50 Hz)	5000 W	7000 W**	10000 W	15000 W	20000 W
Max. AC output power	5500 VA*	7700 VA**	11000 VA*	16500 VA*	22000 VA*
Max. AC output current	8.3 A	11.7 A	16.7 A	25 A	31.9 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%	98.50%	98.50%	98.50%
European efficiency	97.40%	97.70%	97.90%	98.10%	98.10%
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	18 kg	18 kg	21 kg	21 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	Natural cooling	Natural cooling	Smart forced air cooling	Smart forced air cooling
Max. operating altitude			4000 m (> 2000 m derating)		
Noise(Typical)	35dB (A)	35dB (A)	35dB (A)	45dB (A)	45dB (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, SG10RT is 10000VA, SG15RT is 15000VA, SG20RT is 20000VA,

** : For Australia, 6999W, 6999 VA

