

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

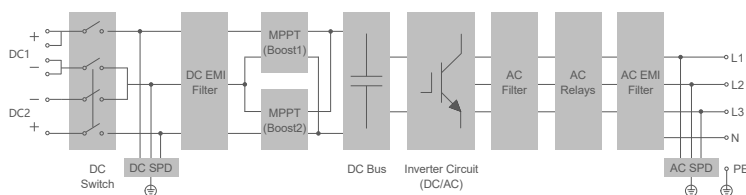
SAFE AND DURABLE

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

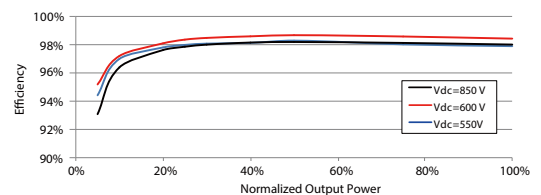
EASY AND USER FRIENDLY

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

CIRCUIT DIAGRAM



EFFICIENCY CURVE



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

