SG15/17/20RT

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

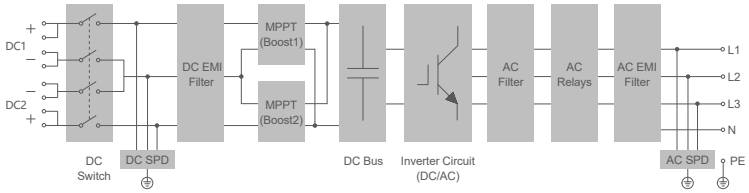
SAFE AND DURABLE

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

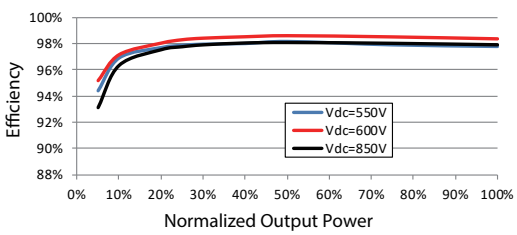
EASY AND USER FRIENDLY

- 21kg compact design
- Unique push-in connectors
- Fast and easy commissioning via App

CIRCUIT DIAGRAM



EFFICIENCY CURVE



SUNGROW
Clean power for all

Type designation	SG15RT	SG17RT	SG20RT
Input (DC)			
Recommended max. PV input power	22.5 kWp	25.5 kWp	30 kWp
Max. PV input voltage		1100 V *	
Min. PV input voltage / Start-up input voltage		180V / 180V	
Rated input voltage		600 V	
MPP voltage range		160V-1000V	
No. of independent MPP inputs		2	
No. of PV strings per MPPT		2 / 2	
Max. PV input current		50 A (25 A / 25 A)	
Max. DC short-circuit current		64 A (32 A / 32 A)	
Max. current for DC connector		30 A	
Output (AC)			
Rated AC output power	15000 W	17000 W	20000 W
Max. AC output apparent power	16500 VA**	18700 VA**	22000 VA**
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Max. AC output current	25 A	28.3 A	31.9 A
Rated AC output current(at 230V)	21.7 A	24.6 A	29 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		180V – 276V / 311V - 478V	
Rated grid frequency		50 Hz / 60 Hz	
Grid frequency range		45 – 55 Hz / 55 – 65 Hz	
Harmonic (THD)		<3 % (at rated power)	
Power factor at Rated power / Adjustable power factor		>0.99/0.8 leading – 0.8 lagging	
Feed-in phases / Connection phases		3 / 3	
Efficiency			
Max. efficiency		98.5%	
European efficiency		98.1%	
Protection&Function			
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	
Ground fault monitoring		Yes	
DC switch		Yes	
PV String current monitoring		Yes	
Arc fault circuit interrupter (AFCI)		Yes	
PID recovery function		Yes	
General Data			
Dimensions (W*H*D)		370*480*195 mm	
Weight		21 kg	
Mounting method		Wall-mounting bracket	
Topology		Transformerless	
Degree of protection		IP65	
Night power consumption		< 6 W	
Corrosion		C5	
Operating ambient temperature range		-25 ℃ to 60 ℃	
Allowable relative humidity range (non-condensing)		0% – 100%	
Cooling method		Smart forced air cooling	
Max. operating altitude		4000 m	
Display		LED	
Communication		WLAN / Ethernet / RS485 / DI / DO	
DC connection type		MC4 (Max. 6 mm²)	
AC connection type		Plug and play	
Grid 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, UNE 206006/7 IN, MEA/PEA, G98, UNE 217002:2020, NTS V2 TypeA	
Grid Support		LVRT, HVRT,active & reactive power control and power ramp rate control	

*: The inverter enters the standby state when the input voltage ranges between1,000V 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: SG15RT is 15000VA,SG17RT is 17000VA, SG20RT is 20000VA.

columbus Official representative in Ukraine +380 93 714 59 95 • info@columbusenergy.com.ua • columbusenergy.com.ua