

SG15/17/20RT-P2

Multi-MPPT String Inverter for 1000 Vdc System

NEW



HIGH YIELD

- Lower startup & wider MPPT voltage
- Compatible with 500W+ PV modules
- Built-in PID recovery function



SMART MANAGEMENT

- 24/7 Live Monitoring
- Remote firmware updates
- PV module-level optimisation and safety



SAFE AND DURABLE

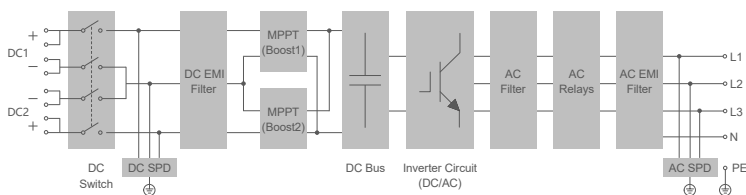
- Quick arc fault circuit interrupter
- Build-in Type II DC&AC SPD
- C5 anti-corrosion & IP65



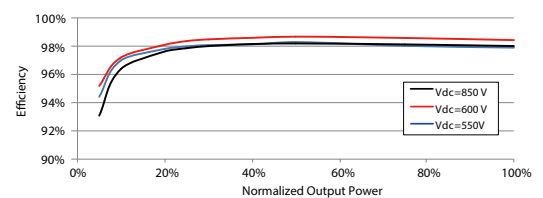
EASY AND USER FRIENDLY

- Light and compact design
- Plug and play connectors
- Fast and easy commissioning via App

CIRCUIT DIAGRAM



EFFICIENCY CURVE



Type designation	SG15RT-P2	SG17RT-P2	SG20RT-P2
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		160 V – 1000 V	
No. of independent MPP inputs		2	
No. of PV strings per MPPT		2 / 2	
Max. PV input current		64 A (32 A / 32 A)	
Max. DC short-circuit current		80 A (40 A / 40 A)	
Output (AC)			
Rated AC power (@230V, 50 Hz)	15000 W	17000 W	20000 W
Max. AC output power	16500 VA **	18700 VA **	22000 VA **
Rated AC output apparent power	16500 VA **	18700 VA **	22000 VA **
Max. AC output current	25 A	28.3 A	31.9 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		175 V – 276 V / 304 V – 478 V	
Rated grid frequency / Grid frequency range		50 Hz / 45 – 55 Hz, 60 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-PE	
Efficiency			
Max. efficiency		98.30 %	
European efficiency		97.90 %	
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	
DC switch		Yes	
Arc fault circuit interrupter (AFCI)		Yes	
PID recovery function		Yes	
Optimizer compatibility ***		Optional	
General Data			
Dimensions (W*H*D)		370 * 480 * 195 mm	
Mounting method		Wall-mounting bracket	
Weight		22 kg	
Topology		Transformerless	
Degree of protection		IP65	
Operating ambient temperature range		-25 °C to 60 °C	
Allowable relative humidity range (noncondensing)		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 mm ²)	
AC connection type		Plug and play	
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, NTS 2.0, UNE 206006/7 IN, UNE 217002, MEA/PEA, G98	
Country of manufacture		China	

* The inverter enters the standby state when the input voltage ranges between 1,000V 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 Belgium & Germany, Max. AC output power: SG5.0RT-P2 is 5000VA, SG6.0RT-P2 is 6000VA, SG7.0RT-P2 is 7000VA, SG8.0RT-P2 is 8000VA, SG10RT-P2 is 10000VA, SG12RT-P2 is 12000VA, SG15RT-P2 is 15000VA, SG17RT-P2 is 17000VA, SG20RT-P2 is 20000VA
** For Jordan, Max. AC output current: SG10RT-P2 is 16A
*** For optimizer compatibility, please consult Sungrow before placing an order