

# SG15/17/20RT-P2

Multi-MPPT String Inverter for 1000 Vdc System

Preliminary



## 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

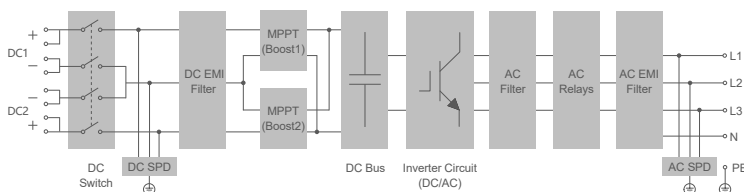
## SAFE AND DURABLE

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

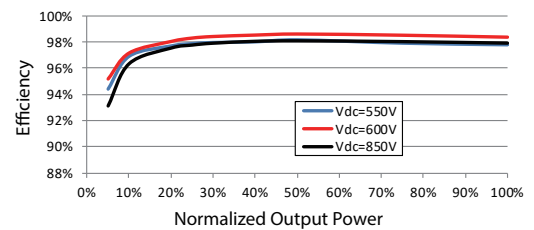
## EASY AND USER FRIENDLY

- 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
<b>Input (DC)</b>			
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)		
<b>Output (AC)</b>			
Rated AC power (@230V,50Hz)	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		
<b>Efficiency</b>			
Max. efficiency	98.30%		
European efficiency	97.90%		
<b>Protection&amp;Function</b>			
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		
<b>General Data</b>			
Dimensions (W*H*D)	370 mm * 480 mm * 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 (non-condensing)	0% to 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 <sup>2</sup> )		
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