

# SG15/20RT

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

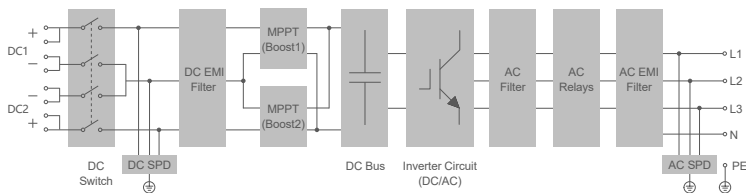
## SAFE AND DURABLE

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

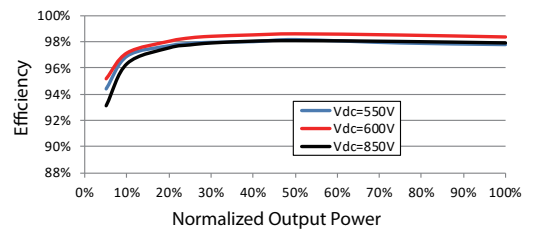
## EASY AND USER FRIENDLY

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

## CIRCUIT DIAGRAM



## EFFICIENCY CURVE



Type designation	SG15RT	SG20RT
<b>Input (DC)</b>		
Recommended max. PV input power	22.5 kWp	30 kWp
Max. PV input voltage *	1100 V	
Min. PV input voltage / Start-up input voltage	180 V / 180 V	
Rated PV input voltage	600 V	
MPPT operating voltage range **	160 V – 1000 V	
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	72 A ( 36 A / 36 A )	
Max. current for input connector	30 A	
<b>Output (AC)</b>		
Rated AC output power	15000 W	20000 W
Max. AC output apparent power	15000 VA	20000 VA
Rated AC output apparent power	15000 VA	20000 VA
Max. AC output current	22.7 A	30.3 A
Rated AC output current(at 230V)	21.7 A	29 A
Rated AC voltage	3 / N / PE, 230 V / 400 V	
AC voltage range	180 V – 276 V / 311 V – 478 V	
Rated grid frequency	50 Hz / 60 Hz	
Grid frequency range	45 Hz – 55 Hz / 55 Hz – 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-N-PE	
<b>Efficiency</b>		
Max. efficiency / European efficiency	98.5 % / 98.1 %	
<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	
Ground fault monitoring	Yes	
DC switch	Yes	
PV string current monitoring	Yes	
Arc fault circuit interrupter (AFCI)	Yes	
PID recovery function	Yes	
DC terminal protective cover	Yes	
<b>General data</b>		
Dimensions (W*H*D)	370 mm * 480 mm * 195 mm	
Weight	21 kg	
Mounting method	Wall-mounting bracket	
Topology	Transformerless	
Degree of protection	IP65	
Corrosion	C5	
Operating ambient temperature range	-25 °C - 60 °C	
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 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 , EN 50530, AS/NZS 4777.2:2020, VDE-AR-N-4105, DIN VDE0126-1-1/A1, EN 50549-1, 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	

\* Input voltage exceeding the MPPT operating voltage range triggers inverter protection

\*\* Please refer to the user manual for the full load MPPT voltage range