

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

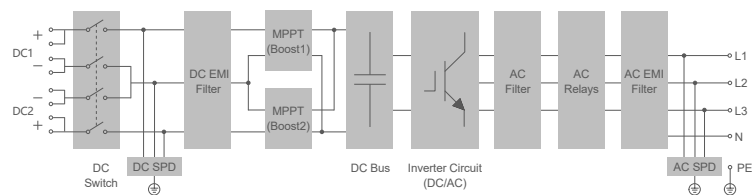
SAFE AND DURABLE

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

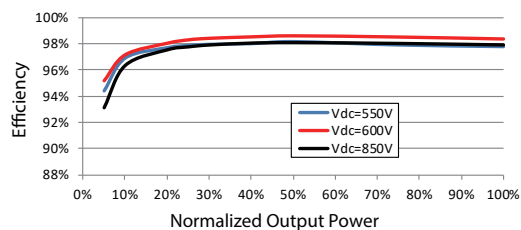
EASY AND USER FRIENDLY

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

CIRCUIT DIAGRAM



EFFICIENCY CURVE



Type designation	SG15RT	SG20RT
Input (DC)		
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	64 A (32 A / 32 A)	
Max. DC short-circuit current	90 A (45 A / 45 A)	
Max. current for input connector	30 A	
Output (AC)		
Rated AC output power	15000 W	20000 W
Max. AC output apparent power	15000 VA	20000 VA
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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	
Efficiency		
Max. efficiency / European efficiency	98.5 % / 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	
DC terminal protective cover	Yes	
General data		
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 mm²)	
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 RfC, 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