

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
- Built-in Type II DC & AC SPD
- High anti-corrosion rating C5

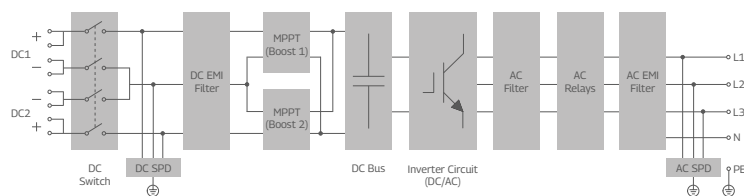


Easy and User Friendly

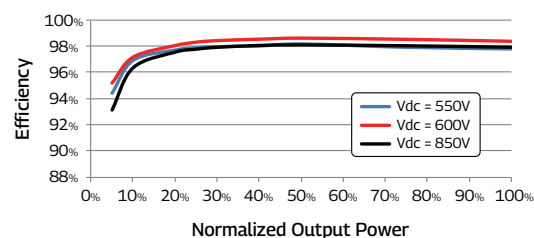
- 21 kg compact design
- Unique push-in connectors
- Fast and easy commissioning via App



CIRCUIT DIAGRAM



EFFICIENCY CURVE



Type Designation	SG15RT		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	180 V / 180 V					
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	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**	
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 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					

Type Designation	SG15RT	SG17RT	SG20RT
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°C to 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		
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 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 Germany, max. AC output power: SG15RT is 15000VA, SG17RT is 17000VA, SG20RT is 20000VA.