

SG3.0RT/SG4.0RT

Multi-MPPT String Inverter for 1000 Vdc System



HIGH YIELD

- Lower startup & wider MPPT voltage
- Compatible with bifacial modules
- Built-in PID recovery function



SAFE AND DURABLE

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



SMART MANAGEMENT

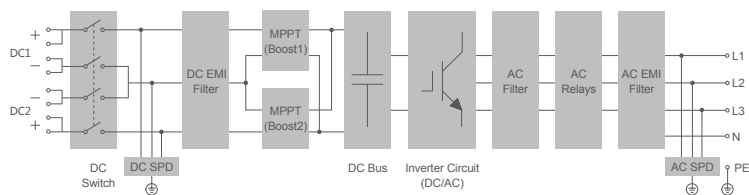
- Smart IV curve scanning
- 24/7 live monitoring
- Remote firmware updates



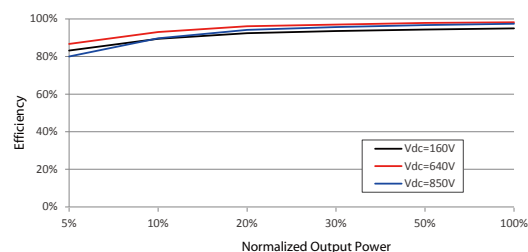
EASY AND USER FRIENDLY

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

CIRCUIT DIAGRAM



EFFICIENCY CURVE (SG4.0RT)



Type designation	SG3.0RT		SG4.0RT
Input (DC)			
Recommended max. PV input power	4.5 kWp		6.0 kWp
Max. PV input voltage	1100 V *		
Min. PV input voltage / Start-up input voltage	180 V / 180 V		
Nominal input voltage	600 V		
MPP voltage range	160 V – 1000 V		
MPP voltage range for nominal power	160 V – 850 V		
No. of independent MPP inputs	2		
No. of PV strings per MPPT	1 / 1		
Max. PV input current	25 A (12.5 A / 12.5 A)		
Max. current for input connector	30 A		
Max. DC short-circuit current	32 A (16 A / 16 A)		
Output (AC)			
Nominal AC power (@230V, 50Hz)	3000 W		4000 W
Max. AC output power	3300 VA		4400 VA
Max. AC output current	5.1 A		6.8 A
Nominal AC voltage	3 / N / PE, 220 / 380 V 3 / N / PE, 230 / 400 V 3 / N / PE, 240 / 415 V		
AC voltage range	180 V – 276 V / 311 V – 478 V		
Nominal grid frequency / Grid frequency range	50 Hz / 45 – 55 Hz 60 Hz / 55 – 65 Hz		
Harmonic (THD)	<5 % (at nominal power)		
Power factor at nominal power / Adjustable power factor	>0.99 / 0.8 leading – 0.8 lagging		
Feed-in phases / AC connection	3 / 3		
Efficiency			
Max. efficiency		98.2 %	
European efficiency	96.5 %		97.0 %
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	
General Data			
Dimensions (W*H*D)	370*480*195 mm		
Mounting method	Wall-mounting bracket		
Weight	18 kg		
Topology	Transformerless		
Degree of protection	IP65		
Operating ambient temperature range	-25 °C to 60 °C		
Allowable relative humidity range (non-condensing)	0% – 100%		
Cooling method	Natural cooling		
Max. operating altitude	4000m (> 2000 m derating)		
Noise (Typical)	35 dB (A)		
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 / EN62109-1/2, IEC 61727, IEC 62116, IEC 61683, EN50530, EN50549-1		

*: The inverter enters the standby state when the input voltage range is between 1,000V to 1,100V. If the maximum DC voltage in the system can exceed 1000 V, the MC4 connectors included in the scope of delivery must not be used. In this case MC4 Evo2 connectors must be used.