

SG3.0/4.0RT

Multi-MPPT String Inverter for 1000 Vdc System



HIGH YIELD

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



SMART MANAGEMENT

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



SAFE AND DURABLE

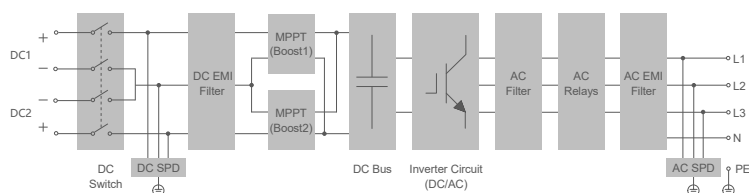
- Quick arc fault circuit interrupter
- Build-in Type II DC & AC SPD
- High anti-corrosion rating C5



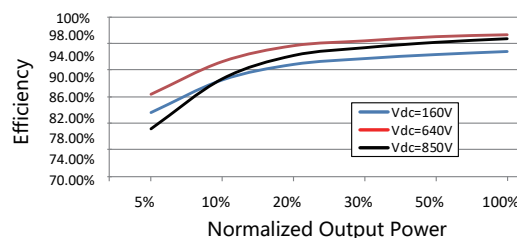
EASY AND USER FRIENDLY

- 18kg 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	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	1/1	
Max. PV input current	25A (12.5A/12.5A)	
Max. DC short-circuit current	32A (16A/16A)	
Max. current for DC connector	30 A	
Output (AC)		
Rated AC output power	3000W	4000W
Max. AC output apparent power	3300VA	4400VA
Max. AC output current	5.1A	6.8A
Rated AC output current(at 230V)	4.3 A	5.8 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)	<5 % (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	
Efficiency		
Max. efficiency / European efficiency	98.2% / 96.5%	98.2% / 97%
Protection&Function		
Grid monitoring	Yes	
DC reverse polarity 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	
General Data		
Dimensions (W*H*D)	370*480*195 mm	
Weight	18 kg	
Mounting method	Wall-mounting bracket	
Topology	Transformerless	
Degree of protection	IP65	
Night power consumption	<6W	
Operating ambient temperature range	-25 °C to 60 °C	
Allowable relative humidity range (non-condensing)	0% – 100%	
Cooling method	Natural 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 / EN62109-1/2, IEC 61727, IEC 62116, IEC 61683, EN50530, EN50549-1	
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.