

SG5.0/6.0/8.0/10/12RT

Multi-MPPT String Inverter for 1000 Vdc System

NEW



HIGH YIELD

- Lower startup & wider MPPT voltage
- Compatible with bifacial modules

SMART MANAGEMENT

- Optional Smart IV curve scanning
- Remote firmware updates

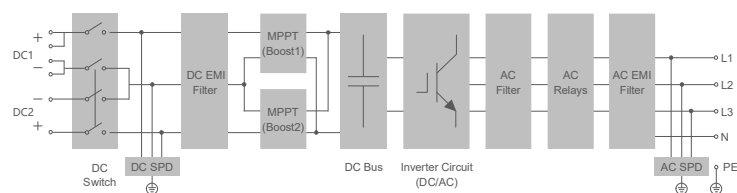
SAFE AND DURABLE

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

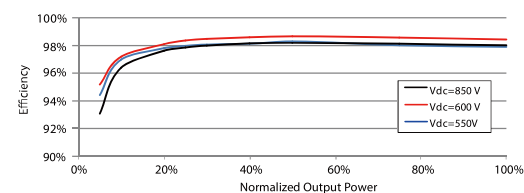
EASY AND USER FRIENDLY

- 18kg compact design
- Fast and easy commissioning via App

CIRCUIT DIAGRAM



EFFICIENCY CURVE



Type designation	SG5.0RT	SG6.0RT	SG8.0RT	SG10RT	SG12RT
Input (DC)					
Recommended max. PV input power	7.5 kW	9.0 kW	12 kW	15 kW	18 kW
Max. PV input voltage	1100 V *				
Min. PV input voltage / Start-up input voltage	180V / 180V				
Nominal 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	1 / 1	2 / 1	2 / 1	2 / 1
Max. PV input current	25 A (12.5 A / 12.5 A)		37.5 A (25 A / 12.5 A)		
Max. DC short-circuit current	32 A (16 A / 16 A)		48 A (32 A / 16 A)		
Output (AC)					
Nominal AC power (@230 V, 50 Hz)	5000 W	6000 W	8000 W	10000 W	12000 W
Max. AC output power	5500 VA	6600 VA	8800 VA	11000 VA	13200 VA
Max. AC output current	8.3 A	10 A	13.3 A	16.7 A	20 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				
Nominal grid frequency / Grid frequency range	50 Hz / 45 – 55 Hz 60 Hz / 55 – 65 Hz				
Harmonic (THD)	<3 % (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	98.40%	98.40%	98.50%	98.50%	98.50%
European efficiency	97.40%	97.40%	97.80%	97.90%	97.90%
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				
General Data					
Dimensions (W*H*D)	370*480*195 mm				
Mounting method	Wall-mounting bracket				
Weight	18 kg				
Topology	Transformerless				
Degree of protection	IP65				
Night power consumption	< 1 W				
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 (> 2000 m derating)				
Noise(Typical)	35 dB (A)				
Display	LED				
Communication	WLAN, Ethernet, RS485, DI, DO				
DC connection type	MC4				
AC connection type	Plug and play				
Compliance	EN 61000-6-1/-3, EN 61000-3-11/-12, IEC62109-2, IEC 61727, IEC 62116, IEC 61683, IEC 60068, EN 50530				

*: 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.