

SG5.0/7.0/8.0/10/15/20RT

Multi-MPPT String Inverter for 1000 Vdc System

AU



HIGH YIELD

- Lower startup & wider MPPT voltage
- Compatible with 500W+ PV modules
- Built-in PID recovery function



SMART MANAGEMENT

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



SAFE AND DURABLE

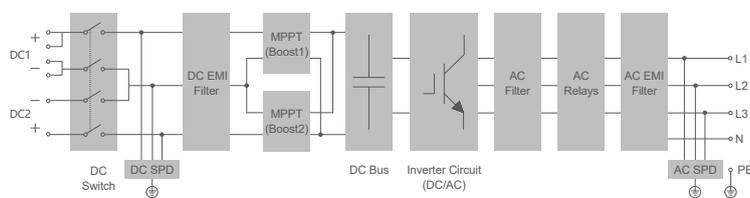
- Quick arc fault circuit interrupter
- Build-in Type II DC&AC SPD
- C5 anti-corrosion & IP65



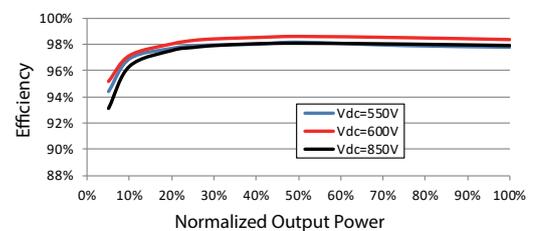
EASY AND USER FRIENDLY

- Light and compact design
- Plug and play connectors
- Fast and easy commissioning via App

CIRCUIT DIAGRAM (SG10RT)



EFFICIENCY CURVE



Type designation	SG5.0RT	SG7.0RT	SG8.0RT	SG10RT	SG15RT	SG20RT
Input (DC)						
Recommended max. PV input power	7.5 kWp	10.5 kWp	12 kWp	15 kWp	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					
MPP voltage range	160 V – 1000 V					
No. of independent MPP inputs	2					
No. of PV strings per MPPT	1 / 1	2 / 1			2 / 2	
Max. PV input current	32 A (16 A / 16 A)	48 A (32 A / 16 A)			64 A (32 A / 32 A)	
Max. DC short-circuit current	40 A (20 A / 20 A)	60 A (40 A / 20 A)			80 A (40 A / 40 A)	
Output (AC)						
Rated AC output power (@230V, 50Hz)	5000 W	6999 W	8000 W	9999 W	15000 W	20000 W
Max. AC output apparent power	5000 VA	6999 VA	8000 VA	9999 VA	15000 VA	20000 VA
Rated AC output apparent power	5000 VA	6999 VA	8000 VA	9999 VA	15000 VA	20000 VA
Max. AC output current	7.6 A	10.6 A	12.2 A	15.2 A	22.7 A	30.3 A
Rated AC output current (at 230 V)	7.2A	10.1 A	11.6 A	14.5 A	21.7 A	29 A
Rated AC voltage	3 / N / PE, 230 / 400 V					
AC voltage range	180 V – 276 V / 311 V - 478 V					
Rated grid frequency / Grid frequency range	50 Hz / 45 – 55 Hz 60 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 / AC connection	3 / 3 - N - PE					
Efficiency						
Max. efficiency	98.40 %	98.40 %	98.50 %	98.50 %	98.50 %	98.50 %
European efficiency	97.40 %	97.70 %	97.80 %	97.90 %	98.10 %	98.10 %
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 mm * 480 mm * 195 mm					
Weight	18 kg			22 kg		
Mounting method	Wall-mounting bracket					
Topology	Transformerless					
Degree of protection	IP65					
Corrosion	C5					
Operating ambient temperature range	-25 °C to 60 °C					
Allowable relative humidity range (non-condensing)	0% to 100%					
Cooling method	Natural cooling			Smart forced air cooling		
Max. operating altitude	4000 m					
Display	LED					
Communication	WLAN / Ethernet / RS485 / DI / DO					
DC connection type	MC4 (Max. 6 mm ²)					
AC connection type	Plug and play					
Grid compliance	IEC 62109-1/2, AS/NZS 4777.2: 2020					
Country of manufacture	China					

* 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.