

SG3.0RT/SG4.0RT

Multi-MPPT string inverters for 1000 V DC system



HIGH

- Lower starting voltage and wider MPPT voltage range
- Compatible with double-sided modules
- Built-in PID recovery function



SAFETY AND DURABILITY

- High-speed circuit breaker in the event of an arc discharge
- Built-in Type II DC/AC SPD
- High-grade corrosion protection - C5



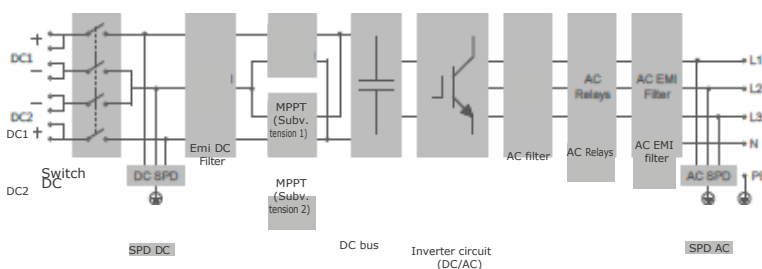
INTELLIGENT

- Intelligent I-V curve scanning
- Real-time monitoring 24 hours a day, 7 days a week
- Remote software update

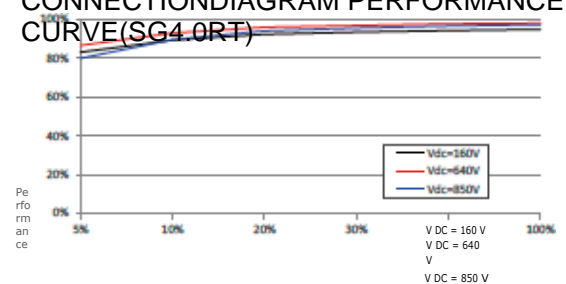


MANAGEMENT EASY AND USER FRIENDLY

- Compact design, low weight - only 18 kg
- Unique plug-in connectors
- Quick and easy startup using the app



CONNECTION DIAGRAM PERFORMANCE 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 / Input voltage at startup	180 V / 180 V	
Nominal input voltage	600 V	
MPP voltage range	160 V - 1000 V	
MPP voltage range for rated power	160 V - 850 V	
Number of independent MPP inputs	2	
Number of PV chains per MPPT	1/1	
Max. PV input current	25 A (12.5 A / 12.5 A)	
Max. input connector amperage	30 A	
Max. DC short-circuit current	32 A (16 A / 16 A)	
Output (AC)		
Rated AC power (at 230 V, 50 Hz)	3000 W	4000 W
Max. AC output power	3300 VA	4400 VA
Max. AC output current	5,1 A	6,8 A
Rated voltage AC	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	
Rated supply frequency / Supply frequency range	50 Hz / 45 - 55 Hz 60 Hz / 55 - 65 Hz	
Harmonic content (THD)	< 5% (at rated power)	
Power factor at rated power / Adjustable power factor	> 0,99 / 0,8 ahead - 0,8 behind	
Supply phases / AC connection	3/3	
Performance		
Max capacity	98,2%	
Performance according to European standards	96,5%	97,0%
Security		
Network monitoring	Yes	
Protection against reverse DC connection	Yes	
AC short circuit protection	Yes	
Leakage current protection	Yes	
Overvoltage protection	DC Type II / AC Type II	
DC switch	Yes	
Arc Flash Circuit Interrupter (AFCI)	Yes	
PID restore function	Yes	
General data		
Dimensions (W x H x D)	370 x 480 x 195 mm	
Installation method	Wall mounting bracket	
Mass	18 kg	
Topology	Transformerless	
Degree of protection	IP65	
Ambient operating temperature range	- 25°C - 60°C	
Allowable relative humidity range (non-condensing)	0% - 100%	
Cooling method	Natural cooling	
Max. working height	4000 m (lower performance > 2000 m)	
Noise (typical)	35 dB (A)	
Display	LED	
Communication	WLAN / Ethernet / RS485 / DI / DO	
DC connection type	MC4 (Max. 6 mm ²)	
Type of AC connection	Plug and play	
Compliance with standards	IEC / EN 61000-6-1/2/3/4, IEC / EN62109-1/2, IEC 61727, IEC 62116, EN 61683, EN50530, EN50549-1	

*: The inverter enters standby mode when the input voltage range is 1000 V to 1100 V. If the maximum system DC voltage can exceed 1000 V, the MC4 connectors provided in the scope of delivery cannot be used. In this case, use MC4 Evo2 connectors.