# SG5.0RT/SG6.0RT/SG7.0RT/ SG8.0RT/SG10RT/SG12RT



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

# **SMART MANAGEMENT**

- · Smart IV curve scanning
- 24/7 Live monitoring
- Over-the-air firmware updates

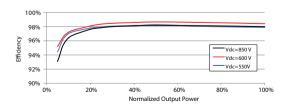
#### **EASY AND USER FRIENDLY**

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

## CIRCUIT DIAGRAM

# DC DC SMIch B DC Bus Inverter Circuit (DC/AC) DC Bus Inverter Circuit (DC/AC)

#### **EFFICIENCY CURVE**





Type designation	SG5.0RT	SG6.0RT	SG7.0RT	SG8.0RT	SG10RT	SG12RT
Input (DC)						
Recommended max. PV input power	7.5 kW	9.0 kW	10.5 kW	12 kW	15 kW	18 kW
Max. PV input voltage			1100 V			
Min. PV input voltage / Start-up input voltage	180 V					
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	2/1
Max. PV input current	25 A (12.5 A / 12.5 A)		37.5 A (25 A / 12.5 A)			
Max. current for input connector	, , ,	, ,	30 A	, ,		
Max. DC short-circuit current	32 A (16 A / 16 A)	32 A (16 A / 16 A)	48 A (32 A / 16 A)	48 A (32 A / 16 A)	48 A (32 A / 16 A)	48 A (32 A / 16 A
Output (AC)	0271(1071)1071	0271(1071) 1071)	1071(0271,1071)	1071(0271)1071)	1071(0271,1071)	1071(0271)
Nominal AC power (@230 V, 50 Hz)	5000 W	6000 W	7000 W**	8000 W	10000 W	12000 W
Max. AC output power						
Max. AC output power  Max. AC output current	5500 VA*	6600 VA*	7700 VA**	8800 VA*	11000 VA*	13200 VA*
Max. AC output current	8.3 A	10 A	11.7 A	13.3 A	16.7 A	20 A
Nominal AC voltage	3 / N / PE, 220 / 380 V					
	3 / N / PE, 230 / 400 V					
10 li	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 /	>0.99 / 0.8 leading – 0.8 lagging					
Adjustable power factor						
Feed-in phases / AC connection			3/3			
Efficiency						
Max. efficiency	98.40%	98.40%	98.40%	98.50%	98.50%	98.50%
European efficiency	97.40%	97.40%	97.70%	97.80%	97.90%	97.90%
Protection						
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					
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Topology  Degree of protection	Transformerless					
Degree of protection	IP65					
Operating ambient temperature range	-25 °C to 60 °C					
Allowable relative humidity range	0% – 100%					
Cooling method	Natural cooling					
Max. operating altitude	4000 m (> 2000 m derating)					
Noise(Typical)	35dB(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, IEC62109-2, IEC 61727, IEC 62116, AS/NZS 4777.2:2015,					
	VDE-AR-N-4105, DIN VDE0126-1-1, CEI 0-21, EN50549-1					

 $<sup>^*</sup>$ : For Australia & Belgium & Germany, max. AC output power: SG5.0RT is 5000VA, SG6.0RT is 6000VA, SG8.0RT is 8000VA, SG10RT is 10000VA, SG12RT is 12000VA.

<sup>\*\*:</sup> For Australia ,6999W,6999 VA











