

SG15/20RT-P2

Multi-MPPT String Inverter for 1000 Vdc System



HIGH YIELD

- Lower startup & wider MPPT voltage
- Compatible with 500W+ PV modules



EASY AND USER FRIENDLY

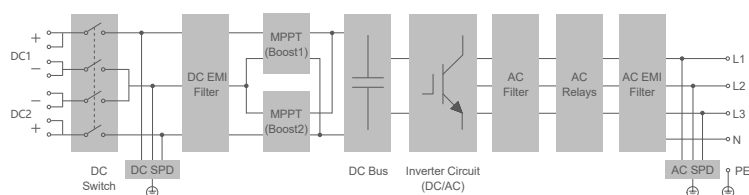
- 18kg compact design
- Plug and play connectors
- Fast and easy commissioning via iSolarCloud App



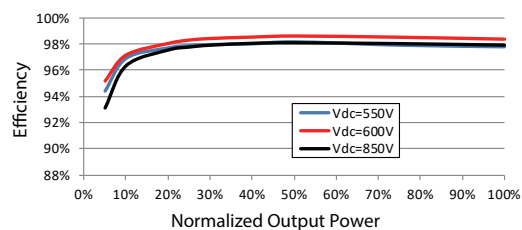
SAFE AND RELIABLE

- Build-in Type II DC & AC SPD
- C5 anti-corrosion & IP65
- Remote firmware updates

CIRCUIT DIAGRAM



EFFICIENCY CURVE



Type designation	SG15RT-P2		SG20RT-P2	
Input (DC)				
Recommended max. PV input power	22.5 kWp		30 kWp	
Max. PV input voltage*	1100 V **			
Min. PV input voltage / Start-up input voltage	160V / 180V			
Rated input voltage	600 V			
MPPT operating voltage range***	160 V – 1000 V			
No. of independent MPP trackers	2			
No. of PV strings per MPPT	2 / 2			
Max. PV input current	64 A (32 A / 32 A)			
Max. DC short-circuit current	80 A (40A / 40A)			
Output (AC)				
Rated AC power	15000 W		20000 W	
Max. AC output apparent power	16500 VA		22000 VA	
Rated AC output apparent power	16500 VA		22000 VA	
Max. AC output current	25 A		31.9 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	175 V – 276 V / 304 V – 478 V			
Rated grid frequency / Grid frequency range	50 Hz / 45 Hz – 55 Hz 60 Hz / 55 Hz – 65 Hz			
Harmonic (THD)	< 3 % (at rated power)			
Power factor at rated power / Ajustable power factor	> 0.99 / 0.8 leading – 0.8 lagging			
Feed-in phases / AC connection	3 / 3-PE			
Efficiency				
Max. efficiency	98.3 %			
European efficiency	97.9 %			
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			
DC switch	Yes			
General Data				
Dimensions (W*H*D)	370 mm * 480 mm * 195 mm			
Weight	22 kg			
Mounting method	Wall-mounting bracket			
Topology	Transformerless			
Degree of protection	IP 65			
Night power consumption	< 1 W			
Operating ambient temperature range	-25 °C – 60 °C			
Allowable relative humidity range (non-condensing)	0% – 100%			
Cooling method	Smart forced air cooling			
Max. operating altitude	4000 m			
Display	LED			
Communication	WLAN / Ethernet / RS485 / DI / DO			
DC connection type	MC4 Compatible Connector (Max. 6 mm²)			
AC connection type	Plug and play			
Grid compliance	PORTARIA N° 140, DE 21 DE MARÇO DE 2022, EC/EN 62109-1/-2, IEC/EN 61000-6-1/-2/-3/-4 EMC, IEC 61727, IEC 62116, IEC 61683, EN 50530, IEC 60068-1/-2/-14/-27/-30/-64, IEC 61000-3-2:2006 IEC/ EN - 61000-3-12, IEC 60529 IP			

* Input voltage exceeding the MPPT operating voltage range triggers inverter protection

** 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

*** Please refer to the user manual for the full load MPPT voltage range