

# SG8.0/9.0/10RS

Suitable for 50Hz / 60Hz grid, could be used in Asia, Africa, South America, Australia and Europe. Available for hand installation, no need for lifting machinery assistance



## ☀️ HIGH YIELD

- Compatible with high power PV modules and bifacial modules
- Lower startup & wider MPPT voltage range
- Built-in smart PID Zero function

## 🛡️ SAFE AND RELIABLE

- Integrated arc fault circuit interrupter
- Built-in Type II DC&AC SPD
- Corrosion protection rating at C5

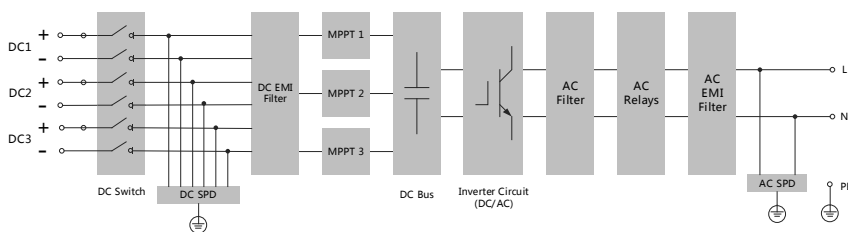
## 💡 USER FRIENDLY SETUP

- Plug and play installation
- One-click access to iSolarCloud monitoring platform
- Light and compact with optimized heat dissipation design

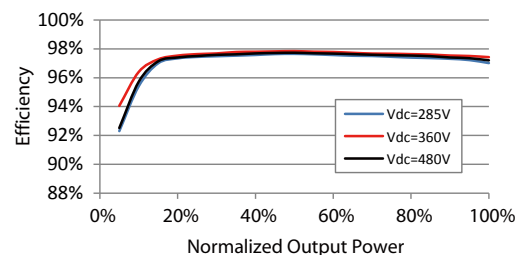
## ⚙️ SMART MANAGEMENT

- Real time data ( 10 seconds refresh sample )
- 24/7 live online monitoring and with integrated display
- Online IV curve scan and diagnosis

## CIRCUIT DIAGRAM



## EFFICIENCY CURVE (SG10RS)



Type designation	SG8.0RS	SG9.0RS	SG10RS
<b>Input ( DC )</b>			
Recommended max. PV input power	12 kWp	13.5 kWp	15 kWp
Max. PV input voltage		600 V	
Min. operating PV voltage / Start-up input voltage		40 V / 50 V	
Rated PV input voltage		360 V	
MPP voltage range		40 V – 560 V	
No. of independent MPP inputs		3	
Default No. of PV strings per MPPT		1	
Max. PV input current		48 A ( 16 A / 16 A / 16 A )	
Max. DC short-circuit current		60 A ( 20 A / 20 A / 20 A )	
<b>Output ( AC )</b>			
Rated AC output power	8000 W	9000 W	10000 W
Max. AC Output power	8000 VA	9000 VA	10000 VA
Rated AC output current ( at 230 V )	34.8 A	39.2 A	43.5 A
Max. AC output current	36.4 A	41 A	45.5 A
Rated AC voltage		220 V / 230 V / 240 V	
AC voltage range		154 V - 276 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 / Connection phases		1 / 1	
<b>Efficiency</b>			
Max. efficiency / European efficiency	97.8 % / 97.3 %	97.8 % / 97.4 %	97.8 % / 97.4 %
<b>Protection</b>			
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	
PV string current monitoring		Yes	
Arc fault circuit interrupter ( AFCI )		Yes	
PID Zero function		Yes	
<b>General Data</b>			
Dimensions ( W * H * D )		490 mm * 340 mm * 170 mm	
Weight		19 kg	
Mounting method		Wall-mounting bracket	
Topology		Transformerless	
Degree of protection		IP65	
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	
Display		LED digital display & LED indicator	
Communication		Ethernet / WLAN / RS485 / DI ( Ripple control & DRM )	
DC connection type		MC4 ( Max. 6 mm <sup>2</sup> )	
AC connection type		Plug and play connector ( Max. 16 mm <sup>2</sup> )	
Grid compliance		IEC / EN62109-1/2, IEC / EN62116, IEC / EN61727, IEC / EN61000-6-2/3, AS/NZS 4777.2, ABNT NBR 16149, ABNT NBR 16150, G99	
Grid Support		Active & reactive power control and power ramp rate control	

