

SG125CX-P2

Multi-MPPT String Inverter for 1000 Vdc System



HIGH YIELD

- 12 MPPTs with max. efficiency 98.5%
- DC 15A current input, compatible with over 500W+ PV module
- Dynamic shading optimization mode

SMART O&M

- Key component diagnosis and protection
- Smart IV Curve Diagnosis
- Grid fault record function, easy for remote O&M

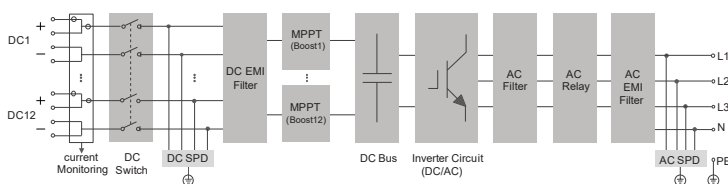
LOWER INVESTMENT

- Compatible max. 240mm² Al AC cables
- Drawer-style cable sealing plate support AC cable pre-assembly

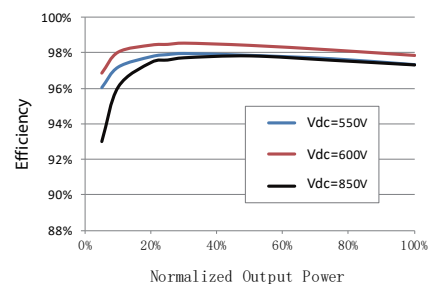
PROVEN SAFETY

- IP66 protection and C5 Anti-corrosion
- DC Type I+II SPD, AC Type II SPD
- Support AFCI 2.0 function

CIRCUIT DIAGRAM



EFFICIENCY CURVE



Type designation	SG125CX-P2
Input (DC)	
Recommended max. PV input power	175 kW
Max. PV input voltage*	1100 V
Min. PV input voltage / Startup input voltage	180 V / 200 V
Rated PV input voltage	600 V
MPPT voltage range**	180 V – 1000 V
No. of independent MPP inputs	12
No. of PV strings per MPPT	2
Max. PV input current	360 A (30 A *12)
Max. DC short-circuit current	480 A (40 A *12)
Max. current for DC connector	30 A
Output (AC)	
Rated AC output power	125 kW
Max. AC output apparent power	125 kVA
Max. AC output current	181.1 A
Rated AC output current(at 230V)	181.1 A
Rated AC voltage	3 / N / PE, 220 V / 380 V; 230 V / 400 V
AC voltage range	320 V – 480 V
Rated grid frequency	50 Hz / 60 Hz
Grid frequency range	45 Hz – 55 Hz / 55 Hz – 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 / European efficiency	98.5% / 98.3%
Protection & function	
Grid monitoring	Yes
DC reverse polarity protection	Yes
AC short-circuit protection	Yes
Leakage current protection	Yes
Surge protection	DC Type I + II / AC Type II
Ground fault monitoring	Yes
DC switch	Yes
PV string current monitoring	Yes
Arc fault circuit interrupter (AFCI)	Yes
PID recovery function	Yes
Optimizer compatibility ***	Optional
General data	
Dimensions (W * H * D)	1020 mm * 795 mm * 360 mm
Weight	87 kg
Mounting method	Wall-mounting bracket
Topology	Transformerless
Degree of protection	IP66
Night power consumption	< 5 W
Corrosion	C5
Operating ambient temperature range	-30 °C to 60 °C
Allowable relative humidity range (non-condensing)	0 % - 100 %
Cooling method	Smart forced air cooling
Max. operating altitude	4000 m
Display	LED, Bluetooth+APP
Communication	RS485 / WLAN (optional) / Ethernet (optional)
DC connection type	Evo2 (Max. 6 mm ²)
AC connection type	OT / DT terminal (Max. 240 mm ²)
AC cable specification	Outside diameter 30 mm - 60 mm
Grid compliance	IEC 62109-1, EN/IEC 61000-6-1/2/3/4, IEC 61727, IEC 62116, EN 50549-1/2, UTE C15-712-1, VDE V 0126-1-1, VDE-AR-N 4105:2018, VFR 2019, NC RfG, G99, UNE 217002, NTS, CEI 0-21 2019, CEI0-16 2019, NRS-097-2-1, IEC 63027
Grid support	Q at night function, LVRT, HVRT, active & reactive power control and power ramp rate control

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

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

*** For optimizer compatibility, please consult Sungrow before placing an order

SG3K-D/SG5K-D

String Inverter



High Yield

- Higher yield with Max. efficiency 98.4 %, European efficiency 98.0 %
- Flexible PV string configurations, DC/AC ratio up to 1.3



Smart Management

- Easy local and online monitoring via App or Web
- Export power control with Sungrow energy meter



Safe and Durable

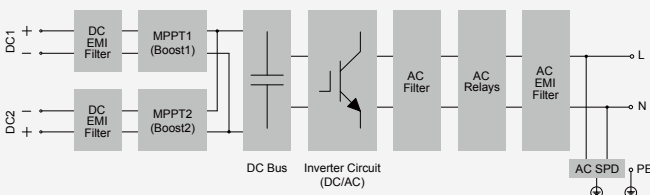
- Build-in surge arresters and residual current protection
- High anti-corrosion with aluminum alloy die casting



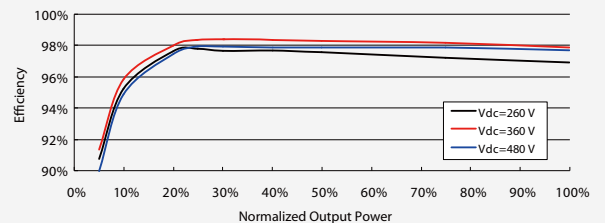
Easy and User Friendly

- 11.5 kg compact design, plug and play installation
- Fast commissioning via LCD

Circuit Diagram



Efficiency Curve



Input (DC)	SG3K-D	SG5K-D
Max. PV input voltage	600 V	
Min. PV input voltage / Startup input voltage	90 V / 120 V	
Nominal input voltage	360 V	
MPP voltage range	90 V–560 V	
MPP voltage range for nominal power	160 V–480 V	260 V–480 V
No. of independent MPP inputs	2	
Max. number of PV strings per MPPT	1	
Max. PV input current	20 A (10 A / 10 A)	
Max. current for input connector	24 A (12 A / 12 A)	
Max. PV short-circuit current	24 A (12 A / 12 A)	
Output (AC)		
AC output power	30000 VA @ 45 °C	4990 VA @ 45 °C
Max. AC output current	13.7 A	21.7 A
Nominal AC voltage	230 Vac	
AC voltage range	180 Vac–276 Vac (this may vary with grid standards)	
Nominal grid frequency	50 Hz, 60 Hz	
Grid frequency range	45 Hz–55 Hz, 55 Hz–65 Hz (this may vary with grid standards)	
Total Harmonic Distortion (THD)	< 3 % (of nominal power)	
DC current injection	< 0.5 % (of nominal current)	
Power factor	>0.99 at default value at nominal power (adj. 0.8 overexcited/leading to 0.8 underexcited/lagging)	
Feed-in phases / Connection phases	1 / 1	
Efficiency		
Max. efficiency	98.4 %	
Euro. efficiency	97.7 %	98.0 %
Protection		
PV reverse connection protection	Yes	
AC short-circuit protection	Yes	
Leakage current protection	Yes	
Grid monitoring	Yes	
PV string current monitoring	Yes	
DC switch	Optional	
Overvoltage protection	AC Type III	
General Data		
Dimensions (W*H*D)	360*390*133 mm	
Weight	11.5 kg	
Isolation method	Transformerless	
Degree of protection	IP65	
Power loss in night mode	< 1 W	
Operating ambient temperature range	-25 °C to 60 °C (> 45 °C derating)	
Allowable relative humidity range	0–100 %	
Cooling method	Natural cooling	
Max. operating altitude	4000 m (> 2000 m derating)	
Display / Communication	LCD / Wi-Fi (optional)	
PV connection type	MC4 (max. 6 mm ²)	
AC connection type	Plug and play connector (max. 6 mm ²)	
Certification	IEC 61000-6-2, IEC 61000-6-3, AS 4777.2, IEC 62109-1, IEC 62109-2, VDE-AR-N-4105, VDE 0126-1-1, EN50438, NB/T 32004, GB/T29319, CE, CGC, TUV, SAA, ABNT NBR 16149:2013, ABNT NBR 16150:2013	
Grid support	Active & reactive power control, power ramp rate control	
Type designation	SG3K-D-10	SG5K-D-10



Residential Single Phase Inverter



HIGH YIELD

- Higher yield with max. efficiency 98.5 %, European efficiency 98.0 %
- Flexible PV string configurations, DC/AC ratio up to 1.3



SAFE AND DURABLE

- Built-in surge arresters and residual current protection
- High anti-corrosion with aluminum alloy die casting



SMART MANAGEMENT

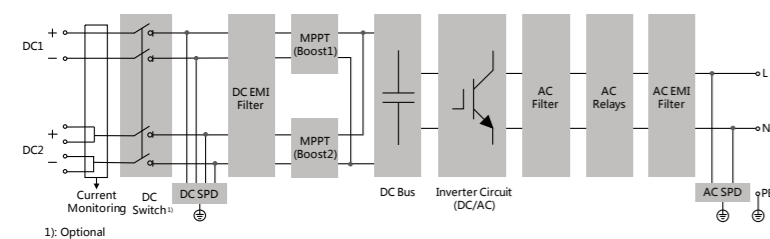
- Easy local and online monitoring via App or Web
- Export power control with smart energy meter



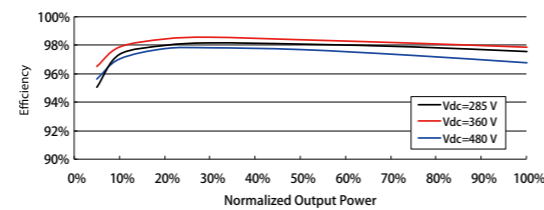
EASY AND USER FRIENDLY

- 15.5 kg compact design, plug and play installation
- Fast commissioning via LCD

CIRCUIT DIAGRAM



EFFICIENCY CURVE



Type designation	SG8K-D
Input (DC)	
Max. PV input voltage	600 V
Min PV input voltage / Startup voltage	90 V / 120 V
Nominal input voltage	360 V
MPP voltage range	90 V – 540 V
MPP voltage range for nominal power	275 V – 480 V
No. of MPPTs	2
Max. number of PV strings per MPPT	1 / 2
Max. PV input current	12.5 A / 25 A
Max. current for input connector	15 A / 30 A
Max. PV short-circuit current	15 A / 30 A
Output (AC)	
AC output power	8000 VA
Max. AC output current	34.8 A
Nominal AC voltage	230 Vac
AC voltage range	180 Vac – 276 Vac (this may vary with grid standards)
Nominal grid frequency	50Hz / 60Hz
Grid frequency range	45 Hz – 55 Hz / 55 Hz – 65 Hz (this may vary with grid standards)
Total harmonic distortion (THD)	< 3 % (of nominal power)
DC current injection	< 0.5 % (of nominal current)
Power factor	> 0.99 / 0.8 leading - 0.8 lagging
Feed-in phases / Connection phases	1 / 1
Efficiency	
Max. efficiency / European efficiency	98.5 % / 98.0 %
Protection	
PV reverse connection protection	Yes
AC short circuit protection	Yes
Leakage current protection	Yes
Grid monitoring	Yes
PV string current monitoring	Yes
DC switch	Optional
Overvoltage protection	DC Type II / AC Type II
General Data	
Dimensions (W*H*D)	360*390*148 mm
Weight	15.5 kg
Isolation method	Transformerless
Ingress protection rating	IP65
Power loss in night mode	< 1 W
Operating ambient temperature	-25 °C to 60 °C (>45 °C derating)
Allowable relative humidity (non-condensing)	0 – 100 %
Cooling method	Natural cooling
Max. operating altitude	4000 m (> 2000 m derating)
Display / Communication	LCD / WiFi
PV connection type	MC4 (Max. 6 mm ²)
AC connection type	Plug and play connector (max. 6 mm ²)
Compliance	IEC62109-1, IEC62109-2, IEC62116, IEC61727, EN 61000-6-2, EN 61000-6-3, AS4777.2
Grid support	Active & reactive power control, power ramp rate control
Type designation	SG8K-D-10

SG5.0RT/SG7.0RT/SG10RT/ SG15RT/SG20RT **New**

SUNGROW
Clean power for all

Multi-MPPT String Inverter for 1000 Vdc System



HIGH YIELD

- Lower startup & wider MPPT voltage
- Compatible with bifacial modules
- Built-in PID recovery function

SMART MANAGEMENT

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

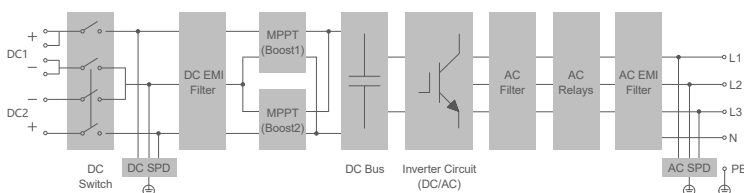
SAFE AND DURABLE

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

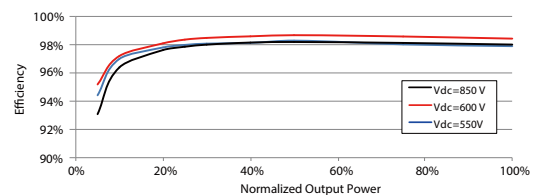
EASY AND USER FRIENDLY

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

CIRCUIT DIAGRAM



EFFICIENCY CURVE



SG5.0RT/SG7.0RT/SG10RT/SG15RT/SG20RT

Type designation	SG5.0RT	SG7.0RT	SG10RT	SG15RT	SG20RT
Input (DC)					
Recommended max. PV input power	7.5 kW	10.5 kW	15 kW	22.5kW	30 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	2/1	2/1	2/2	2/2
Max. PV input current	25 A (12.5 A/12.5 A)	37.5 A (25 A/12.5 A)	37.5 A (25 A/12.5 A)	50 A (25 A / 25 A)	50 A (25 A / 25 A)
Max. current for input connector			30A		
Max. DC short-circuit current	32 A (16 A / 16 A)	48 A (32 A / 16 A)	48 A (32 A / 16 A)	64 A (32 A / 32 A)	64 A (32 A / 32 A)
Output (AC)					
Nominal AC power (@230 V, 50 Hz)	5000 W	7000 W**	10000 W	15000 W	20000 W
Max. AC output power	5500 VA*	7700 VA**	11000 VA*	16500 VA*	22000 VA*
Max. AC output current	8.3 A	11.7 A	16.7 A	25 A	31.9 A
Nominal AC voltage			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		
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 / Adjustable power factor			>0.99 / 0.8 leading – 0.8 lagging		
Feed-in phases / AC connection			3 / 3		
Efficiency					
Max. efficiency	98.40%	98.40%	98.50%	98.50%	98.50%
European efficiency	97.40%	97.70%	97.90%	98.10%	98.10%
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	18 kg	18 kg	21 kg	21 kg
Topology			Transformerless		
Degree of protection			IP65		
Operating ambient temperature range			-25 °C to 60 °C		
Allowable relative humidity range			0% – 100%		
Cooling method	Natural cooling	Natural cooling	Natural cooling	Smart forced air cooling	Smart forced air cooling
Max. operating altitude			4000 m (> 2000 m derating)		
Noise(Typical)	35dB (A)	35dB (A)	35dB (A)	45dB (A)	45dB (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				

*: For Australia & Belgium & Germany Max. AC output power: SG5.0RT is 5000VA, SG10RT is 10000VA, SG15RT is 15000VA, SG20RT is 20000VA,

** : For Australia, 6999W, 6999 VA



SG5.0RT/SG7.0RT/SG10RT/ SG15RT/SG20RT **New**

SUNGROW
Clean power for all

Multi-MPPT String Inverter for 1000 Vdc System



HIGH YIELD

- Lower startup & wider MPPT voltage
- Compatible with bifacial modules
- Built-in PID recovery function

SMART MANAGEMENT

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

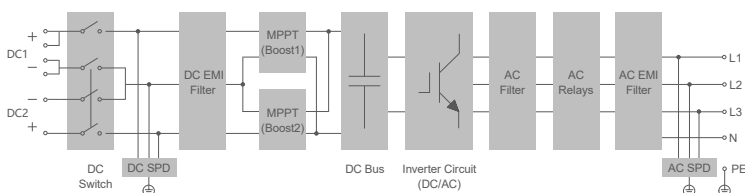
SAFE AND DURABLE

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

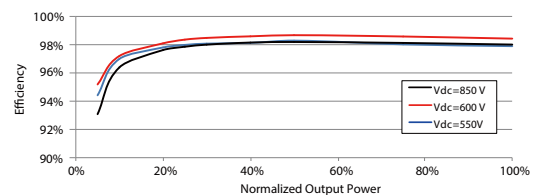
EASY AND USER FRIENDLY

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

CIRCUIT DIAGRAM



EFFICIENCY CURVE



SG5.0RT/SG7.0RT/SG10RT/SG15RT/SG20RT

Type designation	SG5.0RT	SG7.0RT	SG10RT	SG15RT	SG20RT
Input (DC)					
Recommended max. PV input power	7.5 kW	10.5 kW	15 kW	22.5kW	30 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	2/1	2/1	2/2	2/2
Max. PV input current	25 A (12.5 A/12.5 A)	37.5 A (25 A/12.5 A)	37.5 A (25 A/12.5 A)	50 A (25 A / 25 A)	50 A (25 A / 25 A)
Max. current for input connector			30A		
Max. DC short-circuit current	32 A (16 A / 16 A)	48 A (32 A / 16 A)	48 A (32 A / 16 A)	64 A (32 A / 32 A)	64 A (32 A / 32 A)
Output (AC)					
Nominal AC power (@230 V, 50 Hz)	5000 W	7000 W**	10000 W	15000 W	20000 W
Max. AC output power	5500 VA*	7700 VA**	11000 VA*	16500 VA*	22000 VA*
Max. AC output current	8.3 A	11.7 A	16.7 A	25 A	31.9 A
Nominal AC voltage			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		
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 / Adjustable power factor			>0.99 / 0.8 leading – 0.8 lagging		
Feed-in phases / AC connection			3 / 3		
Efficiency					
Max. efficiency	98.40%	98.40%	98.50%	98.50%	98.50%
European efficiency	97.40%	97.70%	97.90%	98.10%	98.10%
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	18 kg	18 kg	21 kg	21 kg
Topology			Transformerless		
Degree of protection			IP65		
Operating ambient temperature range			-25 °C to 60 °C		
Allowable relative humidity range			0% – 100%		
Cooling method	Natural cooling	Natural cooling	Natural cooling	Smart forced air cooling	Smart forced air cooling
Max. operating altitude			4000 m (> 2000 m derating)		
Noise(Typical)	35dB (A)	35dB (A)	35dB (A)	45dB (A)	45dB (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				

*: For Australia & Belgium & Germany Max. AC output power: SG5.0RT is 5000VA, SG10RT is 10000VA, SG15RT is 15000VA, SG20RT is 20000VA,

** : For Australia, 6999W, 6999 VA



SH5.0/6.0/8.0/10RT New

Residential Hybrid Three Phase Inverter



FLEXIBLE APPLICATION

- 150~600V wide battery voltage range
- Supports parallel connection with full communication between inverters
- Provides 100% unbalance loads in backup mode

ENERGY INDEPENDENCE

- Seamless transition to backup mode for protection against power outages
- Fast charging/discharging to meet the demand of higher consumption and energy trading

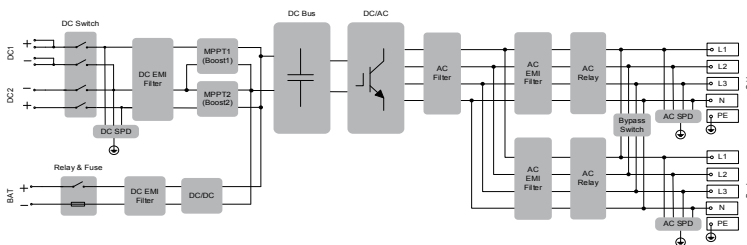
SMART MANAGEMENT

- High self-consumption with optimised built-in EMS
- Free online monitoring to enhance energy management for end user, installer and retailer
- Remote firmware update and customisable settings

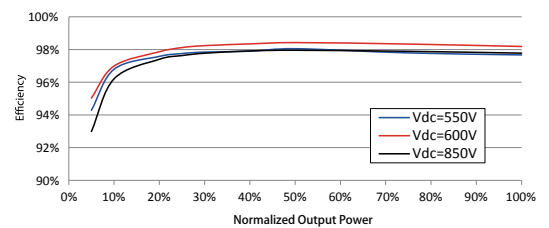
EASY INSTALLATION

- Unique push-in connectors for time-saving installation
- Touch free commissioning with smartphone
- Lightweight and compact

CIRCUIT DIAGRAM



EFFICIENCY CURVE (SH10RT)



Type designation	SH5.ORT	SH6.ORT	SH8.ORT	SH10RT
PV Input				
Max. PV input power	7500 W	9000 W	12000 W	15000 W
Max. PV input voltage			1000 V	
Startup voltage	180 V	250 V	250 V	250 V
Nominal input voltage			600 V	
MPP voltage range	150 V - 950 V	200 V - 950 V	200 V - 950 V	200 V - 950 V
MPP voltage range for nominal power	210 V - 850 V	250 V - 850 V	330 V - 850 V	280 V - 850 V
No. of MPPTs			2	
Max. number of PV strings per MPPT	1/1	1/1	1/1	1/2
Max. PV input current			25 A (12.5 A / 12.5 A)	
Max. current for input connector			16 A	
Short-circuit current of PV input	32 A (16 A / 16 A)	32 A (16 A / 16 A)	32 A (16 A / 16 A)	48 A (16 A / 32 A)
AC Input and Output				
Nominal AC output power	5000 W	6000 W	8000 W	10000 W
Nominal AC output current	7.3 A	8.7 A	11.6 A	14.5 A
Max. AC output apparent power	5000 VA	6000 VA	8000 VA	10000 VA
Max. AC output current	7.6 A	9.1 A	12.1 A	15.2 A
Nominal AC voltage		3 / N / PE, 220 / 380 V; 230 / 400 V; 240 / 415 V		
AC voltage range		270 - 480 V		
Nominal grid frequency / Grid frequency range		50 Hz / 45 - 55 Hz, 60 Hz / 55 - 65 Hz		
THD		<3 % (of nominal power)		
DC current injection		<0.5 % In		
Power factor		>0.99 / 0.8 leading to 0.8 lagging		
Protection				
LVRT			Yes	
Anti-islanding protection			Yes	
AC short circuit protection			Yes	
Leakage current protection			Yes	
DC switch (solar)			Yes	
DC fuse (battery)			Yes	
Overvoltage category		III [MAINS], II [PV] [BATTERY]		
SPD		DC Type II / AC Type II		
Battery Data				
Battery type			Li-ion battery	
Battery voltage			150 V - 600 V	
Max charge / discharge current			30 A* / 30 A*	
Max charge / discharge power	7500 W / 6600 W	9000 W / 7200 W	10600 W / 10600 W	10600 W / 10600 W
System Data				
Max. efficiency	98.0%	98.2%	98.4%	98.4%
European efficiency	97.2%	97.5%	97.9%	97.9%
Isolation method (solar / battery)			Transformerless / Transformerless	
Ingress protection rating			IP65	
Operating ambient temperature range			-25 °C - 60 °C	
Allowable relative humidity range (non-condensing)			0% - 100%	
Cooling method			Natural convection	
Max. operating altitude			4000 m (>3000 m derating)	
Display			LED	
Communication			RS485, WLAN, Ethernet, CAN, 4×DI, 1×DO	
DC connection type			MC4 (PV) / Sunclix (Battery)	
AC connection type			Plug and play connector	
Compliance			IEC / EN 62109-1, IEC / EN 62109-2, IEC / EN 61000-6-1, IEC / EN 61000-6-3, IEC / EN 61000-3, EN 62477-1, VDE-AR-N-4105, AS / NZS 4777.2	
Mechanical Data				
Dimensions (W * H * D)			460 * 540 * 170 mm	
Mounting method			Wall-mounting bracket	
Weight			27 kg	
Backup Data				
Nominal voltage			3 / N / PE, 220 Vac / 230 Vac / 240 Vac	
Frequency range			50Hz / 60Hz	
Total harmonic factor output voltage			2%	
Switch time to emergency mode			< 20ms	
Nominal output power	5000 W / 5000 VA (100% unbalance load)	6000 W / 6000 VA (100% unbalance load)	8000 W / 8000 VA (100% unbalance load)	10000 W / 10000 VA (100% unbalance load)
Peak output power	6000 W / 6000 VA, 5min 10000 W / 10000 VA, 10s	7200 W / 7200 VA, 5min 10000 W / 10000 VA, 10s	12000 W / 12000 VA, 5min	12000 W / 12000 VA, 5min
Parallel operation			Yes / 2	

* Depending on the connected battery



SG8.0/9.0/10RS

Multi-MPPT String Inverter for 600 Vdc System

NEW



HIGH YIELD

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

USER FRIENDLY SETUP

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

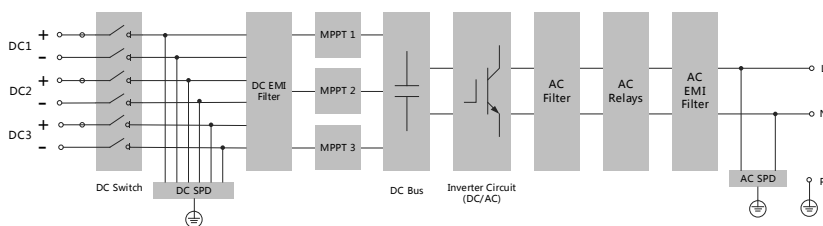
SAFE AND RELIABLE

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

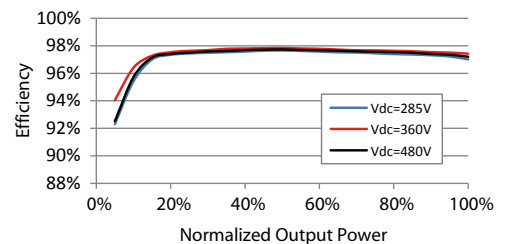
SMART MANAGEMENT

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

CIRCUIT DIAGRAM



EFFICIENCY CURVE



Type designation	SG8.0RS	SG9.0RS	SG10RS
Input (DC)			
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 – 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)	
Output (AC)			
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 / 230 / 240 V	
AC voltage range		154 – 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	
Efficiency			
Max. efficiency		97.8 %	
European efficiency	97.3 %	97.4 %	97.4 %
Protection			
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)		Optional	
PID recovery function		Yes	
General Data			
Dimensions (W*H*D)		490 * 340 * 170 mm	
Weight		19 kg	
Mounting method		Wall-mounting bracket	
Topology		Transformerless	
Degree of protection		IP65	
Operating ambient temperature range		-25 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 ²)	
AC connection type		Plug and play connector (Max. 16 mm ²)	
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	