

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

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

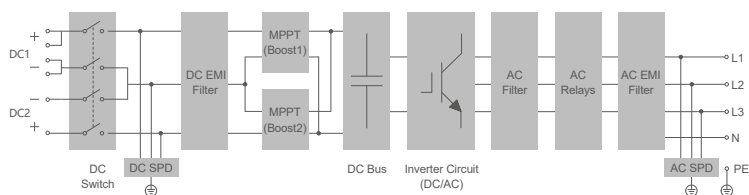
SAFE AND DURABLE

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

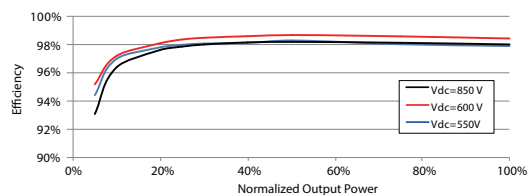
EASY AND USER FRIENDLY

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

CIRCUIT DIAGRAM



EFFICIENCY CURVE



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)	25 A (12.5 A / 12.5 A)	37.5 A (25 A / 12.5 A)	37.5 A (25 A / 12.5 A)	37.5 A (25 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)						
Nominal AC power (@230 V, 50 Hz)	5000 W	6000 W	7000 W**	8000 W	10000 W	12000 W
Max. AC output power	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 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%	98.40%	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			
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			
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			

*: 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.

** : For Australia ,6999W,6999 VA

SG15/17/20RT

Multi-MPPT String Inverter for 1000 Vdc System



NEW



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
- Remote firmware updates



SAFE AND DURABLE

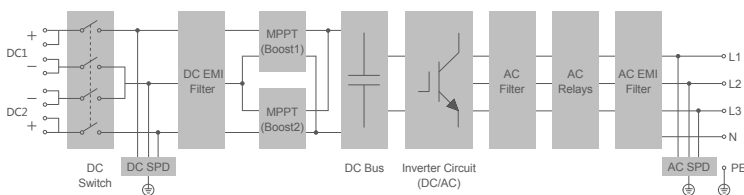
- Quick arc fault circuit interrupter
- Built-in Type II DC & AC SPD
- High anti-corrosion rating C5



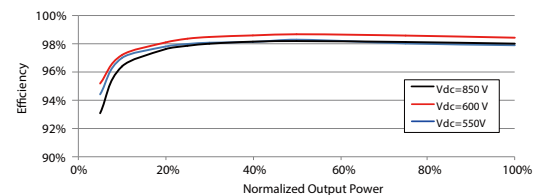
EASY AND USER FRIENDLY

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

CIRCUIT DIAGRAM



EFFICIENCY CURVE



Type designation	SG15RT	SG17RT	SG20RT
Input (DC)			
Recommended max. PV input power	22.5kW	25.5 kW	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		2 / 2	
Max. PV input current		50 A (25 A / 25 A)	
Max. current for input connector		30A	
Max. DC short-circuit current		64 A (32 A / 32 A)	
Output (AC)			
Nominal AC power (@230 V, 50 Hz)	15000 W	17000 W	20000 W
Max. AC output power	16500 VA*	18700 VA*	22000 VA*
Max. AC output current	25 A	28.3 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		98.50 %	
European efficiency		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		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		Smart forced air cooling	
Max. operating altitude		4000 m (> 2000 m derating)	
Noise (Typical)		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: SG15RT is 15000VA, SG17RT is 17000VA, SG20RT is 20000VA.

**: Phase to neutral voltage

Multi-MPPT String Inverter for 1000 Vdc System

AU



HIGH YIELD

- 3 MPPTs with max. efficiency 98.6%
- Compatible with bifacial module
- Built-in PID recovery function

SMART O&M

- Touch free commissioning and remote firmware upgrade
- Smart IV curve scanning *
- Fuse free design with smart string current monitoring

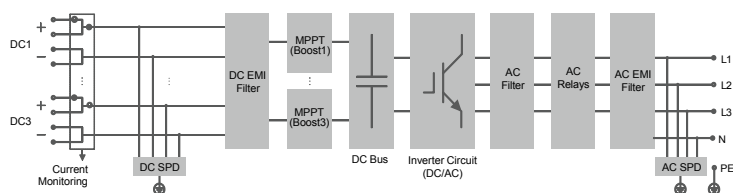
SAVED INVESTMENT

- Compatible with Al and Cu AC cables
- DC 2 in 1 connection enabled
- Cable free communication with optional WLAN

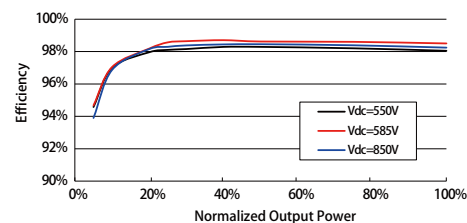
PROVEN SAFETY

- IP66 and C5 anti-corrosion grade
- Quick arc-fault circuit interrupter
- Satisfied global safety and grid code

CIRCUIT DIAGRAM



EFFICIENCY CURVE



Type designation	SG30CX
Input (DC)	
Max. PV input voltage	1100 V **
Min. PV input voltage / Start-up input voltage	200 V / 250 V
Nominal PV input voltage	585 V
MPP voltage range	200 – 1000 V
No. of independent MPP inputs	3
No. of PV strings per MPPT	2
Max. PV input current	78 A
Max. DC short-circuit current	120 A
Output (AC)	
AC output power	29.9 kVA
Max. AC output current	48.15 A
Nominal AC voltage	3 / N / PE, 230 / 400 V
AC voltage range	312 – 528 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-PE
Efficiency	
Max. efficiency / European efficiency	98.6 % / 98.3 %
Protection and function	
DC reverse polarity protection	Yes
AC short-circuit protection	Yes
Leakage current protection	Yes
Grid monitoring	Yes
Ground fault monitoring	Yes
DC switch	Yes
AC switch	No
PV string monitoring	Yes
Q at night function	Yes
PID recovery function	Yes
Arc fault circuit interrupter (AFCI)	Optional
DC terminal protective cover	Yes
Surge protection	DC Type I+II / AC Type II
General Data	
Dimensions (W * H * D)	702 * 595 * 310 mm
Weight	50 kg
Topology	Transformerless
Degree of protection	IP66
Night power consumption	≤2 W
Operating ambient temperature range	-30 to 60 °C (> 45 °C derating)
Allowable relative humidity range	0 – 100 %
Cooling method	Smart forced air cooling
Max. operating altitude	4000 m (> 3000 m derating)
Display	LED, Bluetooth+APP
Communication	RS485 / WLAN / Optional: Ethernet
DC connection type	MC4 (Max. 6 mm ²)
AC connection type	OT or DT terminal (Max.70 mm ²)
Compliance	IEC 62109, IEC 61727, IEC 62116, IEC 60068, IEC 61683, IEC 61000-6-3, AS/NZS 4777.2:2015
Grid Support	Q at night function, LVRT, HVRT, active & reactive power control and power ramp rate control

* Only compatible with Sungrow Logger, EyeM4 and iSolarCloud

** Max. operating DC voltage is 1000V, max. withstanding DC voltage is 1100 V



SG50CX Premium

SUNGROW
Clean power for all

Multi-MPPT String Inverter for 1000 Vdc System

AU



HIGH YIELD

- Up to 5 MPPTs with max. efficiency 98.7%
- Compatible with bifacial module
- Built-in PID recovery function

SMART O&M

- Touch free commissioning and remote firmware upgrade
- Smart IV curve scanning *
- Fuse free design with smart string current monitoring

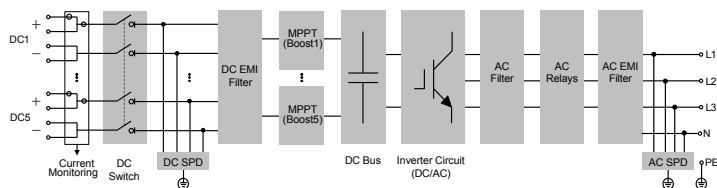
SAVED INVESTMENT

- Compatible with Al and Cu AC cables
- DC 2 in 1 connection enabled
- Cable free communication with optional WLAN

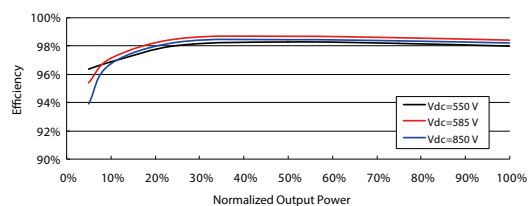
PROVEN SAFETY

- IP66 and C5 anti-corrosion grade
- Quick arc-fault circuit interrupter
- Satisfied global safety and grid code

CIRCUIT DIAGRAM



EFFICIENCY CURVE



Type designation	SG50CX
Input (DC)	
Max. PV input voltage	1100 V **
Min. PV input voltage / Start-up input voltage	200 V / 250 V
Nominal PV input voltage	585 V
MPP voltage range	200 – 1000 V
No. of independent MPP inputs	5
No. of PV strings per MPPT	2
Max. PV input current	130 A
Max. DC short-circuit current	200 A
Output (AC)	
AC output power	50 kVA
Max. AC output current	80.5 A
Nominal AC voltage	3 / N / PE, 230 / 400 V
AC voltage range	312 – 528 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-PE
Efficiency	
Max. efficiency / European efficiency	98.7 % / 98.4 %
Protection and function	
DC reverse polarity protection	Yes
AC short-circuit protection	Yes
Leakage current protection	Yes
Grid monitoring	Yes
Ground fault monitoring	Yes
DC switch	Yes
AC switch	No
PV string monitoring	Yes
Q at night function	Yes
PID recovery function	Yes
Arc fault circuit interrupter (AFCI)	Optional
DC terminal protective cover	Yes
Surge protection	DC Type I+II / AC Type II
General Data	
Dimensions (W * H * D)	782 * 645 * 310 mm
Weight	62 kg
Topology	Transformerless
Degree of protection	IP66
Night power consumption	≤2 W
Operating ambient temperature range	-30 to 60 °C (> 45 °C derating)
Allowable relative humidity range	0 – 100 %
Cooling method	Smart forced air cooling
Max. operating altitude	4000 m (> 3000 m derating)
Display	LED, Bluetooth+APP
Communication	RS485 / WLAN / Optional: Ethernet
DC connection type	MC4 (Max. 6 mm ²)
AC connection type	OT or DT terminal (Max.70 mm ²)
Compliance	IEC 62109, IEC 61727, IEC 62116, IEC 60068, IEC 61683, IEC 61000-6-3, AS/NZS 4777.2:2015
Grid Support	Q at night function, LVRT, HVRT, active & reactive power control and power ramp rate control

* Only compatible with Sungrow Logger, EyeM4 and iSolarCloud

** Max. operating DC voltage is 1000V, max. withstanding DC voltage is 1100 V



Multi-MPPT String Inverter for 1000 Vdc System

AU



HIGH YIELD

- 9 MPPTs with max. efficiency 98.7%
- Compatible with bifacial module
- Built-in PID recovery function

SMART O&M

- Touch free commissioning and remote firmware upgrade
- Smart IV curve scanning *
- Fuse free design with smart string current monitoring

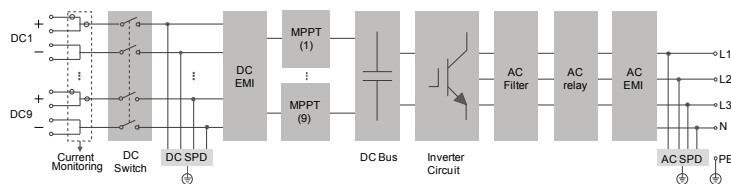
SAVED INVESTMENT

- Compatible with Al and Cu AC cables
- DC 2 in 1 connection enabled
- Q at night function

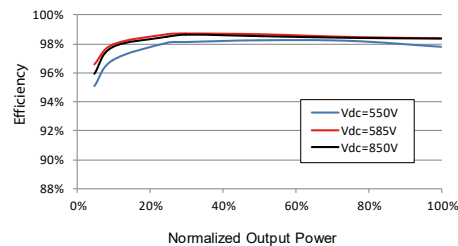
PROVEN SAFETY

- IP66 and C5 protection
- Quick arc-fault circuit interrupter
- Compliant with global safety and grid code

CIRCUIT DIAGRAM



EFFICIENCY CURVE



Type designation	SG110CX
Input (DC)	
Max. PV input voltage	1100 V **
Min. PV input voltage / Startup input voltage	200 V / 250 V
Nominal PV input voltage	585 V
MPP voltage range	200 – 1000 V
No. of independent MPP inputs	9
No. of PV strings per MPPT	2
Max. PV input current	26 A * 9
Max. DC short-circuit current	40 A * 9
Output (AC)	
AC output power	110 kVA @ 45 °C / 100 kVA @ 50 °C
Max. AC output current	158.8 A
Nominal AC voltage	3 / N / PE, 400 V
AC voltage range	320 – 460V
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-PE
Efficiency	
Max. efficiency / European efficiency	98.7 % / 98.5 %
Protection and function	
DC reverse polarity protection	Yes
AC short-circuit protection	Yes
Leakage current protection	Yes
Grid monitoring	Yes
Ground fault monitoring	Yes
DC switch	Yes
AC switch	No
PV string monitoring	Yes
Q at night function	Yes
PID recovery function	Yes
Arc fault circuit interrupter (AFCI)	Optional
DC terminal protective cover	Yes
Surge protection	DC Type II / AC Type II
General Data	
Dimensions (W * H * D)	1051 * 660 * 362.5 mm
Weight	89 kg
Topology	Transformerless
Ingress protection rating	IP66
Night power consumption	< 2 W
Operating ambient temperature range	-30 to 60 °C (> 50 °C derating)
Allowable relative humidity range	0 – 100 %
Cooling method	Smart forced air cooling
Max. operating altitude	4000 m (> 3000 m derating)
Display	LED, Bluetooth+APP
Communication	RS485 / WLAN / Optional: Ethernet
DC connection type	MC4 (Max. 6 mm ²)
AC connection type	OT / DT terminal (Max. 240 mm ²)
Compliance	IEC 62109, IEC 61727, IEC 62116, IEC 60068, IEC 61683, IEC 61000-6-3, AS / NZS 4777.2:2015
Grid Support	Q at night function, LVRT, HVRT, active & reactive power control and power ramp rate control

* Only compatible with Sungrow Logger, EyeM4 and iSolarCloud

** Max. operating DC voltage is 1000V, max. withstanding DC voltage is 1100V