SG2.0/2.5/3.0RS-S

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

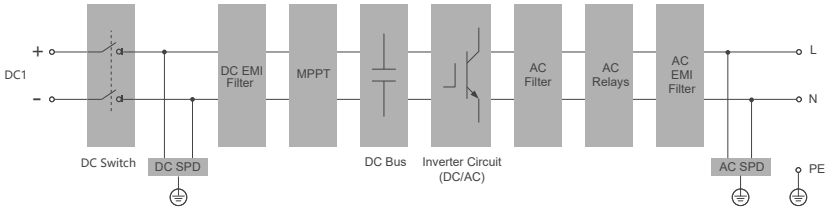
USER FRIENDLY SETUP

- Plug and play installation
- One-click access to iSolarCloud monitoring platform
- Light and compact (A4 Size) with optimized heat dissipation design

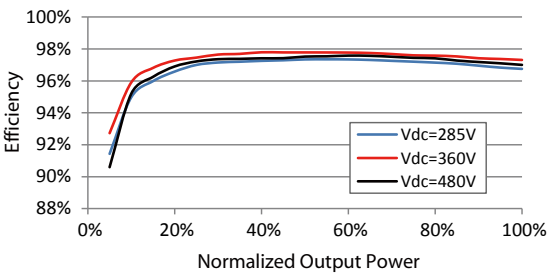
SMART MANAGEMENT

- 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 (SG3.0RS-S)



SUNGROW
Clean power for all

Type designation	SG2.0RS-S	SG2.5RS-S	SG3.0RS-S
Input (DC)			
Recommended max. PV input power	3 kWp	3.75 kWp	4.5 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		1	
Default No. of PV strings per MPPT		1	
Max. PV input current		16 A	
Max. DC short-circuit current		20 A	
Output (AC)			
Rated AC output power	2000 W	2500 W	3000 W
Max. AC Output power	2000 VA	2500 VA	3000 VA
Rated AC output current (at 230 V)	8.7 A	10.9 A	13.1 A
Max. AC output current	9.1 A	11.4 A	13.7 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	
Efficiency			
Max. efficiency / European efficiency	97.8 % / 96.9 %	97.8% / 97.2 %	97.8 % / 97.3 %
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)		Yes	
PID Zero function		Yes	
General Data			
Dimensions (W * H * D)		320 mm * 225 mm * 120 mm	
Weight		6 kg	
Mounting method		Wall-mounting bracket	
Topology		Transformerless	
Degree of protection		IP65	
Operating ambient temperature range		-25 ℃ to 60 ℃	
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 mm²)	
AC connection type		Plug and play connector (Max. 6 mm²)	
Grid compliance		IEC / EN62109-1/2, IEC / EN62116, IEC / EN61727, IEC / EN61000-6-2/3, EN50549-1, AS4777.2, UNE 217002:2020, NTS V2 TypeA, CEI 0-21:2020, VDE0126-1-1/ A1 (VFR-2019), UTE C15-712, C10/11, G98/G99	
Grid Support		Active & reactive power control and power ramp rate control	

SG5.0/6.0RS

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

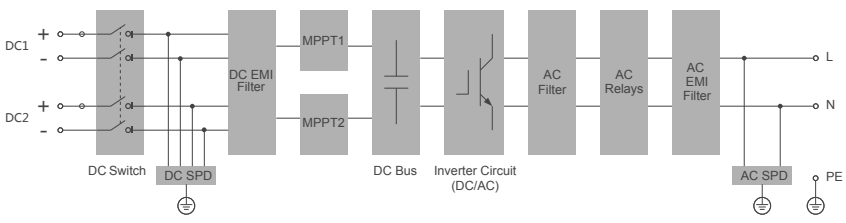
USER FRIENDLY SETUP

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

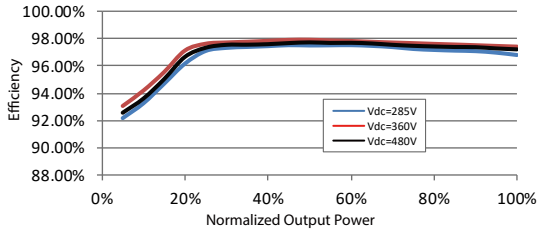
SMART MANAGEMENT

- 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(SG5.0RS)



SUNGROW
Clean power for all

Type designation	SG5.0RS	SG6.0RS
Input (DC)		
Recommended max. PV input power	7.5 kWp	9 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	2	
Default No. of PV strings per MPPT	1	
Max. PV input current	32 A (16 A / 16 A)	
Max. DC short-circuit current	40 A (20 A / 20 A)	
Output (AC)		
Rated AC output power	5000 W *	6000 W
Max. AC Output power	5000 VA *	6000 VA
Rated AC output current (at 230 V)	21.8 A **	26.1 A
Max. AC output current	22.8 A **	27.3 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	
Efficiency		
Max. efficiency / European efficiency	97.9 % / 97.3 %	97.9 % / 97.5%
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)	Yes	
PID Zero function	Yes	
Optimizer compatibility ***	Optional	
General Data		
Dimensions (W * H * D)	410 mm * 270 mm * 150 mm	
Weight	10 kg	
Mounting method	Wall-mounting bracket	
Topology	Transformerless	
Degree of protection	IP65	
Operating ambient temperature range	-25 ℃ to 60 ℃	
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. 6 mm^2)	
Grid compliance	IEC / EN62109-1/2, IEC / EN62116, IEC / EN61727, IEC / EN61000-6-2/3, EN50549-1, AS4777.2, ABNT NBR 16149, ABNT NBR 16150, UNE 217002:2020, NTS V2 TypeA, CEI 0-21:2020, VDE0126-1-1/A1 (VFR-2019), UTE C15-712, C10/11, G98/G99,	
Grid Support	Active & reactive power control and power ramp rate control	

* AS 4777.2 4999 W , 4999 VA
** AS 4777.2 :Rated and Max. AC current is 21.7 A
*** For optimizer compatbility, please consult Sungrow before placing an oder

SG3.0/3.6/4.0RS

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

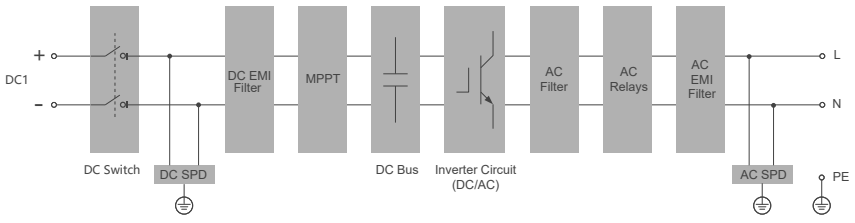
USER FRIENDLY SETUP

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

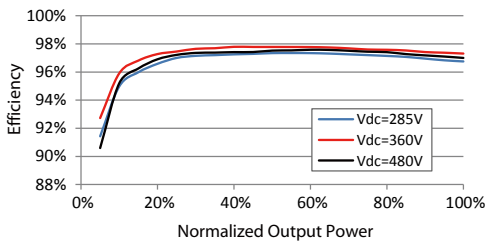
SMART MANAGEMENT

- 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 (SG3.0RS)



SUNGROW
Clean power for all

Type designation	SG3.0RS	SG3.6RS	SG4.0RS
Input (DC)			
Recommended max. PV input power	4.5 kWp	5.4 kWp	6 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		2	
Default No. of PV strings per MPPT		1	
Max. PV input current		32 A (16 A / 16 A)	
Max. DC short-circuit current		40 A (20 A / 20 A)	
Output (AC)			
Rated AC output power	3000 W	3680 W	4000 W
Max. AC Output power	3000 VA	3680 VA	4000 VA
Rated AC output current (at 230 V)	13.1 A	16 A	17.4 A
Max. AC output current	13.7 A	16 A	18.2 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	
Efficiency			
Max. efficiency / European efficiency	97.9 % / 97.0 %	97.9 % / 97.0 %	97.9 % / 97.2 %
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)		Yes	
PID Zero function		Yes	
Optimizer compatibility *		Optional	
General Data			
Dimensions (W * H * D)		410 mm * 270 mm * 150 mm	
Weight		10 kg	
Mounting method		Wall-mounting bracket	
Topology		Transformerless	
Degree of protection		IP65	
Operating ambient temperature range		-25 ℃ to 60 ℃	
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. 6 mm^2)	
Grid compliance		IEC / EN62109-1/2, IEC / EN62116, IEC / EN61727, IEC / EN61000-6-2/3, EN50549-1, AS4777.2, ABNT NBR 16149, ABNT NBR 16150, UNE 217002:2020, NTS V2 TypeA, CEI 0-21:2020, VDE0126-1-1/A1 (VFR-2019), UTE C15-712, C10/11, G98/G99,	
Grid Support		Active & reactive power control and power ramp rate control	

* For optimizer compatbility, please consult Sungrow before placing an oder

SG5.0/6.0/7.0/8.0/10/12RT

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
- Remote firmware updates

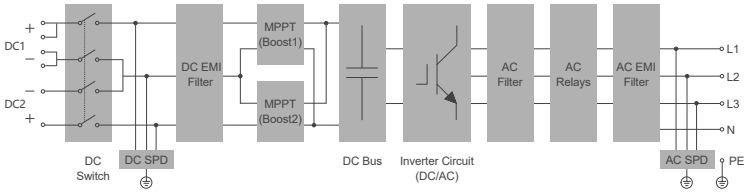
SAFE AND DURABLE

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

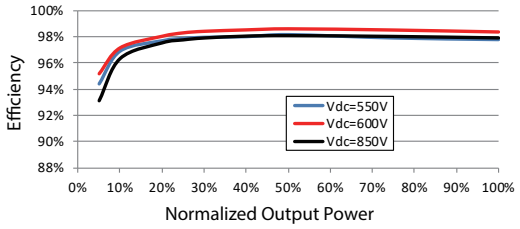
EASY AND USER FRIENDLY

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

CIRCUIT DIAGRAM(SG10RT)



EFFICIENCY CURVE



SUNGROW
Clean power for all

Type designation	SG5.0RT	SG6.0RT	SG7.0RT	SG8.0RT	SG10RT	SG12RT
Input (DC)						
Recommended max. PV input power	7.5 kWp	9.0 kWp	10.5kWp	12 kWp	15 kWp	18 kWp
Max. PV input voltage	1100 V *					
Min. PV input voltage / Start-up input voltage	180V / 180V					
Rated 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. DC short-circuit current	32 A (16 A / 16 A)		48 A (32 A / 16 A)			
Max. current for DC connector	30 A					
Output (AC)						
Rated AC output power	5000 W	6000 W	7000 W	8000 W	10000 W	12000 W
Max. AC output apparent power	5500 VA**	6600 VA**	7700 VA**	8800 VA**	11000 VA**	13200 VA**
Rated AC output apparent 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
Rated AC output current(at 230V)	7.2 A	8.7 A	10.1 A	11.6 A	14.5 A	17.4 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	180V – 276V / 311V - 478V					
Rated grid frequency	50 Hz / 60 Hz					
Grid frequency range	45 – 55 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	3 / 3-PE					
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&Function						
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					
Ground fault monitoring	Yes					
DC switch	Yes					
PV String current monitoring	Yes					
Arc fault circuit interrupter (AFCI)	Yes					
PID recovery function	Yes					
General Data						
Dimensions (W*H*D)	370*480*195 mm					
Weight	18 kg					
Mounting method	Wall-mounting bracket					
Topology	Transformerless					
Degree of protection	IP65					
Night power consumption	< 6 W					
Corrosion	C5					
Operating ambient temperature range	-25 ℃ to 60 ℃					
Allowable relative humidity range (non-condensing)	0% – 100%					
Cooling method	Natural cooling					
Max. operating altitude	4000 m					
Display	LED					
Communication	WLAN / Ethernet / RS485 / DI / DO					
DC connection type	MC4 (Max. 6 mm²)					
AC connection type	Plug and play					
Grid Compliance	IEC / EN 61000-6-1/2/3/4, IEC 61000-3-2/3/11/12, IEC / EN62109-1/2, IEC 61727, IEC 62116, IEC 61683, IEC 60068-2-1/2/14/30/64/27,IEC TS 62910 , EN50530, AS/NZS 4777.2:2020, VDE-AR-N-4105, DIN VDE0126-1-1/A1, EN50549-1, DEWA, VFR 2019, UTE C15-712-1, PSE NC RfG, UNE 206006/7 IN, MEA/PEA, G98, UNE 217002:2020, NTS V2 TypeA					
Grid Support	LVRT, HVRT,active & reactive power control and power ramp rate control					

*: The inverter enters the standby state when the input voltage ranges between1,000V 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.
** For Germany, max. AC output power: SG5.0RT is 5000VA, SG6.0RT is 6000VA, SG7.0RT is 7000VA, SG8.0RT is 8000VA, SG10RT is 10000VA, SG12RT is 12000VA.
*** For Jordan, max. AC output current: SG10RT is 16 A.

SG15/17/20RT

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

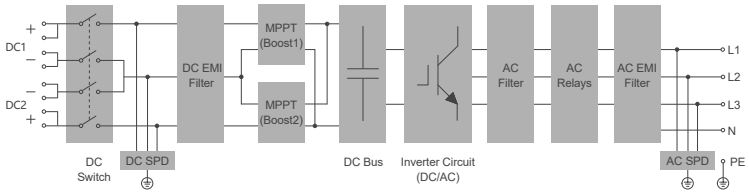
SAFE AND DURABLE

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

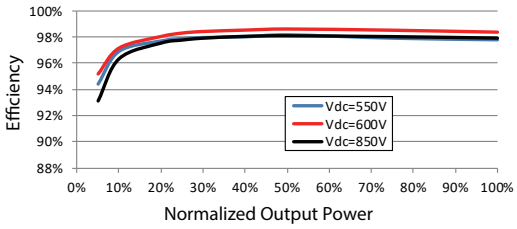
EASY AND USER FRIENDLY

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

CIRCUIT DIAGRAM



EFFICIENCY CURVE



SUNGROW
Clean power for all

Type designation	SG15RT	SG17RT	SG20RT
Input (DC)			
Recommended max. PV input power	22.5 kWp	25.5 kWp	30 kWp
Max. PV input voltage		1100 V *	
Min. PV input voltage / Start-up input voltage		180V / 180V	
Rated input voltage		600 V	
MPP voltage range		160V-1000V	
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. DC short-circuit current		64 A (32 A / 32 A)	
Max. current for DC connector		30 A	
Output (AC)			
Rated AC output power	15000 W	17000 W	20000 W
Max. AC output apparent power	16500 VA**	18700 VA**	22000 VA**
Rated AC output apparent power	16500 VA**	18700 VA**	22000 VA**
Max. AC output current	25 A	28.3 A	31.9 A
Rated AC output current(at 230V)	21.7 A	24.6 A	29 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		180V – 276V / 311V - 478V	
Rated grid frequency		50 Hz / 60 Hz	
Grid frequency range		45 – 55 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		3 / 3	
Efficiency			
Max. efficiency		98.5%	
European efficiency		98.1%	
Protection&Function			
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	
Ground fault monitoring		Yes	
DC switch		Yes	
PV String current monitoring		Yes	
Arc fault circuit interrupter (AFCI)		Yes	
PID recovery function		Yes	
General Data			
Dimensions (W*H*D)		370*480*195 mm	
Weight		21 kg	
Mounting method		Wall-mounting bracket	
Topology		Transformerless	
Degree of protection		IP65	
Night power consumption		< 6 W	
Corrosion		C5	
Operating ambient temperature range		-25 ℃ to 60 ℃	
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 (Max. 6 mm²)	
AC connection type		Plug and play	
Grid Compliance		IEC / EN 61000-6-1/2/3/4, IEC 61000-3-2/3/11/12, IEC / EN62109-1/2, IEC 61727, IEC 62116, IEC 61683, IEC 60068-2-1/2/14/30/64/27,IEC TS 62910 , EN50530, AS/NZS 4777.2:2020, VDE-AR-N-4105, DIN VDE0126-1-1/A1, EN50549-1, DEWA, VFR 2019, UTE C15-712-1, PSE NC RfG, UNE 206006/7 IN, MEA/PEA, G98, UNE 217002:2020, NTS V2 TypeA	
Grid Support		LVRT, HVRT,active & reactive power control and power ramp rate control	

*: The inverter enters the standby state when the input voltage ranges between1,000V 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.
** For Germany, max. AC output power: SG15RT is 15000VA,SG17RT is 17000VA, SG20RT is 20000VA.

SG33/40/50CX

Multi-MPPT String Inverter for 1000 Vdc System

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 diagnosis *
- Fuse free design with smart string current monitoring

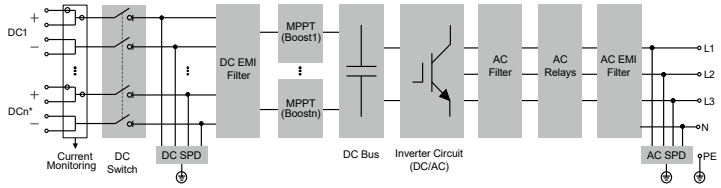
SAVED INVESTMENT

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

PROVEN SAFETY

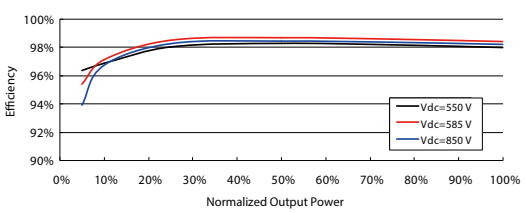
- IP66 and C5 anti-corrosion
- Type II SPD for both DC and AC, DC Type I+II Opt
- Satisfied global safety and grid code

CIRCUIT DIAGRAM



*: n=3(SG33CX)/4(SG40CX)/5(SG50CX)

EFFICIENCY CURVE



SUNGROW
Clean power for all

Type designation	SG33CX	SG40CX	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	3	4	5
No. of PV strings per MPPT		2	
Max. PV input current	3 * 26 A	4 * 26 A	5 * 26 A
Max. DC short-circuit current	3 * 40 A	4 * 40 A	5 * 40 A
Output (AC)			
AC output power	33 kVA @45 ℃, 400Vac / 36.3 kVA @ 40 ℃, 400Vac 33 KVA @ 50 ℃, 415Vac / 36.3 KVA @ 45 ℃, 415Vac	40 kVA @ 45 ℃, 400Vac / 44 kVA @ 40 ℃, 400Vac 40 KVA @ 50 ℃, 415Vac / 44 KVA @ 45 ℃, 415Vac	50 kVA @45 ℃, 400Vac / 55kVA @ 40 ℃, 400Vac 50KVA @ 50 ℃, 415Vac / 55kVA @ 45 ℃,415Vac
Max. AC output current	55.2 A	66.9 A	83.6 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)	
DC current injection		< 0.5 % In	
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 / European efficiency	98.6 % / 98.3 %	98.6% / 98.3%	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	
Overvoltage protection		DC Type II (optional: Type I + II) / AC Type II	
General Data			
Dimensions (W*H*D)	702*595*310mm	782*645*310mm	782*645*310mm
Weight	50 kg	58 kg	62 kg
Topology		Transformerless	
Degree of protection		IP66	
Night power consumption		≤2 W	
Operating ambient temperature range		-30 to 60 ℃ (> 45 ℃ 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 / Optional: WLAN, Ethernet	
DC connection type		MC4 (Max. 6 mm²)	
AC connection type		OT or DT terminal (Max.70 mm²)	
Compliance		IEC 62109, IEC 61727, IEC 62116, IEC 60068, IEC 61683, VDE-AR-N 4105:2018, VDE-AR-N 4110:2018, IEC 61000-6-3, EN 50549-1/2, AS/NZS 4777.2:2015, CEI 0-21 2019, CEI0-16 2019, VDE 0126-1-1/A1 VFR 2019, UTE C15-712-1:2013, DEWA, UNE 206007-1/RD 1699, UNE 217001, Israel certificate, G99	
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
**: The inverter enters the standby state when the input voltage ranges between 1,000 V and 1,100 V. If the maximum DC voltage in the system can exceed 1000 V, the MC4 connectors included in the scope of delivery must not be used. In this case MC4 Evo2 connectors must be used.

SG36/40/50CX-P2

Multi-MPPT String Inverter for 1000 Vdc System

Preliminary

HIGH YIELD

- DC 15A current input, compatiable with over 500W+ PV module
- Dynamic shading optimization mode
- Built-in PID recovery function

SMART O&M

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

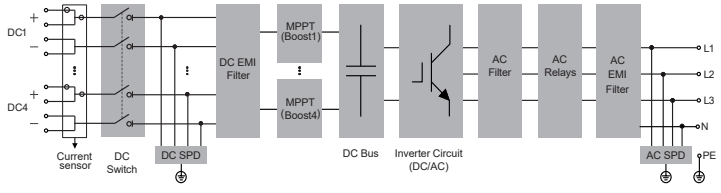
LOWER INVESTMENT

- Easy to handle thanks to 34% weight reduced
- Plug and Play with Buckle Design

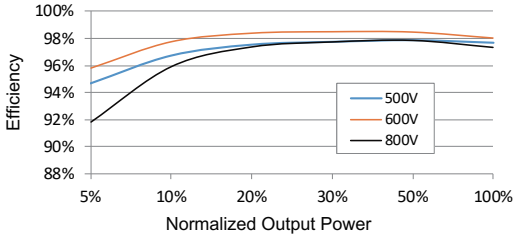
PROVEN SAFETY

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

CIRCUIT DIAGRAM



EFFICIENCY CURVE (SG50CX-P2)



SUNGROW
Clean power for all

Type designation	SG36CX-P2	SG40CX-P2	SG50CX-P2
Input (DC)			
Max. PV input voltage		1100 V	
Min. PV input voltage / Start-up input voltage		160 V / 200 V	
Rated PV input voltage		600 V	
MPP voltage range		160 V - 1000 V	
MPP voltage range for rated power		500V - 800 V	
No. of independent MPP inputs		4	
Max. number of PV strings per MPPT		2	
Max. PV input current		120 A (30 A / 30 A / 30 A / 30 A)	
Max. DC short-circuit current		160 A (40 A / 40 A / 40 A / 40 A)	
Output (AC)			
Rated AC output power	36 kVA	40 kVA	50 kVA
Max. AC output power	40 kVA	44 kVA	55 kVA
Max. AC output current	60.2 A	66.9 A	83.6 A
Rated AC voltage		3 / N / PE, 220 / 380 V, 230 / 400 V	
AC voltage range		312~480 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		3 / 3	
Efficiency			
Max. efficiency		98.50%	
Euro. Efficiency		98.30%	
Protection			
Grid monitoring		Yes	
DC reverse connection 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	
General Data			
Dimensions (W*H*D)		645*575*245 mm	
Weight	40 kg	40 kg	41 kg
Topology		Transformerless	
Ingress protection rating		IP66	
Corrosivity class		C5	
Night power consumption		< 4W	
Operating ambient temperature range		-30 to 60 ℃ (> 45 ℃ derating)	
Allowable relative humidity range (non-condensing)		0 – 100 %	
Cooling method		Smart forced air cooling	
Max. operating altitude		4000 m (> 2000 m derating)	
Display		LED, Bluetooth+APP	
Communication		RS485 / Optional: WLAN, Ethernet	
DC connection type		EVO2 (Max. 6 mm²)	
AC connection type		OT terminal (16~35 mm²)	
AC Cable specification		Outside diameter 18~38mm	
Grid Compliance		IEC 62109, IEC 61727, IEC 62116	
Grid Support		Q at night function, LVRT, HVRT,active & reactive power control and power ramp rate control	
Country of manufacture		China	

*: Only compatible with Sungrow logger and iSolarCloud

SG36/60CX-US

Suitable for 50Hz / 60Hz grid, could be used in North American. Available for hand installation, no need for lifting machinery assistance.

HIGH YIELD

- 4 MPPTs with max. efficiency 98.6%
  6 MPPTs with max. efficiency 98.8%
- Compatible with bifacial modules
- Built-in PID recovery function

SMART O&M

- Touch-free commissioning and firmware upgrade
- Online IV curve scan and diagnosis
- Fuse free design with smart string current monitoring

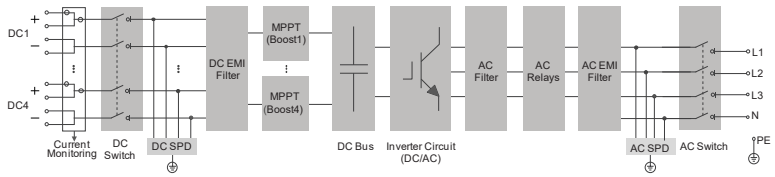
SAVED INVESTMENT

- DC/AC ratio greater than 1.5
- Compatible with Al and Cu AC cables
- Flexible installation from vertical to horizontal

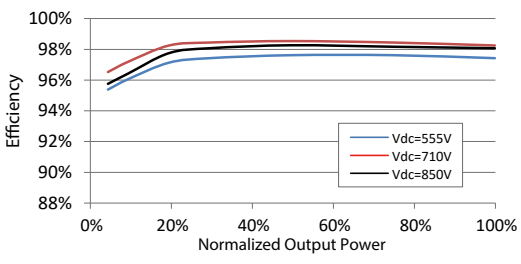
PROVEN SAFETY

- Type 4X and C5 protection rating
- Type II SPD for both DC and AC
- Compliant with UL safety and variety grid codes

CIRCUIT DIAGRAM (SG36CX-US)



EFFICIENCY CURVE (SG36CX-US)



SUNGROW
Clean power for all

Type designation	SG36CX-US	SG60CX-US
Input (DC)		
Max. PV input voltage *	1000 V	
Min. PV input voltage / Start-up input voltage	200 V / 250 V	
Rated PV input voltage	710 V	
MPPT operating voltage range **	200 V – 1000 V	
No. of independent MPP inputs	4	6
No. of PV strings per MPPT	2	
Max. PV input current	26 A * 4	26 A * 6
Max. DC short-circuit current	45 A	
Output (AC)		
Rated AC output power	36kVA @ 113°F (45°C)/30kVA @ 122°F(50°C)	60kVA @ 113°F (45°C)/50kVA @ 122°F(50°C)
Max. AC output apparent power	43.3 A	72.2 A
Rated AC voltage	3 / N / PE, 277 V / 480 V	
AC voltage range	422 V – 528 V	
Rated grid frequency / Grid frequency range	60 Hz / 55 Hz – 65 Hz	
Harmonic (THD)	< 3 % (at nominal power)	
DC current injection	< 0.5 % In	
Power factor at rated power / Adjustable power factor	> 0.99 / 0.8 leading – 0.8 lagging	
Feed-in phases / AC connection	3 / 3	
Efficiency		
Max. efficiency	98.60 %	98.80 %
CEC efficiency	98.00 %	98.00 %
Protection		
DC reverse polarity protection	Yes	
AC short circuit protection	Yes	
Leakage current protection	Yes	
Grid monitoring	Yes	
DC switch	Yes	
AC switch	Yes	
PV string monitoring	Yes	
Arc fault circuit interrupter (AFCI)	Yes	
PID Recovery function	Yes	
Overvoltage protection	DC Type II / AC Type II	
Rapid shutdown	Yes	
General data		
Dimensions (W * H * D)	Inverter: 702 mm * 595 mm * 310 mm (27.6'' * 23.4'' * 12.2'')	Inverter: 782 mm * 645 mm * 310 mm (30.7'' * 25.4'' * 12.2'')
	Wire-Box: 231 mm * 295 mm * 234 mm (9.1'' * 11.6'' * 9.2'')	Wire-Box: 231 mm *2 95 mm * 234 mm (9.1''*11.6''*9.2'')
Weight	54 kg (119.0 lbs)	65 kg (143.3 lbs)
Topology	Transformerless	
Ingress protection rating	Type 4X (NEMA 4X, IP66)	
Night power consumption	< 2 W ***	
Operating ambient temperature range	-30 °C - 60 °C (> 45 °C derating) - 22 °F - 140 °F (> 113°F derating)	
Allowable relative humidity range	0 % – 100 %	
Cooling method	Smart forced air cooling	
Max. operating altitude	4000 m / 13123.4 ft (> 3000 m / 9842.5 ft derating)	
Display	LED, Bluetooth + APP	
Communication	RS485 / optional: WiFi and Ethernet	
Third-Party communication protocol	SunSpec Modbus	
DC connection type	MC4 (#12 - #10 AWG)	
AC connection type	OT (#6 - 2/0 AWG, Cu or Al)	OT (#5 - 2/0 AWG, Cu or Al)
Compliance	UL1741, UL1741 SA/SB, CA Rule 21, IEEE 1547, IEEE 1547.1, CSA C22.2, No.107.1-01, UL 1699B and FCC Part 15, UL1998, Rule 14, NEC 2023, Sunspec Rapid Shutdown	
Grid Support	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

*** Night power consumption excludes the optional power from PID recovery.

SG110CX

Multi-MPPT String Inverter for 1000 Vdc System

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 Diagnosis *
- Fuse free design with smart string current monitoring

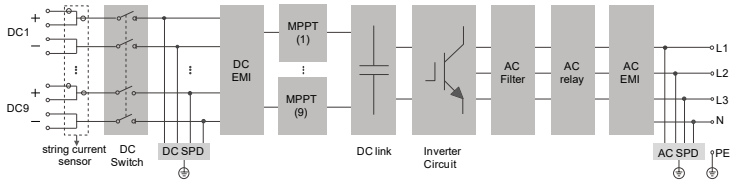
SAVED INVESTMENT

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

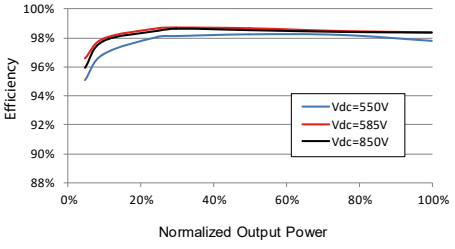
PROVEN SAFETY

- IP66 and C5 protection
- Type II SPD for both DC and AC
- Compliant with global safety and grid code

CIRCUIT DIAGRAM



EFFICIENCY CURVE



SUNGROW
Clean power for all

Type designation	SG110CX
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	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 ℃ / 100 kVA @ 50 ℃
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	98.7 %
European efficiency	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
Surge protection	DC Type II (optional: Type I + II) / AC Type II
General Data	
Dimensions (W*H*D)	1051*660*362.5 mm
Weight	89 kg
Topology	Transformerless
Degree of protection	IP66
Night power consumption	< 2 W
Operating ambient temperature range	-30 to 60 ℃ (> 50 ℃ 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 / Optional: WLAN, Ethernet
DC connection type	MC4 (Max. 6 mm²)
AC connection type	OT / DT terminal (Max. 240 mm²)
Compliance	IEC 62109, IEC 61727, IEC 62116, IEC 60068, IEC 61683, VDE-AR-N 4110:2018, VDE-AR-N 4120:2018, IEC 61000-6-3, EN 50549, AS/NZS 4777.2:2015, CEI 0-21, VDE 0126-1-1/A1 VFR 2014, UTE C15-712-1:2013, DEWA
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
**: 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.

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

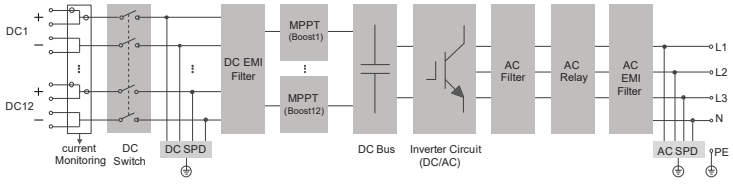
LOWER INVESTMENT

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

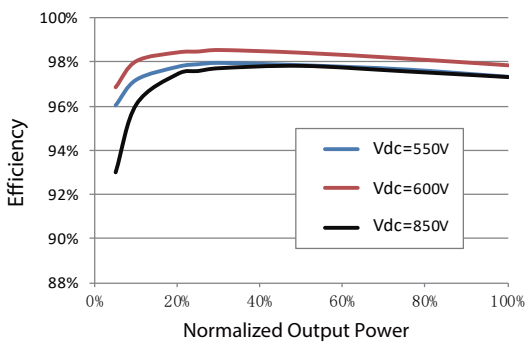
PROVEN SAFETY

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

CIRCUIT DIAGRAM



EFFICIENCY CURVE



SUNGROW
Clean power for all

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
RSD compatibility ***	Optional
General data	
Dimensions (W * H * D)	1020 mm * 795 mm * 360 mm
Weight	≤ 93 kg
Mounting method	Wall-mounting bracket
Topology	Transformerless
Degree of protection	IP66
Night power consumption	< 5 W
Corrosion	C5
Operating ambient temperature range	-30 ℃ - 60 ℃
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 mm²)
AC connection type	OT / DT terminal (Max. 240 mm²)
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 controlramp 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 & RSD compatibility, please consult Sungrow before placing an order

SG350HX

Multi-MPPT String Inverter for 1500 Vdc System

HIGH YIELD

- Up to 16 MPPTs with max. efficiency 99%
- 20A per string, compatible with 500Wp+ module
- Data exchange with tracker system, improving yield

LOW COST

- Q at night function, save investment
- Power line communication (PLC)
- Smart IV Curve diagnosis*,active O&M

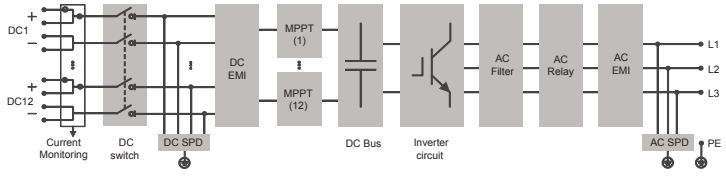
GRID SUPPORT

- SCR≥1.15 stable operation in extremely weak grid
- Reactive power response time <30ms
- Compliant with global grid code

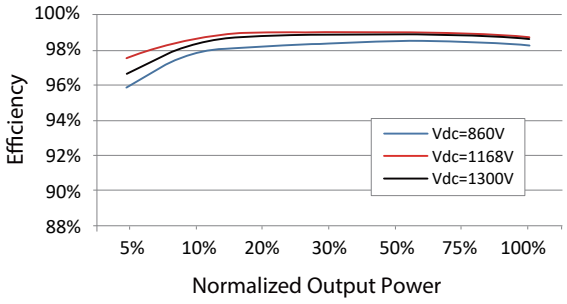
PROVEN SAFETY

- 2 strings per MPPT, no fear of string reverse connection
- 24h real-time AC and DC insulation monitoring

CIRCUIT DIAGRAM



EFFICIENCY CURVE



SUNGROW
Clean power for all

Type designation	SG350HX
Input (DC)	
Max. PV input voltage	1500 V
Min. PV input voltage / Startup input voltage	500 V / 550 V
Nominal PV input voltage	1080 V
MPP voltage range	500 V – 1500 V
No. of independent MPP inputs	12 (Optional: 14 / 16)
Max. number of input connector per MPPT	2
Max. PV input current	12 * 40 A (Optional: 14 * 30 A / 16 * 30 A)
Max. DC short-circuit current per MPPT	60 A
Output (AC)	
AC output power	352 kVA @ 30℃ / 320 kVA @ 40 ℃ / 295 kVA @ 50℃
Max. AC output current	254 A
Nominal AC voltage	3 / PE, 800 V
AC voltage range	640 – 920 V
Nominal grid frequency / Grid frequency range	50 Hz / 45 – 55 Hz, 60 Hz / 55 – 65 Hz
THD	< 3 % (at nominal power)
DC current injection	< 0.5 % In
Power factor at nominal power / Adjustable power factor	> 0.99 / 0.8 leading – 0.8 lagging
Feed-in phases / Connection phases	3 / 3
Efficiency	
Max. efficiency / European efficiency	99.02 % / 98.8 %
Protection	
DC reverse connection protection	Yes
AC short circuit protection	Yes
Leakage current protection	Yes
Grid monitoring	Yes
Ground fault monitoring	Yes
DC switch / AC switch	Yes / No
PV string current monitoring	Yes
Q at night function	Yes
Anti-PID and PID recovery function	Optional
Surge protection	DC Type II / AC Type II
General Data	
Dimensions (W*H*D)	1136 * 870 * 361 mm
Weight *	≤ 116 kg
Isolation method	Transformerless
Degree of protection	IP66
Power consumption at night	< 6 W
Operating ambient temperature range	-30 to 60℃
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 / PLC
DC connection type	MC4-Evo2 (Max. 6 mm², optional 10mm²)
AC connection type	Support OT/DT terminal (Max. 400 mm²)
Compliance	IEC 62109, IEC 61727, IEC 62116, IEC 60068, IEC 61683, VDE-AR-N 4110:2018, VDE-AR-N 4120:2018, EN 50549-1/2, UNE 206007-1:2013, P.O.12.3, UTE C15-712-1:2013
Grid Support	Q at night function, LVRT, HVRT, active & reactive power control and power ramp rate control, Q-U control, P-f control

* Due to the multi-supplier for some key components, the actual weight may have a ±10% deviation, please refer to the actually delivered product.

SG350HX-US

Multi-MPPT String Inverter for 1500 Vdc System

HIGH YIELD

- Up to 16 MPPTs with max. efficiency 99.02%
- 20A per string, compatible with 500Wp+ module
- Data exchange with tracker system, improving yield

LOW COST

- Q at night function, save investment
- Power line communication (PLC)
- Smart IV Curve diagnosis, active O&M

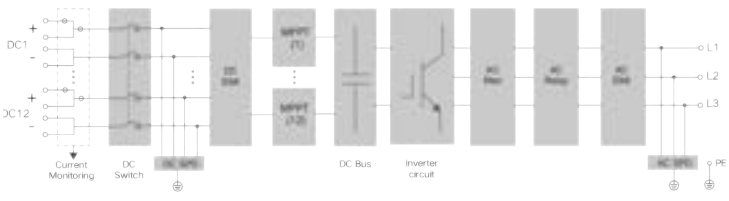
GRID SUPPORT

- SCR≥1.15 stable operation in extremely weak grid
- Reactive power response time <30ms

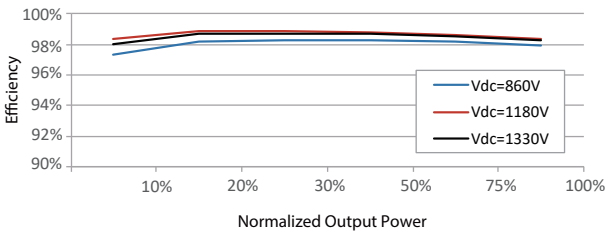
PROVEN SAFETY

- 2 strings per MPPT, no fear of string reverse connection
- 24h real-time AC and DC insulation monitoring

CIRCUIT DIAGRAM



EFFICIENCY CURVE



SUNGROW
Clean power for all

Type designation	SG350HX-US
Input (DC)	
Max. PV input voltage	1500 V
Min. PV input voltage / Startup input voltage	500 V / 550 V
Nominal PV input voltage	1180 V
MPP voltage range	500 V – 1500 V
Full Power MPP Voltage Range @ 40 ℃	860 V – 1330 V *
No. of independent MPP inputs	12 (optional : 16)
Max. number of input connector per MPPT	2
Max. PV input current	12 * 40 A (Optional: 16 * 30 A)
Max. DC short-circuit current per MPPT	60 A
Output (AC)	
AC output power	352 kVA @ 30℃ / 320 kVA @ 40 ℃
Max. AC output current	254 A
Nominal AC voltage	3 / PE, 800 V
AC voltage range	704 V – 880 V
Nominal grid frequency / Grid frequency range	60 Hz / 55 Hz – 65 Hz
THD	< 3 % (at nominal power)
DC current injection	< 0.5 % In
Power factor at nominal power / Adjustable power factor	> 0.99 / 0.8 leading – 0.8 lagging
Feed-in phases / Connection phases	3 / 3
Efficiency	
Max. efficiency / CEC efficiency	99.02 % / 98.5 %
Protection	
DC reverse connection protection	Yes
AC short circuit protection	Yes
Leakage current protection	Yes
Grid monitoring	Yes
Ground fault monitoring	Yes
DC switch / AC switch	Yes / No
PV string current monitoring	Yes
Q at night function	Yes
Anti-PID and PID recovery function	Optional **
Surge protection	DC Type II / AC Type II
General data	
Dimensions (W * H * D)	1165 mm * 870 mm * 361 mm (45.9'' * 34.3'' * 14.2'')
Weight	≤ 123 kg (≤ 272 lbs)
Isolation method	Transformerless
Degree of protection	IP66 (NEMA 4X)
Power consumption at night	< 6 W
Operating ambient temperature range	-30 ℃ to 60 ℃ (- 22 ℉ to 140 ℉)
Allowable relative humidity range	0 % – 100 %
Cooling method	Smart forced air cooling
Max. operating altitude	4000 m (> 3000 m derating) / 13123 ft (> 9843 ft derating)
Display	LED, Bluetooth+APP
Communication	RS485 / PLC **
DC connection type	MC4 (Max. 10AWG, optional 8AWG)
AC connection type	Support OT / DT terminal (Max. 750 Kcmil)
Compliance	UL 1741, UL 62109-1, CSA C22.2 No.107.1-16, IEEE 1547-2018, IEEE 1547.1-2020, UL 1741 SA/SB, California Rule21, HECO SRD V2.0
Grid Support	Q at night function, LVRT, HVRT,active & reactive power control and power ramp rate control, Q-U control, P-f control

* Full power MPP range is temperature dependent, check the characteristic curve of the inverter for more information.
**These two functions require the customer to purchase Sungrow's MVS3200/4480-US to be implemented.