

RESIDENTIAL PV/ ESS PLANT

SYSTEM SOLUTIONS



ABOUT SUNGROW

Sungrow Power Supply Co., Ltd. ("Sungrow") is the world's most bankable inverter brand with over 405 GW installed worldwide as of June 2023. Founded in 1997 by University Professor Cao Renxian, Sungrow is a leader in the research and development of solar inverters with the largest dedicated R&D team in the industry and a broad product portfolio offering PV inverter solutions and energy storage systems for utility-scale, commercial & industrial, and residential applications, as well as internationally recognized floating PV plant solutions, NEV driving solutions, EV charging solutions and renewable hydrogen production systems. With a strong 26-year track record in the PV space, Sungrow products power over 150 countries worldwide.

As a leader in innovation in the solar industry, Sungrow possesses a dynamic technical R&D team which consists of over 3600 employees. The Company has also invested in its own in-house testing center approved by SGS, CSA, and TÜV Rheinland. Sungrow has the world's largest inverter factory, with a global annual production capacity of 305 GW, including 25 GW outside China.

Offering a wide range of solutions and services, Sungrow is committed to providing clean power for all and is steadfast in its efforts to become the global leader in clean power conversion technology. Learn more about Sungrow by visiting www.sungrowpower.com.

The World's Most Bankable Inverter Brand

No.1 bankable for 4 consecutive years
The only inverter supplier ranked **100%** bankable

Source: BloombergNEF

26

Years in the
Solar Industry

6000

Patent
applications

150⁺

Countries with Sungrow
Installations

NO.1

Largest PV Inverter
R&D Team





NO.1

2022 Inverter Shipments

Source: IHS Market now a part of S&P Global estimates

405GW⁺

Deployed Worldwide

As of June 2023

305GW

Inverter & converter
Annual Capacity

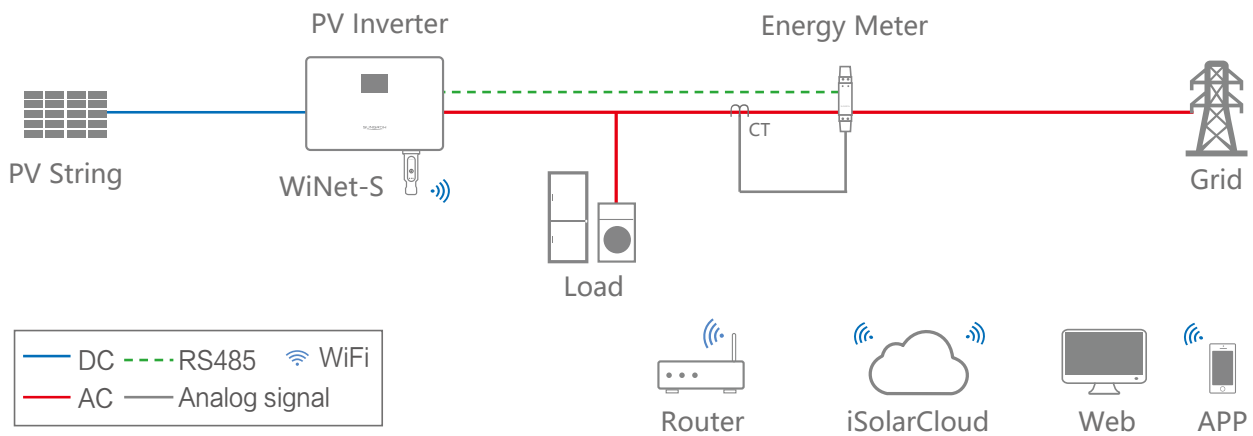
30GWh

Annual Capacity of ESS &
Energy Storage Battery Pack

RESIDENTIAL PV PLANT SYSTEM SOLUTION



Solar System for Your Home



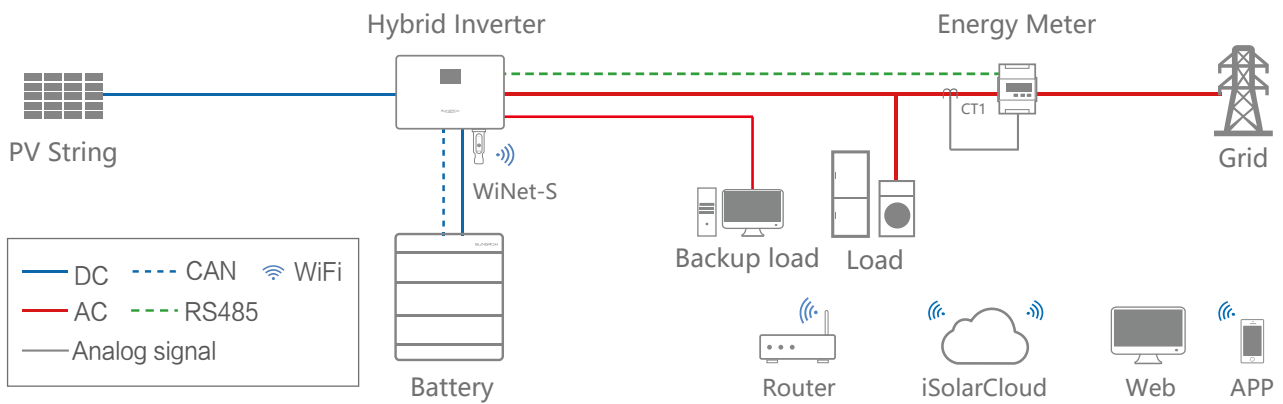
Recommended Products



RESIDENTIAL ENERGY STORAGE SYSTEM SOLUTION



Solar Batteries for Your Home



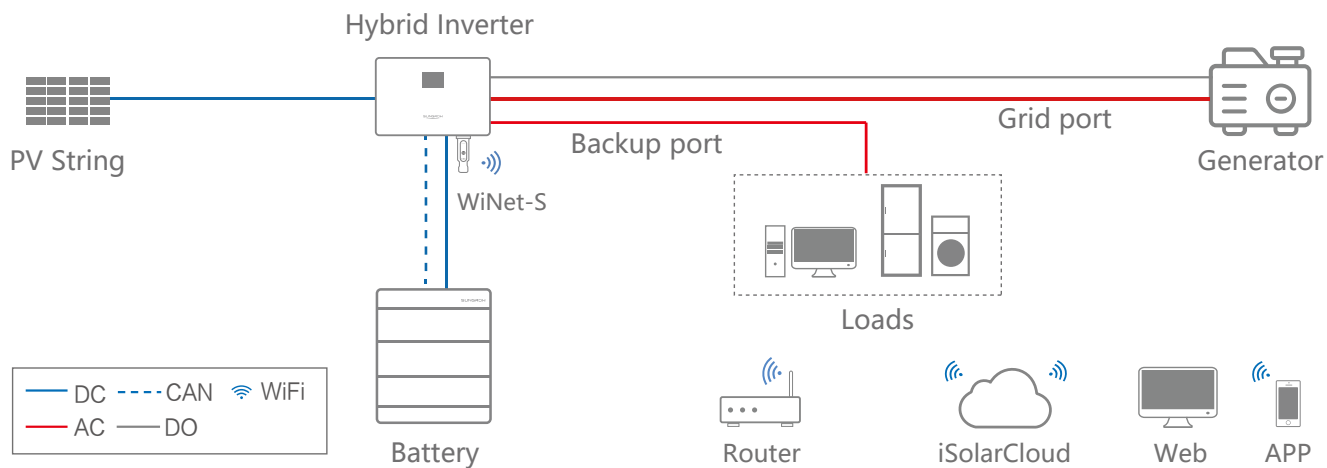
Recommended Products



RESIDENTIAL ENERGY STORAGE SYSTEM SOLUTION



Off-grid solution



Recommended Products



SH5.0/6.0RS



SBR064 - 192

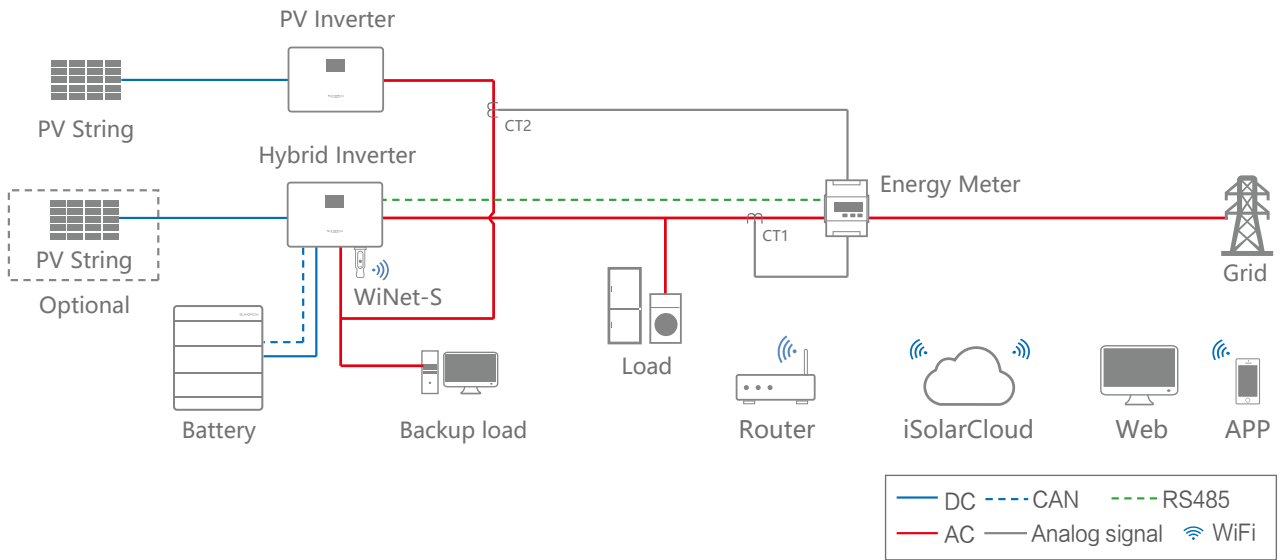


WiNet-S

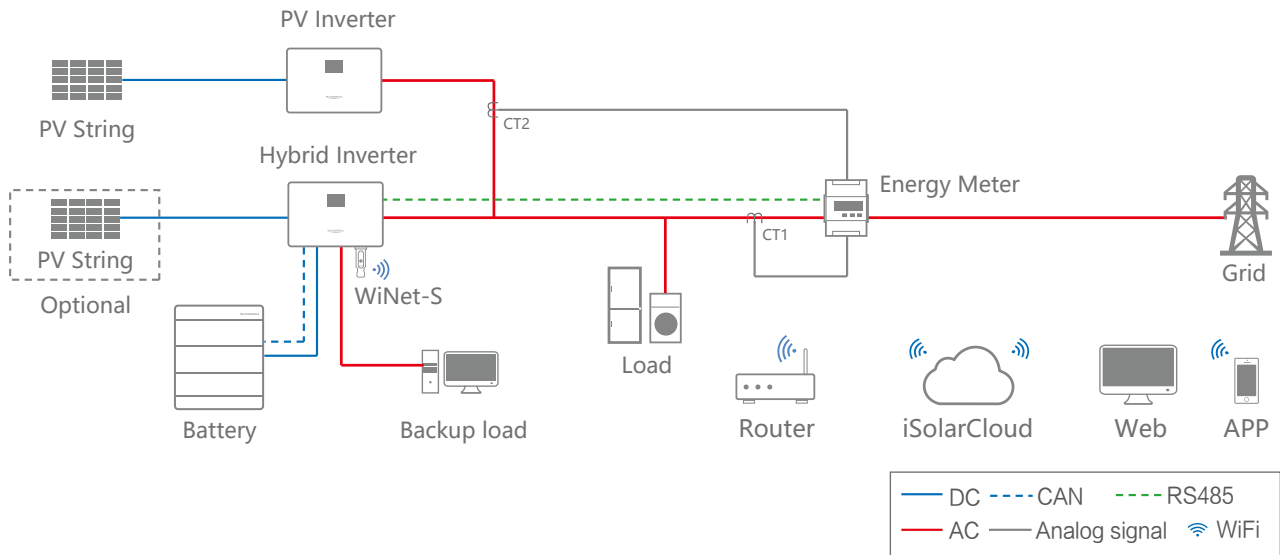


iSolarCloud

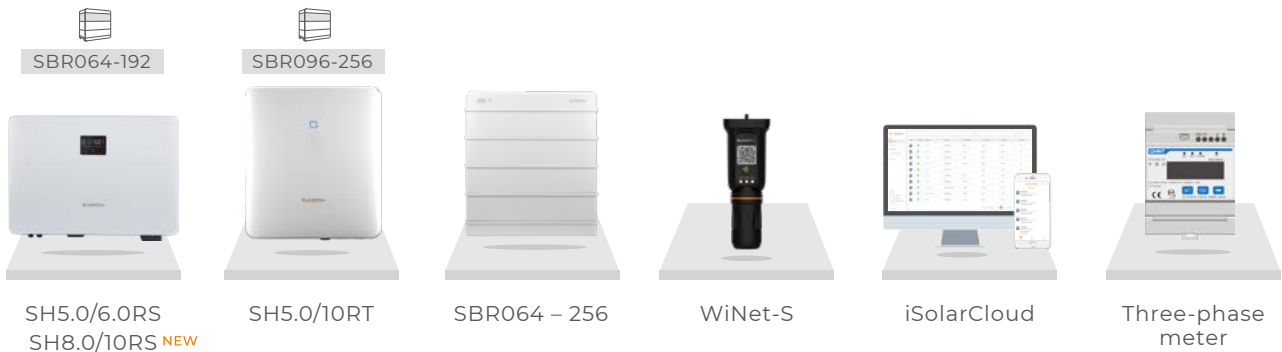
Backup Port Retrofitting Solution



On-grid Port Retrofitting Solution



Recommended Products



SG2.0RS-S

Single-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



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

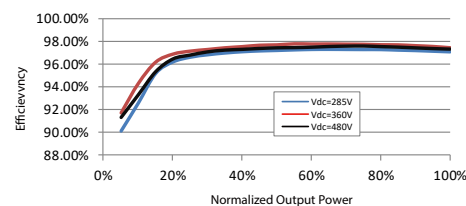
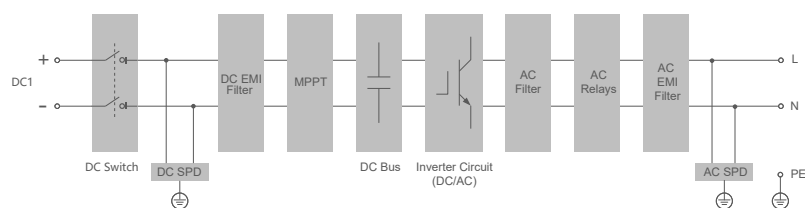


SMART MANAGEMENT

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

CIRCUIT DIAGRAM

EFFICIENCY CURVE



Type designation	SG2.0RS-S
Input (DC)	
Recommended max. PV input power	3 kWp
Max. PV input voltage	600 V
Min. PV input voltage / Startup input voltage	40 V / 50 V
Rated PV input voltage	360 V
MPP voltage range	40 – 560 V
No. of independent MPP inputs	1
No. of PV strings per MPPT	1
Max. PV input current	16 A
Max. DC short-circuit current	20 A
Max. current for DC connector	30A
Output (AC)	
Rated AC output power	2000 W
Max. AC output apparent power	2000 VA
Rated AC output apparent power	2000 VA
Max. AC output current	9.1 A
Rated AC output current (at 230V)	8.7 A
Rated AC voltage	220 / 230 / 240 V
AC voltage range	154 – 276 V
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	1 / 1
Efficiency	
Max. efficiency / European efficiency	97.8 % / 96.9 %
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
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)	320 * 225* 120 mm
Weight	6kg
Mounting method	Wall-mounting bracket
Topology	Transformerless
Degree of protection	IP65
Corrosion	C5
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. 6 mm ²) *
Grid compliance	IEC / EN62109-1/2, IEC / EN62116, IEC / EN61727, IEC / EN61000-6-2/3, EN50549-1, AS/NZS 4777.2:2020, 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
Country of manufacture	China

* Country code needs to be set before grid connection



SG3.0/5.0RS

Double-MPPT String Inverter for 600 Vdc System

AU



HIGH YIELD

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



SAFE AND RELIABLE

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



USER FRIENDLY SETUP

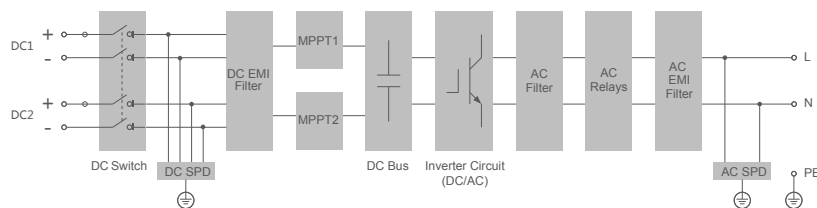
- Plug and play installation*
- One-click access to iSolarCloud monitoring platform
- Light and compact with optimized heat dissipation design



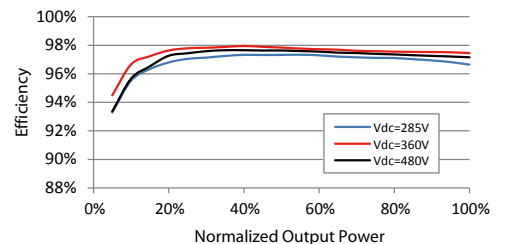
SMART MANAGEMENT

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

CIRCUIT DIAGRAM



EFFICIENCY CURVE



Type designation	SG3.0RS	SG5.0RS
Input (DC)		
Recommended max. PV input power	4.5 kWp	7.5 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 – 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	4999 W
Max. AC Output power	3000 VA	4999 VA
Rated AC output apparent power	3000 VA	4999 VA
Rated AC output current (at 230V)	13.1 A	21.7 A
Max. AC output current	13.7 A	21.7 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 / European efficiency	97.9 % / 97.0 %	97.9 % / 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)	410* 270* 150mm	
Weight	10 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. 6 mm ²) *	
Grid compliance	IEC / EN62109-1/2, IEC / EN62116, IEC / EN61727, IEC / EN61000-6-2/3, EN50549-1, AS4777.2:2020, 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	
Country of manufacture	China	

* Country code needs to be set before grid connection



SG5.0RS-ADA

Multi-MPPT String Inverter for 600 Vdc System



HIGH YIELD

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



SAFE AND RELIABLE

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



USER FRIENDLY SETUP

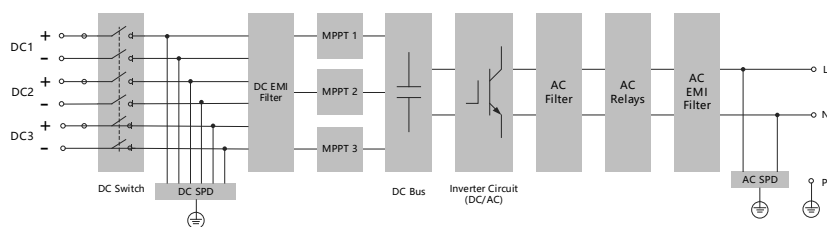
- Plug and play installation *
- One-click access to iSolarCloud monitoring platform
- Light and compact with optimized heat dissipation design



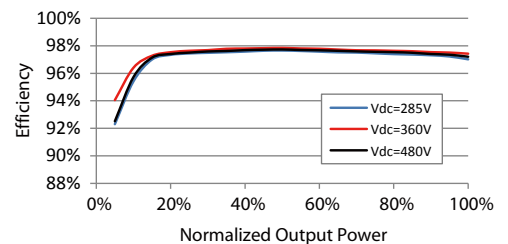
SMART MANAGEMENT

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

CIRCUIT DIAGRAM



EFFICIENCY CURVE



Type designation	SG5.0RS-ADA
Input (DC)	
Recommended max. PV input power	7.5 kWp
Max. PV input voltage	600 V
Min. PV input voltage / Startup input voltage	40 V / 50 V
Rated PV input voltage	360 V
MPP voltage range	40 – 560 V
No. of independent MPP inputs	3
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)
Max. current for DC connector	30A
Output (AC)	
Rated AC output power	4999 W
Max. AC output apparent power	4999 VA
Rated AC output apparent power	4999 VA
Max. AC output current	22.7 A
Rated AC output current (at 230V)	21.7 A
Rated AC voltage	220 / 230 / 240V
AC voltage range	154 – 276 V
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	1 / 1
Efficiency	
Max. efficiency / European efficiency	97.8 % / 96.9 %
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
Ground fault monitoring	Yes
DC switch	Yes
PV string current monitoring	Yes
Arc fault circuit interrupter (AFCI)	Yes
PID recovery function	Yes
DC terminal protective cove	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
Corrosion	C5
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 62109-1/2, AS/NZS 4777.2:2020
Grid Support	Active & reactive power control and power ramp rate control
Country of manufacture	China

* Country code needs to be set before grid connection



SG8.0/10RS

Multi-MPPT String Inverter for 600 Vdc System

ADA



HIGH YIELD

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



SAFE AND RELIABLE

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



USER FRIENDLY SETUP

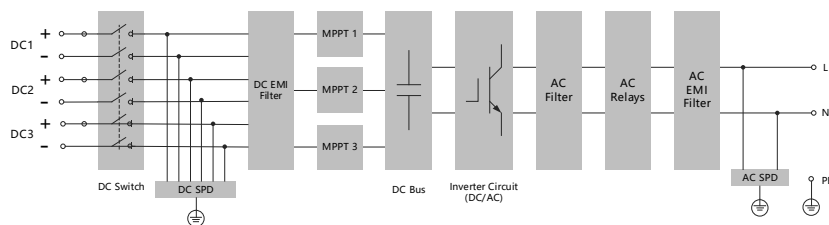
- Plug and play installation *
- One-click access to iSolarCloud monitoring platform
- Light and compact with optimized heat dissipation design



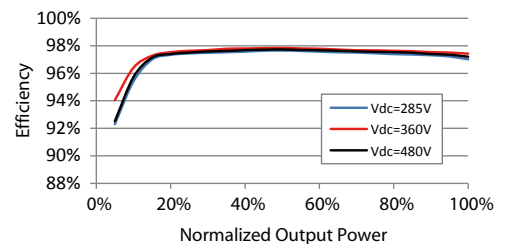
SMART MANAGEMENT

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

CIRCUIT DIAGRAM



EFFICIENCY CURVE



Type designation	SG8.0RS	SG10RS
Input (DC)		
Recommended max. PV input power	12 kWp	15 kWp
Max. PV input voltage	600 V	
Min. PV input voltage / Startup input voltage	40 V / 50 V	
Rated PV input voltage	360 V	
MPP voltage range	40 – 560 V	
No. of independent MPP inputs	3	
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)	
Max. current for DC connector	30A	
Output (AC)		
Rated AC output power	8000 W	9999 W
Max. AC output apparent power	8000 VA	9999 VA
Rated AC output apparent power	8000 VA	9999 VA
Max. AC output current	36.4 A	43.5 A
Rated AC output current (at 230V)	34.8 A	45.5 A
Rated AC voltage	220 / 230 / 240V	
AC voltage range	154 – 276 V	
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	1 / 1	
Efficiency		
Max. efficiency / European efficiency	97.8 % / 97.3 %	97.8 % / 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	
Ground fault monitoring	Yes	
DC switch	Yes	
PV string current monitoring	Yes	
Arc fault circuit interrupter (AFCI)	Yes	
PID recovery function	Yes	
DC terminal protective cove	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	
Corrosion	C5	
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 62109-1/2, AS/NZS 4777.2:2020	
Grid Support	Active & reactive power control and power ramp rate control	
Country of manufacture	China	

* Country code needs to be set before grid connection



SG5.0/7.0/8.0/10/15/20RT

Multi-MPPT String Inverter for 1000 Vdc System

AU



HIGH YIELD

- Lower startup & wider MPPT voltage
- Compatible with 500W+ PV modules
- Built-in PID recovery function



SMART MANAGEMENT

- 24/7 Live Monitoring
- Remote firmware updates
- Smart IV curve scanning



SAFE AND DURABLE

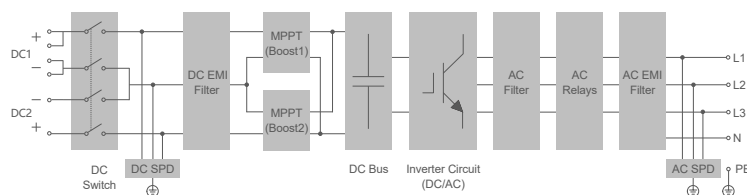
- Quick arc fault circuit interrupter
- Build-in Type II DC&AC SPD
- C5 anti-corrosion & IP65



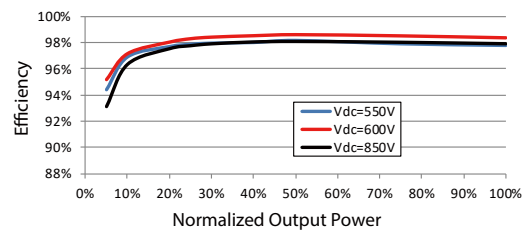
EASY AND USER FRIENDLY

- Light and compact design
- Plug and play connectors
- Fast and easy commissioning via App

CIRCUIT DIAGRAM (SG10RT)



EFFICIENCY CURVE



Type designation	SG5.0RT	SG7.0RT	SG8.0RT	SG10RT	SG15RT	SG20RT
Input (DC)						
Recommended max. PV input power	7.5 kWp	10.5 kWp	12 kWp	15 kWp	22.5 kWp	30 kWp
Max. PV input voltage	1100 V *					
Min. PV input voltage / Start-up input voltage	180 V / 180 V					
Rated PV 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 / 2	
Max. PV input current	32 A (16 A / 16 A)	48 A (32 A / 16 A)			64 A (32 A / 32 A)	
Max. DC short-circuit current	40 A (20 A / 20 A)	60 A (40 A / 20 A)			80 A (40 A / 40 A)	
Output (AC)						
Rated AC output power (@230V, 50Hz)	5000 W	6999 W	8000 W	9999 W	15000 W	20000 W
Max. AC output apparent power	5000 VA	6999 VA	8000 VA	9999 VA	15000 VA	20000 VA
Rated AC output apparent power	5000 VA	6999 VA	8000 VA	9999 VA	15000 VA	20000 VA
Max. AC output current	7.6 A	10.6 A	12.2 A	15.2 A	22.7 A	30.3 A
Rated AC output current (at 230 V)	7.2A	10.1 A	11.6 A	14.5 A	21.7 A	29 A
Rated AC voltage	3 / N / PE, 230 / 400 V					
AC voltage range	180 V – 276 V / 311 V - 478 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 / AC connection	3 / 3 - N - PE					
Efficiency						
Max. efficiency	98.40 %	98.40 %	98.50 %	98.50 %	98.50 %	98.50 %
European efficiency	97.40 %	97.70 %	97.80 %	97.90 %	98.10 %	98.10 %
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					
DC switch	YES					
Arc fault circuit interrupter (AFCI)	YES					
PID recovery function	YES					
General Data						
Dimensions (W * H * D)	370 mm * 480 mm * 195 mm					
Weight	18 kg			22 kg		
Mounting method	Wall-mounting bracket					
Topology	Transformerless					
Degree of protection	IP65					
Corrosion	C5					
Operating ambient temperature range	-25 °C to 60 °C					
Allowable relative humidity range (non-condensing)	0% to 100%					
Cooling method	Natural cooling			Smart forced air cooling		
Max. operating altitude	4000 m					
Display	LED					
Communication	WLAN / Ethernet / RS485 / DI / DO					
DC connection type	MC4 (Max. 6 mm ²)					
AC connection type	Plug and play					
Grid compliance	IEC 62109-1/2, AS/NZS 4777.2: 2020					
Country of manufacture	China					

* 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.



SH5.0/6.0RS

Residential Hybrid Single Phase Inverter

NEW



FLEXIBLE APPLICATION

- 80~460 V wide battery voltage range
- Ideal for both retrofitting and new installations
- Built-in smart PID Zero function *



ENERGY INDEPENDENCE

- Seamless transition to backup mode, for protection against power outages
- Fast Charging or discharging, enabling higher self-consumption results
- Built-in EMS with advanced customization



USER FRIENDLY SETUP

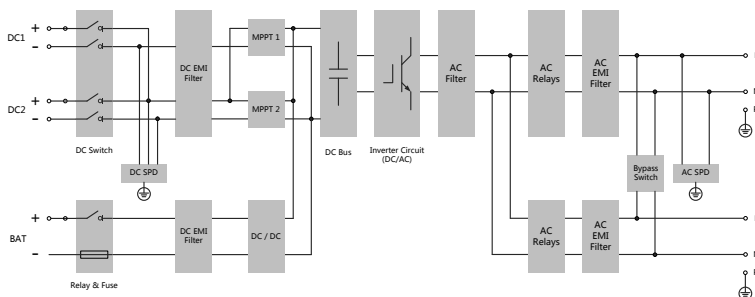
- Plug and play installation **
- iSolarCloud monitoring available on App and Web
- Lightweight and compact, optimized for heat-dissipation



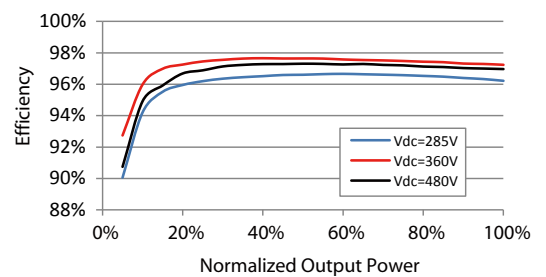
SMART MANAGEMENT

- 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 (SH6.0RS)



Type designation	SH5.0RS	SH6.0RS
Input (DC)		
Recommended max. PV input power	12000 Wp	13000 Wp
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	40V – 560 V	
No. of independent MPP inputs	2	
No. of PV strings per MPPT	1/1	
Max. PV input current	32 A (16 A / 16 A)	
Max. DC short-circuit current	40 A (20 A / 20 A)	
Max. current for input connector	20 A	
Battery Data		
Battery type	Li-ion battery	
Battery voltage	80 V – 460 V	
Max charge / discharge current	30 A / 30 A	
Max charge / discharge power	6600 W	
Input / Output (AC)		
Max. AC power from grid	12000 VA	13000 VA
Rated AC output power	4999 W	6000 W
Max. AC output apparent power	4999 VA	6000 VA
Rated AC output apparent power	4999 VA	6000 VA
Rated AC output current (at 230V)	21.7 A	26.1 A
Max. AC output current	22.7 A	27.3 A
Rated AC voltage	230 V	
AC voltage range	154 V – 276 V	
Rated grid frequency	50 Hz / 60 Hz	
Grid frequency range	45 Hz – 55 Hz / 55 Hz – 65 Hz	
Harmonic (THD)	< 3 % (of rated power)	
Power factor at rated power / Adjustable power factor	> 0.99 at default value at rated power	
Feed-in phases / connection phases	1/1	
Backup Data (on-grid mode)		
Rated output power for backup load	6000 W	
Rated output current for backup load	27.3 A	
Backup Data (off-grid mode)		
Rated voltage	230V (±2 %)	
Rated grid frequency	50 Hz / 60 Hz (±0.2 %)	
Output voltage harmonic (THD)	< 2 %	
Switch time to emergency mode	< 10 ms	
Rated output power	5000 W / 5000 VA	6000 W / 6000 VA
Peak output power	8400 VA, 10 s	
Efficiency		
Max. efficiency / European efficiency	97.7 % / 97.3 %	
Protection & Function		
Grid monitoring	Yes	
DC reverse polarity protection	Yes	
AC short circuit protection	Yes	
Leakage current protection	Yes	
DC switch(solar)	Yes	
DC Overcurrent Protection (Battery)	Yes	
Surge Protection	DC Type II / AC Type II	
PID recovery function	Yes	
Parallel operation on grid port / Max. No of inverters	Master-slave mode / 3	
Battery input reverse polarity protection	Yes	
General Data		
Topology (Solar / Battery)	Transformerless / Transformerless	
Degree of protection	IP65	
Dimensions (W * H * D)	490 * 340 * 170 mm	
Weight	18.5 kg	
Mounting method	Wall-mounting bracket	
Operating ambient temperature range	-25 °C to 60 °C	
Allowable relative humidity range(Non-condensing)	0 % – 100 %	
Cooling method	Natural convection	
Max. operating altitude	4000 m	
Display	LED digital display & LED indicator	
Communication	RS485 / Ethernet / WLAN / CAN	
DI / DO	DI * 4 / DO * 1 / DRM	
DC connection type	MC4 (PV) / Evo2 Compatible (Battery)	
AC connection type	Plug and Play ***	
Grid compliance	IEC 62109-1/2, IEC 62477-1, AS/NZS 4777.2:2020	
Country of manufacture	China	

* Only for P-type PV module

** Country code needs to be set before grid connection

*** AC Connector brand is Phoenix Contact and compatible brand



SH8.0/10RS

Residential Hybrid Single Phase Inverter



AU



FULL BACKUP

- Built-in 63A bypass for full house backup
- 10ms seamless switch
- Peak output up to 13680VA(10s) in backup mode



FLEXIBLE APPLICATION

- Up to 200% PV input with 4 MPPTs
- 50A fast charge / discharge current
- VPP Ready



FRIENDLY INSTALLATION

- Plug & Play installation
- Free online monitoring to enhance energy management



SAFE AND DURABLE

- Support precise AFCI
- IP65/C5



Type designation	SH8.0RS	SH10RS
Input (DC)		
Recommended max. PV input power	16000 Wp	20000 Wp
Max. PV input voltage		600 V
Min. PV input voltage / Startup input voltage		40 V / 50 V
Rated PV input voltage		360 V
MPPT voltage range*		40 V – 560 V
No. of independent MPP trackers		4
No. of PV strings per MPPT		1 / 1 / 1 / 1
Max. PV input current		64 A (16 A / 16 A / 16 A / 16 A)
Max. DC short-circuit current		80 A (20 A / 20 A / 20 A / 20 A)
Battery data		
Battery type		Li-ion battery
Battery voltage range		80 V – 460 V
Max. charge / discharge current		50 A ** / 50 A **
Max. charge / discharge power		10000 W / 10000 W
Input and output (AC)		
Max. AC power from grid		14500 VA ***
Rated AC output power	8000 W	9999 W
Max. AC output apparent power	8000 VA	9999 VA
Max. AC output current	36.4 A	45.5 A
Rated AC voltage		1 / N / PE, 220 V / 230 V / 240V
AC voltage range		154 V – 276 V
Rated grid frequency		50 Hz / 60 Hz
Grid frequency range		45Hz - 55 Hz / 55 Hz - 65 Hz
Harmonic (THD)		< 3 % (of 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
Backup data (on grid mode)		
Max. output power for backup load		14500 W ***
Max. output current for backup load		63 A
Backup data (off-grid mode)		
Rated voltage		1 / N / PE, 220 V / 230 V / 240 V (± 2 %)
Rated frequency		50 Hz / 60 Hz (± 0.2 %)
THDV(@Linear load)		< 2 %
Backup switch time		< 10 ms
Rated output power	8000 W / 8000 VA	10000 W / 10000 VA
Peak output power		13680 VA, 10 s
Efficiency		
Max. efficiency / European efficiency	97.4 % / 96.8 %	97.5 % / 97.1 %
Protection & Function		
Grid monitoring		Yes
DC reverse polarity protection		Yes
AC short-circuit protection		Yes
Leakage current protection		Yes
DC switch (solar)		Yes
Surge Protection		DC Type II / AC Type II
PID Zero		Yes
Battery input reverse polarity protection		Yes
General data		
Topology (solar / battery)		Transformerless / Transformerless
Degree of protection		IP65
Dimensions (W * H * D)		605 * 435 * 181 mm
Weight		29 kg
Mounting method		Wall-mounting bracket
Operating ambient temperature range		-25 °C to 60 °C
Allowable relative humidity range(Non-condensing)		0 % - 100 %
Cooling method		Natural convection
Max. operating altitude		4000 m
Noise (Typical)		35 dB (A)
Display		LED digital display and LED indicator
Communication		RS485, WLAN, Ethernet, CAN
DI / DO		DI * 4 / DO * 2 / DRMO
DC connection type	MC4 (PV, Max.6mm ²) / Plug and play connector (battery, Max.10mm ²)	
AC connection type		Plug and play connector (Max.16mm ²)
Compliance		IEC 62109-1, IEC 62109-2, IEC 62477-1, IEC61000-6-1/-2/-3/-4, IEC62920, EN55011, CISPR 11, AS/NZS 4777.2:2020, NRS 097
Country of manufacture		China

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

** Depending on the connected battery

***Please refer to the user manual and modify the settings based on actual load power



SH5/10T

Hybrid Three Phase Inverter

NEW



FULL BACKUP

- Built-in 63A bypass for full house backup
- 10ms seamless switch



FLEXIBLE APPLICATION

- Support 100% unbalance output in backup and on grid mode
- Max. 16A DC input current per string
- 50A fast charge/ discharge current



FRIENDLY INSTALLATION

- Plug & Play installation
- Quiet operation for indoor or outdoor installation



SAFE AND DURABLE

- Support precise AFCI
- IP65/C5



Type designation	SH5T	SH10T
Input (DC)		
Recommended max. PV input power	10000 Wp	20000 Wp
Max. PV input voltage		1000 V
Min. PV input voltage / Startup input voltage		150 V / 180 V
Rated PV input voltage		600 V
MPPT voltage range*		150 V - 950 V
No. of independent MPP trackers		2
No. of PV strings per MPPT	1 / 1	2 / 1
Max. PV input current	32 A (16 A / 16 A)	48 A (32 A / 16 A)
Max. DC short-circuit current	40 A (20 A / 20 A)	60 A (40 A / 20 A)
Max. current for input connector		30A
Battery Data		
Battery type		Li-ion battery
Battery voltage		100 V - 700 V
Max. charge / discharge current		50 A ** / 50 A **
Max. charge / discharge power	15000 W / 5000 W	15000 W / 10000 W
Input / Output (AC)		
Max. AC power from grid		43000VA****
Rated AC output power	5000 W	9999 VA
Max. AC output apparent power	5000 VA	15.2 A
Max. AC output current	7.6 A	
Rated AC voltage		3 / N / PE, 220 V / 380 V; 230 V / 400 V; 240 V / 415 V
AC voltage range		270 V - 480 V
Rated grid frequency		50 Hz / 60 Hz
Grid frequency range		45Hz - 55 Hz / 55 Hz - 65 Hz
Harmonic (THD)		< 3 % (of rated power)
Power factor at Rated power / Adjustable power factor		> 0.99 / 0.8 leading to 0.8 lagging
Feed-in phases/connection phases		3 / 3-N-PE
Backup data (on grid mode)		
Max. output power for backup load		43000 W***
Max. output current for backup load		3 * 63 A
Backup data (off-grid mode)		
Rated voltage		3 / N / PE, 220 / 380 V; 230 / 400 V; 240 / 415 V (± 2 %)
Rated frequency		50 Hz / 60 Hz (± 0.2 %)
THDV(@Linear load)		< 2 %
Backup switch time		< 10 ms
Rated output power	5000W / 5000VA	10000W / 10000 VA
Peak output power ****	10000 W / 10000 VA, 10 s	15000 W / 15000 VA, 10 s
Efficiency		
Max. efficiency / European efficiency	97.9 % / 97.2 %	98.0 % / 97.5 %
Protection & Function		
Grid monitoring		Yes
DC reverse polarity protection		Yes
AC short-circuit protection		Yes
Leakage current protection		Yes
DC switch (solar)		Yes
Surge Protection		DC Type II / AC Type II
PID Zero		Yes
Battery input reverse polarity protectio		Yes
General data		
Topology (solar / battery)		Transformerless / Transformerless
Degree of protection		IP65
Dimensions (W * H * D)		620 mm * 480 mm * 195 mm
Weight		32 kg
Mounting method		Wall-mounting bracket
Operating ambient temperature range		-25 °C to 60 °C
Allowable relative humidity range(Non-condensing)		0 % - 100 %
Cooling method		Natural convection
Max. operating altitude		2000
Noise(Typical)		35 dB (A)
Display		LED
Communication		RS485, WLAN, Ethernet, CAN
DI / DO		DI * 4 / DO * 2 / DRMO
DC connection type		MC4 (PV, Max.6mm ²) / Plug and play connector (battery, Max.10mm ²)
AC connection type		Pluq and play connector (Max.16mm ²)
Compliance		IEC / EN 62109, IEC 61000-6, EN 62477-1, IEC 61727, IEC62116, IEC62920, EN55011, CISPR 11, VDE-AR-N-4105, EN50549-1
Country of manufacture		China

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

** Depending on the connected battery

*** Please refer to the user manual and modify the settings based on actual load power

**** Can be reached only if PV and battery power is sufficient



SH15/20/25T

Hybrid Three Phase Inverter

NEW



FULL BACKUP

- Built-in 63A bypass for full house backup
- 10ms seamless switch
- Peak output up to 36500 VA (10 s) in backup mode (SH25T)



FLEXIBLE APPLICATION

- Support 100% unbalance output in backup and on grid mode
- Max. 16A DC input current per string
- 50A fast charge / discharge current



FRIENDLY INSTALLATION

- Plug & Play installation
- Quiet operation for indoor or outdoor installation



SAFE AND DURABLE

- Support precise AFCI
- IP65/C5



Type designation	SH15T	SH20T	SH25T
Input (DC)			
Recommended max. PV input power	30000 Wp	40000 Wp	50000 Wp
Max. PV input voltage		1000 V	
Min. PV input voltage / Startup input voltage		150 V / 180 V	
Rated PV input voltage		600 V	
MPPT voltage range*		150 V - 950 V	
No. of independent MPP trackers		3	
No. of PV strings per MPPT	2 / 1 / 1	2 / 2 / 1	2 / 2 / 1
Max. PV input current	64 A (32 A / 16 A / 16 A)	80 A (32 A / 32 A / 16 A)	80 A (32 A / 32 A / 16 A)
Max. DC short-circuit current	80 A (40 A / 20 A / 20 A)	100 A (40 A / 40 A / 20 A)	100 A (40 A / 40 A / 20 A)
Max. current for input connector		30 A	
Battery data			
Battery type		Li-ion battery	
Battery voltage range		100 V - 700 V	
Max. charge / discharge current		50A ** / 50A **	
Max. charge / discharge power	30000 W / 15000 W	30000 W / 20000 W	30000 W / 25000 W
Input / Output (AC)			
Max. AC power from grid		43000VA***	
Rated AC output power	15000 W	20000 W	25000 W
Max. AC output apparent power	15000 VA	20000 VA	25000 VA
Max. AC output current	22.8 A	30.4 A	37.9 A
Rated AC voltage		3 / N / PE, 220 V / 380 V ; 230 V / 400 V; 240 V / 415 V	
AC voltage range		270 V - 480 V	
Rated grid frequency		50 Hz / 60 Hz	
Grid frequency range		45 Hz - 55 Hz / 55 Hz - 65 Hz	
Harmonic (THD)		< 3 % (of rated power)	
Power factor at Rated power / Adjustable power factor		> 0.99 / 0.8 leading to 0.8 lagging	
Feed-in phases/connection phases		3 / 3-N-PE	
Backup data (on grid mode)			
Max. output power for backup load		43000W***	
Max. output current for backup load		3 * 63 A	
Backup data (off-grid mode)			
Rated voltage		3 / N / PE, 220 / 380 V; 230 / 400 V; 240 / 415 V (± 2 %)	
Rated frequency		50 Hz / 60 Hz (± 0.2 %)	
THDV(@Linear load)		< 2 %	
Backup switch time		< 10 ms	
Rated output power	15000 W / 15000 VA	20000 W / 20000 VA	25000 W / 25000 VA
Peak output power ****	25500 W / 25500 VA ,10 s	32000 W / 32000 VA ,10s	36500 W / 36500 VA ,10 s
Efficiency			
Max. efficiency / European efficiency	98.1 % / 97.6 %	98.1 % / 97.6 %	98.2 % / 97.8 %
Protection & Function			
Grid monitoring		Yes	
DC reverse polarity protection		Yes	
AC short-circuit protection		Yes	
Leakage current protection		Yes	
DC switch (solar)		Yes	
Surge Protection		DC Type II / AC Type II	
PID Zero		Yes	
Battery input reverse polarity protection		Yes	
General data			
Topology (solar / battery)		Transformerless / Transformerless	
Degree of protection		IP65	
Dimensions (W * H * D)		620 mm * 480 mm * 245 mm	
Weight	38 kg	38 kg	40 kg
Mounting method		Wall-mounting bracket	
Operating ambient temperature range		-25 °C - 60 °C	
Allowable relative humidity range(Non-condensing)		0% - 100%	
Cooling method	Natural convection	Natural convection	Fan cooling
Max. operating altitude		2000 m	
Noise(Typical)	35 dB (A)	35 dB (A)	50 dB (A)
Display		LED	
Communication		RS485, WLAN, Ethernet, CAN	
DI / DO		DI * 4 / DO * 2 / DRM0	
DC connection type	MC4 (PV, Max.6mm ²) / Plug and play connector (battery, Max.10mm ²)		
AC connection type	Plug and play connector (Max.16mm ²)		
Compliance	IEC / EN 62109, IEC 61000-6, EN 62477-1, IEC 61727, IEC62116, IEC62920, EN55011, CISPR 11, VDE-AR-N-4105, EN50549-1, NRS 097		
Country of manufacture	China		

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

** Depending on the connected battery

*** Please refer to the user manual and modify the settings based on actual load power

**** Can be reached only if PV and battery power is sufficient



SH5.0/10RT

Residential Hybrid Three phase Inverter



FLEXIBLE APPLICATION

- 150–600V wide battery voltage range
- Supports parallel connection with master-slave controlling
- Provides 100% power to 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



SMART MANAGEMENT

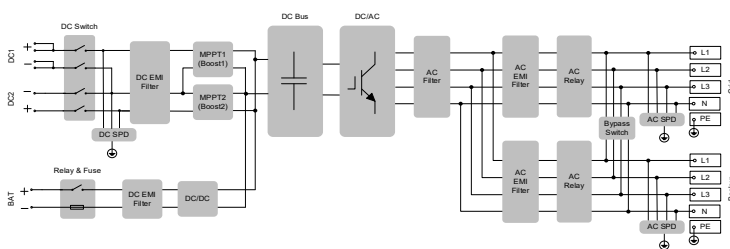
- High self-consumption with optimised built-in EMS
- Free online monitoring to enhance energy management for end user, installer and retailer
- Remote firmware update and customisable settings



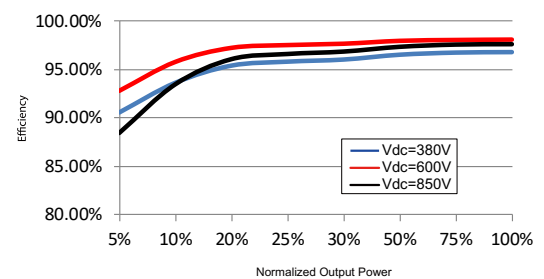
EASY INSTALLATION

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

CIRCUIT DIAGRAM



EFFICIENCY CURVE (SH5.0RT)



Type designation	SH5.0RT	SH10RT
Input (DC)		
Recommended max. PV input power	7500 W	15000 W
Max. PV input voltage		1000 V
Min. PV input voltage / Startup input voltage	150 V / 180 V	200 V / 250 V
Rated PV input voltage		600 V
MPP voltage range	150 V – 950 V	200 V – 950 V
MPP voltage range for rated power	210 V – 850 V	280 V – 850 V
No. of independent MPP inputs		2
No. of PV strings per MPPT	1 / 1	1 / 2
Max. PV input current	25 A (12.5 A / 12.5 A)	37.5 A (12.5 A / 25 A)
Max. DC short-circuit current	36 A (18 A / 18 A)	54 A (18 A / 36 A)
Max. current for input connector		30 A
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 / 6000 W	10600 W / 10600 W
Input and Output (AC)		
Max. AC input power	11600 W	14000 W
Max. AC power from grid	12500 VA	20600 VA
Rated AC output power	5000 W	9999 W
Max. AC output apparent power	5000 VA	9999 VA
Rated AC output apparent power	5000 VA	9999 VA
Rated AC output current	7.3 A	14.5 A
Max. AC output current	7.6 A	15.2 A
Rated AC voltage		3 / N / PE, 220 / 380 V; 230 / 400 V
AC voltage range		270 V – 480 V
Rated grid frequency		50 Hz
Grid frequency range		45 Hz – 55 Hz
Harmonic (THD)		< 3 % (of rated power)
Power factor at Rated power / Adjustable power factor		> 0.99 / 0.8 leading to 0.8 lagging
Feed-in phases / connection phases		3 / 3-N-PE
Backup Data		
Rated voltage		3 / N / PE, 220 Vac / 230 Vac
Total harmonic factor output voltage (Linear load)		2 %
Switch time to emergency mode		< 20 ms
Rated output power	5000 W / 5000 VA	9999 W / 9999 VA
Peak output power **	6000 W / 6000 VA, 5 min 10000 W / 10000 VA, 10 s	12000 W / 12000 VA, 5 min
Rated output current for backup load during on grid mode		3 * 18.5 A
Efficiency		
Max. efficiency / European efficiency	98.0 % / 97.2 %	98.4 % / 97.9 %
PV to Bat to Grid efficiency		> 94 %
Protection & Function		
Grid monitoring		Yes
DC reverse polarity protection		Yes
AC short-circuit protection		Yes
Leakage current protection		Yes
DC switch (solar)		Yes
DC Overcurrent Protection (Battery)		Yes
Surge Protection		DC Type II / AC Type II
PID recovery function		Yes
Parallel operation on grid port / Max. No. of inverters		Master-slave mode / 5
Battery input reverse polarity protection		Yes
General Data		
Topology (solar / battery)		Transformerless / Transformerless
Degree of protection		IP65
Dimensions (W * H * D)		460 * 540 * 170 mm
Weight		27 kg
Mounting method		Wall-mounting bracket
Operating ambient temperature range		- 25 °C to 60 °C
Allowable relative humidity range(Non-condensing)		0 % – 100 %
Cooling method		Natural convection
Max. operating altitude		4000 m
Noise (Typical)		30 dB (A)
Display		LED
Communication		RS485, WLAN, Ethernet, CAN, 4 * DI, 1 * DO
DC connection type		MC4 (PV) / Evo2 Compatible (Battery)
AC connection type		Plug and play connector
Compliance		IEC 62109-1/2, IEC 62477-1, AS/NZS 4777.2:2020
Country of manufacture		China

* Depending on the connected battery

** Can be reached only if PV and battery power is sufficient. Detail compatibility for backup under off-grid scenario can be referred to the user manual.



SBR064/096/128/ 160/192/224/256

High Voltage LFP Battery



HIGH-PERFORMANCE

- Up to 30A continuous charging and discharging current with high efficiency
- Up to 100% usable energy



SAFETY

- Lithium iron phosphate Battery
- Multi-stages protection design and extensive safety certification



FLEXIBILITY








- Extendable during lifetime
- Support 2-8 modules per unit, 6.4-25.6 kWh capacity range



EASY INSTALLATION

- Compact and Light, single person installation
- Plug and Play, wiring-less connection between modules



Type designation	SBR064 ^{***}	SBR096	SBR128	SBR160	SBR192	SBR224	SBR256
Technical properties							
	2 modules	3 modules	4 modules	5 modules	6 modules	7 modules	8 modules
System Data							
Battery type	LiFePO4 Prismatic Cell						
Battery module	3.2 kWh, 33 kg						
Energy (useable)*	6.4 kWh	9.6 kWh	12.8 kWh	16 kWh	19.2 kWh	22.4 kWh	25.6 kWh
Nominal voltage	128 V	192 V	256 V	320 V	384 V	448 V	512 V
Operating voltage	108 V – 146 V	162 V – 219 V	216 V – 292 V	270 V – 365 V	324 V – 438 V	378 V – 511 V	432 V – 584 V
Rated DC power	3.84 kW	5.76 kW	7.68 kW	9.60 kW	11.52 kW	13.44 kW	15.36 kW
Max. charging / discharging current: continuous	30 A						
Depth of Discharge	Max. 100 % DOD (settable)						
Short circuit current	3500 A						
Display	SOC indicator, Status indicator						
Communication interface	CAN						
Protection							
Over / under voltage protection	Yes						
Over current protection	Yes						
Over/under temperature protection	Yes						
DC breaker	Yes						
General Data							
Dimensions (W*H*D)	625*545*330 mm	625*545*330 mm	625*675*330 mm	625*805*330 mm	625*935*330 mm	625*1065*330 mm	625*1195*330 mm
Weight	89 kg	114 kg	147 kg	180 kg	213 kg	246 kg	279 kg
Installation location	Indoor / Outdoor						
Mounting method	Floor stand						
Operating ambient temperature range	Charge: 0 °C to 50 °C Discharge: -20 °C to 50 °C						
Degree of protection	IP55						
Allowable relative humidity range	0% – 95% (non - condensing)						
Max. operating altitude	4000 m						
Cooling method	Natural convection						
Certificates	CE, CEC, IEC 62619, IEC 62040, UN38.3, VDE 2510-50, IEC62477, IEC63056, IEC61000, UKCA						
Warranty**	10 Years						
Country of manufacture	Made in China						

* Test conditions: 25 °C, 100 % depth of discharge (DOD), 0.2C charge & discharge

** Refer to battery warranty letter for conditional application.

*** SBR064 consists of 2 battery modules and 1 empty module.



SBH150/200/250/ 300/350/400

High Voltage LFP Battery

NEW



HIGH POWER

- Up to 50A continuous charge and discharge current
- Max.power exceeding 25kW



SAFETY

- Lithium Iron Phosphate (LFP) Cell
- Refined battery management



FLEXIBILITY






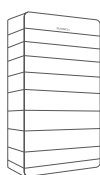
- Extendable as needs
- Support 3-8 modules per unit, max.4 units in parallel (160kWh)



EASY INSTALLATION

- Stackable & Modular design
- Plug and play, no cable between battery modules



Type designation	SBH150	SBH200	SBH250	SBH300	SBH350	SBH400
Technical properties	 3 modules	 4 modules	 5 modules	 6 modules	 7 modules	 8 modules
System data						
Battery type	LiFePO4 Prismatic Cell					
Battery module	5.0kWh, 45kg					
Energy (useable)*	15.0kWh	20.0kWh	25.0 kWh	30.0 kWh	35.0 kWh	40.0 kWh
Nominal voltage	211.2 V	281.6 V	352.0 V	422.4 V	492.8 V	563.2 V
Nominal power**	10.56 kW	14.08 kW	17.60 kW	21.12 kW	24.64 kW	28.16 kW
Operating voltage	178.2V-240.9V	237.6V-321.2V	297V-401.5V	356.4V-481.8V	415.8V-562.1V	475.2V-642.4V
Max. charge/discharge current: continuous	50 A					
Depth of discharge	Max. 100 % DOD (settable)					
Display	SOC indicator , Status indicator					
Communication interface	CAN					
Protection						
Over/under voltage protection	Yes					
Over current protection	Yes					
Over/under temperature protection	Yes					
DC breaker	Yes					
General data						
Dimensions (W*H*D)	675 * 740 * 350 mm	675 * 900 * 350 mm	675 * 1060 * 350 mm	675 * 1220 * 350 mm	675 * 1380 * 350 mm	675 * 1540 * 350 mm
Weight	151 kg	196 kg	241 kg	286 kg	331 kg	376 kg
Installation location	Indoor / Outdoor					
Mounting method	Floor stand					
Operating ambient temperature range	Charge: 0 °C - 50 °C Discharge: -20 °C to 50 °C					
Degree of protection	IP55					
Allowable relative humidity range	0 % - 95 % no condensing					
Max. operating altitude	Max. 2000 m					
Cooling method	Natural convection					
Certificates	CE, IEC 62619, IEC 62040, UN38.3, VDE 2510-50					
Warranty***	10 Years					
Country of manufacture	China					

* Test conditions: 25 °C , 100 % depth of discharge (DOD), 0.2C charge&discharge

** Nominal charge / discharge current and power derating will occur related to Temperature and SOC

*** Refer to battery warranty letter for conditional application

AC007E-01 L1

7kW AC Charger for Electric Vehicles



RELIABLE AND VERSATILE

- Type 2 charging plug – compatible with standard electric vehicles
- Integrated 6mA DC fault current detection



USER FRIENDLY

- Premounted 7m charging cable
- Space-saving dimensions for wall-mounting
- Optional pole-mounting



SMART AND EASY MANAGEMENT

- Adaptive Load Management
- Control and visualization via iEnergyCharge
- Capable for OCPP1.6J communication



SUSTAINABLE

- RFID access control with 2 cards included
- Authentication via APP or RFID



Type designation	AC007E-01 L1
AC Input and Output	
Max. charge power	7.4 kW
Nominal voltage	230 V
Nominal grid frequency	50 Hz / 60 Hz
Max. current	32 A single-phase
Charge connector	Plug Type 2
Input cable cross-section	3 mm ² * 6 mm ²
Output cable length	7 m
Protection Devices	
Residual current detection	6 mA DC
Over/Under voltage protection	Yes
Over load protection	Yes
Over temperature protection	Yes
Surge protection	II
Overvoltage category	III (grid) / II (car)
General Data	
Dimensions (H * W * D)	310 * 205 * 92 mm
Weight	4.2 kg
Mounting method	Wall-mounting / Pole-mounting (optional)
Impact resistance	IK08
Degree of protection	IP65
Operating ambient temperature range	-30 °C to 50 °C
Allowable relative humidity range (non-condensing)	5 % – 95 %
Cooling method	Natural convection
Max. operating altitude	2000 m
Grid type	TN / TT
Display	LED indicator
Monitoring	iEnergyCharge APP
Communication	WIFI
Charging protocol	OCPP 1.6 J
Power consumption for standby	< 5 W
Start mode	RFID card / APP
Compliance	EN / IEC 61851-1 ; EN / IEC 61851-21-2
Warranty	3 years (standard)



AC22E-01

22kW AC Charger for Electric Vehicles



RELIABLE AND VERSATILE

- Integrated 6mA DC fault current detection
- IP65 proof for usage in nearly every environment
- Automatic phase-switching function



USER FRIENDLY

- Fast installation with Poka-Yoke connector
- Adaptable access control with RFID-Cards
- Optional integrated MID meter



SMART AND EASY MANAGEMENT

- Capable for load management and balancing
- Control and visualization via iSolarCloud or iEnergyCharge
- Applicable for OCPP communication



SUSTAINABLE

- Beyond Charging maximum usage of solar energy together with Sungrow 1/3-phase solution
- Different charging modes to fit all needs

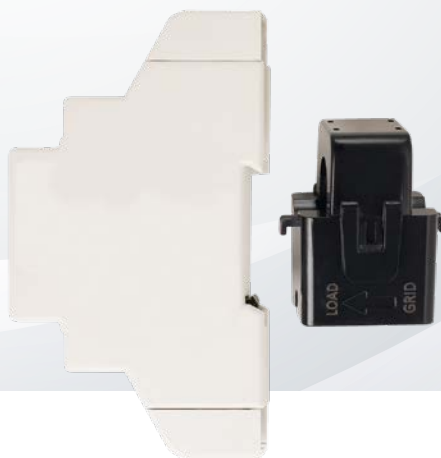


Technical Data	AC22E-01
AC Input and Output	
Max. charge power	22 kW
Nominal voltage	400 V
Nominal grid frequency	50 Hz / 60 Hz
Max. current	32 A three-phase
Charge connector	Plug Type 2
Input cable cross-section	5 mm ² * 6 mm ²
Output cable length	7 m
Protection	
Residual current detection	6 mA DC
Over/Under voltage protection	Yes
Over load protection	Yes
Over temperature protection	Yes
Surge protection category	Yes
Overvoltage category	III (grid) / II (car)
General Data	
Dimensions (H * W * D)	346 * 214 * 125 mm
Weight	≤ 7 kg
Mounting method	Wall-mounting / Pole-mounting (optional)
Impact resistance	IK 10
Degree of protection	IP 65
Operating ambient temperature range	- 30 °C to 50 °C
Allowable relative humidity range	5 % – 95 %
Cooling method	Natural convection
Max. operating altitude	3000 m
Grid type	TN / TT
Status indication	LED indicator
Communication	RS485 / Ethernet / WIFI / 4G (Optional)
Power consumption for standby	< 5.5 W (6.5 W with MID meter)
Start mode	RFID-Card / App / Plug & Play
Compliance	EN / IEC 61851-1:2019; EN / IEC 61851-21-2:2018
MID meter	Optional
Warranty	3 years (standard)



S100

Single-phase Smart Energy Meter



Type designation	S100
Electrical Parameter	
Nominal voltage	240 Vac
Input voltage range	180 Vac – 286 Vac
Power consumption	<2W (10 VA)
Max. operating current	100 A
Grid frequency	50 Hz
Measurement accuracy	Class 1
Interface and communication	RS485
Environmental Condition	
Ingress protection rating	IP20
Operating ambient temperature	-25 to 75 °C
Relative humidity	0 – 95 %
Mechanical Data	
Dimensions (W * H * D)	18 * 117 * 65 mm
Weight	0.2 kg
Installation	35 mm DIN-rail



DTSU666-20

Three-phase Smart Energy Meter



ACCURATE MEASUREMENT

- Class 1 measurement accuracy



HIGH EFFICIENCY

- Overall power consumption ≤ 1.5 W



EASY OPERATION

- LCD display, easy to set and check
- Meter with CT for easy installation

Type designation	DTSU666-20
Input	
Rated voltage	240 Vac L-N / 415 Vac L-L
AC voltage range	50 – 280 Vac L-N / 85 – 485 Vac L-L
Measurement range	CT: 0 – 100 A or 0 – 250 A, Rogwski coil: 0 – 1000 A or 0 – 3000 A
Accuracy class	1 *
Power consumption	≤ 1.5 W (6 VA)
CTs available input no.	6
Communication	
Serial port	RS485 * 1, 9600 bps
Protection and data storage	
Insulation resistance	> 100M Ω
Overvoltage category	III
Data storage time	10 Years
Ambient conditions	
Operating temperature	-25 °C to 70 °C
Relative air humidity	≤ 75 % (non-condensing)
Max. operating altitude	≤ 2000 m
Protection class	IP20
Mechanical parameters	
Dimensions (W*H*D)	72 mm * 118 mm * 65.5 mm
Weight	800 g
AC connection	1 – 6 mm ²
Comm. connection	0.2 – 1 mm ²
Mounting type	35 mm Din-rail mounting
Certificate compliance	EN61326-1, EN61010-1

Type designation	CT
CT** specification	
CT type	Split Core
Max. input current	100 A or 250 A
Output voltage	333 mV
Cable lengths	6 m
CT model	ZTY6.176.532 for 100 A, ZTY6.176.533 for 250 A

* Measurement accuracy is determined by installation if use Rogwski coil.

** CTs need to be ordered seperately, while for certain types of inverters, CTs are provided by default, please refer to inverters manuals for details.



DTSU666

Three-phase Smart Energy Meter



Type designation	DTSU666
Electrical Parameter	
Nominal voltage	230 Vac / 400 Vac
Input voltage range	57.7 / 100 Vac – 265 / 460 Vac
Power consumption	< 1.5W (6 VA)
Max. operating current	80 A
Grid frequency	50/ 60 Hz
Measurement accuracy	Class 1
Interface and communication	RS485
Environmental Condition	
Ingress protection rating	IP20
Operating ambient temperature	-30 °C – +60 °C
Relative humidity	75 %
Mechanical Data	
Dimensions (W * H * D)	72 * 65* 100 mm
Weight	0.4 kg
Installation	35 mm DIN-rail



WiMeter-S

Single Phase Wireless Meter



FLEXIBLE NETWORKING

- Support Wi-SUN wireless communication, RS485 free communication line



SIMPLE AND EFFICIENT

- DIN-Rail Mounting, easy installation



ACCURATE AND RELIABLE

- Class 0.5 measurement accuracy

Type Designation	WiMeter-S
Communication	
RS485 interface	1
LED indicator	3
WLAN	802.11 b/g IEEE802.11n HT20@2.4GHz IEEE802.11n HT40@2.4GHz
Measurement Range	
Phase voltage range	180 Vac ~ 288 Vac
Current	0 ~ 100 A
Measurement Accuracy	
Voltage / Current / Power	±0.5 %
Energy	±1 %
Power Supply	
Power supply	220~240 Vac
Max. Power consumption	2.5 W
Ambient Conditions	
Operating ambient temperature range	-30 °C to 60 °C
Allowable relative humidity range (non-condensing)	≤ 95%
Max. operating altitude	≤ 4000 m
Degree of protection	IP20
Mechanical Parameters	
Dimensions (W*H*D)	59 mm * 109 mm * 66 mm
Weight	350 g
Mounting type	DIN-Rail Mounting



WiMeter-T

Three Phase Wireless Meter

NEW



FLEXIBLE NETWORKING

- Support Wi-SUN wireless communication, RS485 free communication line



SIMPLE AND EFFICIENT

- DIN-Rail Mounting, easy installation



ACCURATE AND RELIABLE

- Class 1 measurement accuracy

Type Designation	WiMeter-T
Communication	
RS485 interface	1
LED indicator	3
WLAN	802.11 b/g IEEE802.11n HT20@2.4GHz IEEE802.11n HT40@2.4GHz
Measurement Range	
Line voltage range	398Vac ~ 692Vac
Phase voltage range	230Vac ~ 400Vac
Current	0 ~ 80 A
Measurement Accuracy	
Voltage / Current / Power	±1 %
Energy	±1 %
Power Supply	
Power supply	220~240Vac
Max. Power consumption	3W
Ambient Conditions	
Operating ambient temperature range	-30 °C to 60 °C
Allowable relative humidity range	≤ 95%(non-condensing)
Max. operating altitude	≤ 4000 m
Degree of protection	IP20
Mechanical Parameters	
Dimensions (W*H*D)	113mm*113mm*66mm
Weight	540g
Mounting type	DIN-Rail Mounting



WiNet-S

LAN Communication Module



SMART AND FLEXIBLE

- WLAN or Ethernet, flexible compatibility of plant networking, one-click access to iSolarCloud
- Automatic network configuration with DHCP, transmission without configuration
- Free WLAN configuration, easy and time saving



SIMPLE AND EFFICIENT

- Plug and play, quick installation
- Data interval in seconds, quick glance for what you want
- Support of Smart IV Curve Diagnosis[1]
- Support of local and remote parameter setting and firmware updates



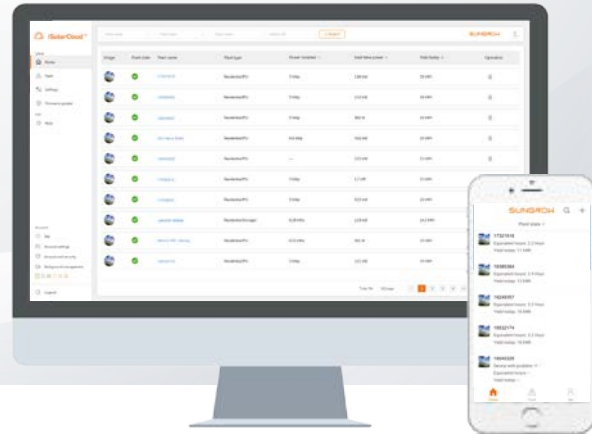
SAFE AND RELIABLE

- Password and encrypted transmission for data protection
- IP66, wide temperature range

Type designation	WiNet-S
Communication	
Max. number of devices	1
LED display	LED * 3
Communication Mode	
Internet communication	Channel * 1, 10/100Mbps self-adaption, Communication distance $\leq 100\text{m}$
WLAN communication	802.11 b/g IEEE802.11n HT20@2.4GHz IEEE802.11n HT40@2.4GHz 2.4 GHz
Power Supply	
DC input	5 VDC, 2.1 A
Power consumption	$\leq 5\text{ W}$
Ambient conditions	
Operating Temperature	-30 °C to 60 °C
Relative air humidity	$\leq 95\%$ (non-condensing)
Elevation	$\leq 4000\text{ m}$
Protection class	IP66
Mechanical parameters	
Dimensions (W * H * D)	48 * 132 * 36 mm
Mounting type	Plug and play

iSolarCloud

Online Monitoring Platform



FLEXIBLE AND FRIENDLY

- Centralized power plant management, low O&M cost
- Flexible data access, Web portal and App, remote or local maintenance
- Easy account management, share plants with co-workers and friends



SAFE AND RELIABLE

- Hierarchical access management
- Cyber security and redundant data storage over the lifecycle of plants, certified data security
- Full log for trace and audit



SIMPLE AND EFFICIENT

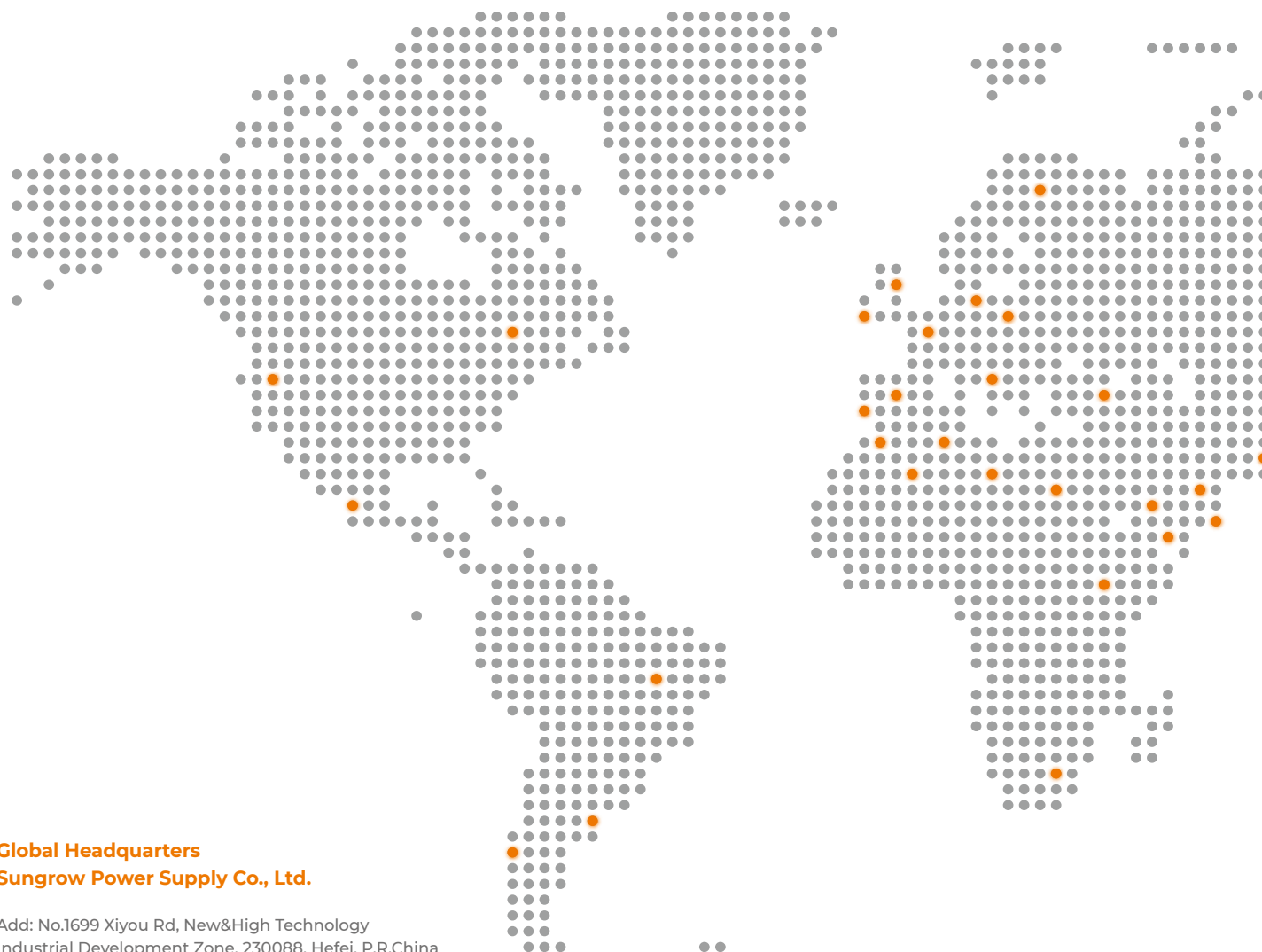
- Scan QR to create plant or get support
- Accurate positioning of faults, quick trouble shooting, realtime push of information to reduce the time to resolve faults
- Parameter setting, firmware updates, automated data reports



Type designation	iSolarCloud
Monitoring Device	
Device type	Inverter, combiner box, meteo station, energy meter, transformer and other plant devices
Monitoring Capacity	More than 100 GW (scalable)
Data Collection	
Time interval	5minutes or less
General Data	
Language	Chinese, English, German, French, Spanish, Portuguese, Italian, Dutch, Polish, Japanese, Korean, Vietnamese, Traditional Chinese
Data storage time	> 25 years
Storage capability	> 100PB
System reliability	99.99%
Minimum Web requirements	
Browser	IE 11, Chrome 65, Safari 11, Firefox 60
Resolution	1366 * 768, 1920 * 1080 recommended
Minimum Operating Environment for App	
Dimensions (W * H)	1920 * 1080, 2001 * 1125, 1280 * 720
Mounting type	Android 5.0, iOS 10.0



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