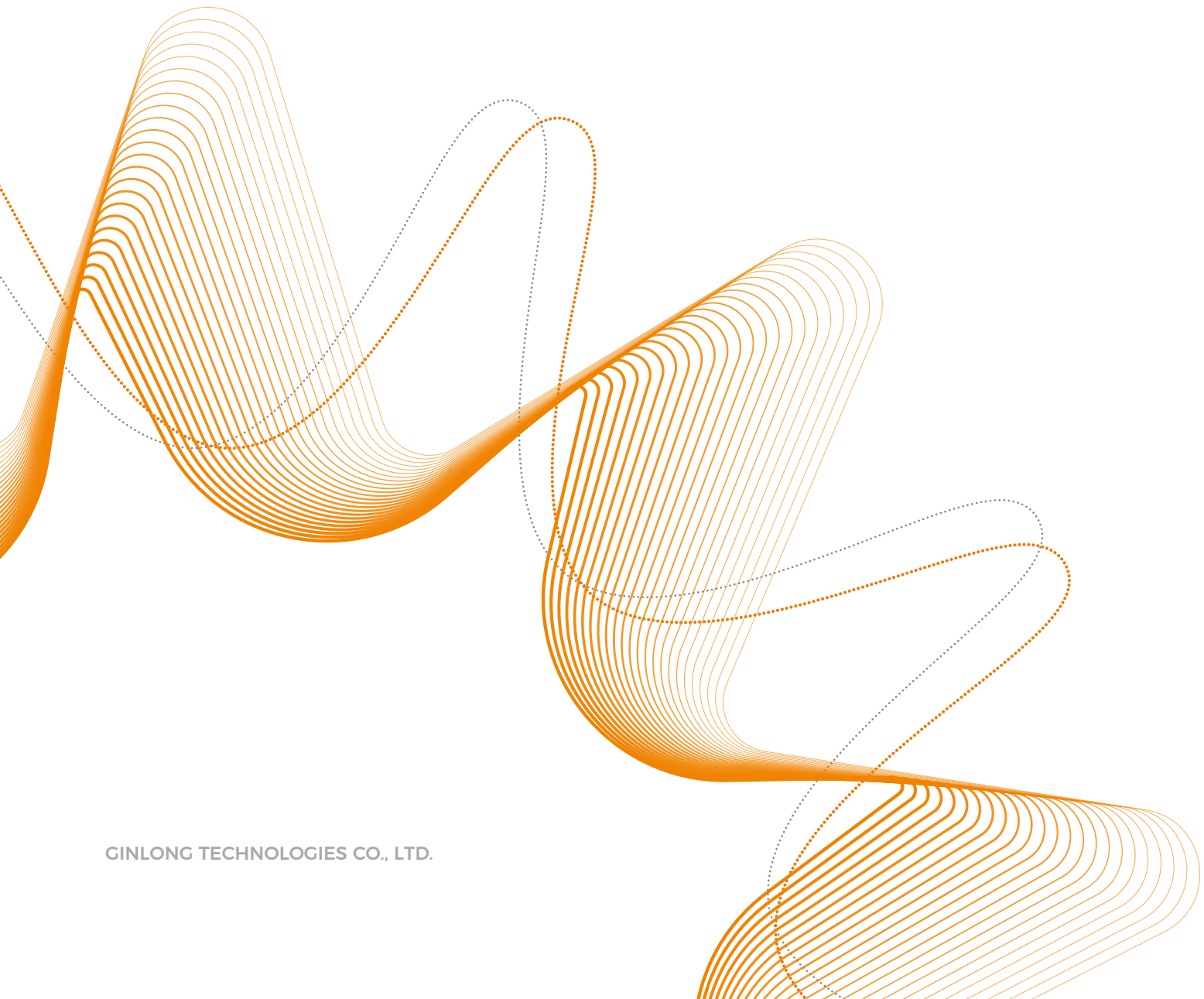
Solis: A Global Top 3 PV Inverter Manufacturer



GINLONG TECHNOLOGIES CO., LTD.

Developing technology to power the world with clean energy

COMPANY MISSION

COMPANY PROFILE

Established in 2005, Ginlong (Solis) (Stock Code: 300763.SZ) stands as the world's third-largest PV inverter manufacturer. As a global provider of solar and energy storage solutions catering to residential, commercial, and utility-scale customers, we deliver value across the solar supply chain. Operating under the Solis brand, our solar inverter product line employs innovative string technology, ensuring top-tier reliability validated through rigorous international certifications.

By amalgamating a global supply chain with world-class R&D and manufacturing capabilities, Ginlong tailors Solis inverters to each regional market, with dedicated teams of local experts providing exceptional service and support. Our proven bankability has garnered support from leading financial institutions, assuring robust, long-term returns on investment. Collaborating with stakeholders, we are committed to expediting the world's journey towards a more sustainable future.

solis

NO.1

Ranked No.1 in Global Residential Single-Phase Inverter Shipments

Source: Wood Mackenzie 2024

TOP 3

A Global Top 3 PV Inverter Manufacturer

10 years

EUPD Research Top Brand PV Inverters 2016-2025

80GW+

Manufacturing Capacity

Why Solis?

Powered by Technology, Driven by Service.

NO.1

Ranked No.1 in Global Residential Single-Phase Inverter Shipments
Source: Wood Mackenzie 2024

TOP 3

A Global Top 3 PV Inverter Manufacturer

10 years

EUPD Research Top Brand PV Inverters 2016-2025

21 years

A driving force in renewable energy since 2005

120GW+

Total global shipments

CNAS & ILAC

National Laboratory Qualification

The useful life projections are at or near the TOP of the string inverter life projections.

Source: DNV·GL

2005

Solis founded by Wang Yiming

2006

Second inverter company worldwide to obtain UK G83 certification

2008

Construction begins on a 10-acre site in the Coastal Industrial Park

2009

First Asian inverter company to achieve US UL1741 certification

2010

Second Chinese inverter company to obtain Australian AS4777/AS3100 certification

2011

Hosted the International IEC Standards Conference

2016

Received first EUPD "Top PV Inverter Brand" award

2019

Listed on the Shenzhen Stock Exchange (Stock Code: 300763)

Ranked among the top3 in Asia in BloombergNEF's Global Inverter Bankability Rankings

2020

Set a new record for high-power residential module current compatibility

Certified as a National Green Factory

2021

Ranked as the world's third-largest PV inverter manufacturer

Awarded Asia's Best Employer Award

2022

Achieved CNAS-certified National Laboratory status

2023

Ranked No.1 in global residential single-phase inverter shipments

Ranked as the world's third-largest PV inverter manufacturer for three consecutive years

Recognized as a BloombergNEF Tier 1 global PV inverter manufacturer

2024

Ranked among the Global Top 500 New Energy Companies for four consecutive years

2025

Won the EUPD "Top PV Inverter Brand" award for ten consecutive years

53 Service Centers

With 53 offices and service centers around the world, including the UK, France, Italy, Netherlands, Spain, Poland, Sweden, Turkey, Germany, Lithuania, Switzerland, Greece, Portugal, Ireland, Austria, Romania, Ukraine, Hungary, Latvia, Finland, Denmark, Croatia, Balkans, Bulgaria, Czechia, Slovenia, South Africa, Kenya, Nigeria, Ghana, China, India, Indonesia, Korea, Myanmar, Malaysia, Philippines, Pakistan, Singapore, Sri Lanka, Thailand, Vietnam, Bangladesh, Israel, Lebanon, Yemen, Iraq, Australia, Brazil, USA, Canada, Mexico and Chile, Solis has a well-established and expanding global presence.

HQ Service Centers

GLOBAL REACH LOCAL EXPERTISE

CONTENTS

Residential Energy Storage Solutions

The Solis residential energy storage family has abundant products, covering single-phase and three-phase application scenarios. It aims to provide energy storage solutions for PV systems to achieve the goal of real residential zero-carbon green electricity. The power range covers 3kW - 20kW. We can according to the requirements of your project application scenarios, rely on our flexible products to provide you with the best residential zero-carbon green power solutions.

Models:

S5-EH1P(3-6)K-L (Smart)

S6-EH1P(3-8)K-L-PLUS, S6-EH1P(9-10)K-L-PLUS(21A)

S6-EH1P(9.9-18)K03-NV-YD-L

S6-EH2P(5-8)K02-SV-YD-L

S6-EH2P(9.6-16)K03-SV-YD-L-US

S6-EH2P(10-18)K03-SV-YD-L

S6-EH3P(5-18)K02-NV-YD-L

S6-EH3P(7-10)K02-LV-YD-L

S6-EH3P(3-10)K-H, S6-EH3P12K-H-EU(21A)

S6-EH3P(12-20)K-H

S5-EA1P3K-L

S6-EA1P(3.6-6)K-L

S6-EA3P(5-10)KAA-NV-ND-H

S6-EA3P(5-10)KAA-NV-YD-H-PRO

S6-EO1P(4-6)K-48

S6-EO1P(4-5)K-48-EU

Output:

3 kW - 20 kW

S5-EH1P(3-6)K-L (Smart)

Solis Single Phase Low Voltage Energy Storage Inverters

Smart Energy Management

- AI intelligently manages charging and discharging based on TOU (Time-of-Use) tariffs
- Seamless integration with VPP and EMS platforms for enhanced energy optimization

High Performance

- 160% PV input capacity to maximize solar energy utilization

Flexible & Scalable

- Compatible with mainstream lithium and lead-acid batteries

Simple & Fast Configuration

- 7-inch large screen uses U.S.-made ZEITLER industrial-grade components

Models:

S5-EH1P3K-L / S5-EH1P3.6K-L

S5-EH1P4.6K-L / S5-EH1P5K-L

S5-EH1P6K-L

DATASHEET

Models	3K	3.6K	4.6K	5K	6K
Input DC (PV side)					
Recommended max. PV array size	6 kW	7.2 kW	9.2 kW	10 kW	12 kW
Max. usable PV input power	4.8 kW	5.7 kW	8 kW	8 kW	8 kW
Max. input voltage	600 V				
Rated voltage	330 V				
Start-up voltage	120 V				
MPPT voltage range	90 - 520 V				
Max. input current	15 A / 15 A				
Max. short circuit current	22.5 A / 22.5 A				
MPPT number / Max. input strings number	2 / 2				
Battery					
Battery type	Li-ion / Lead-acid				
Battery voltage range	42 - 58 V				
Battery capacity	50 - 2000 Ah				
Max. charge / discharge power	3 kW			5 kW	
Max. charge / discharge current	62.5 A			100 A	
Communication	CAN				
Output AC (Back-up)					
Rated output power	3 kW			5 kW	
Max. apparent output power	4.5 kVA, 10 s			7 kVA, 10 s	
Back-up switch time	< 20 ms				
Rated output voltage	1/N/PE, 220 V / 230 V				
Rated frequency	50 Hz / 60 Hz				
Rated output current	14 A / 13.5 A			23 A / 22 A	
THDv (@linear load)	< 2%				
Input AC (Grid side)					
Input voltage range	187 - 265 V				
Max. input current	20.5 A / 20 A	25 A / 23.5 A	31.5 A / 30 A	34.5 A / 33 A	34.5 A / 33 A
Frequency range	45 - 55 Hz / 55 - 65 Hz				
Output AC (Grid side)					
Rated output power	3 kW	3.6 kW	4.6 kW	5 kW	6 kW
Max. apparent output power	3.3 kVA	4 kVA	4.6 kVA	5.5 kVA	6.6 kVA
Operation phase	1/N/PE				
Rated grid voltage	220 V / 230 V				
Rated grid frequency	50 Hz / 60 Hz				
Rated grid output current	13.7 A / 13.1 A	16.4 A / 15.7 A	20.9 A / 20 A	22.8 A / 21.7 A	27.3 A / 26.1 A
Max. output current	15 A	18.5 A	21 A	25 A	30 A
Power factor	> 0.99 (0.8 leading - 0.8 lagging)				
THDi	< 2%				
Efficiency					
Max. efficiency	> 97.1%				
EU efficiency	> 96.5%				
Protection					
DC reverse-polarity protection	Yes				
Short circuit protection	Yes				
Output over current protection	Yes				
Surge protection	DC Type II / AC Type II				
Ground fault monitoring	Yes				
Integrated AFCI	Yes ①				
Protection class / Over voltage category	I / II				
General Data					
Dimensions (W × H × D)	333 × 505 × 249 mm				
Weight	17.9 kg		18.1 kg		
Topology	Non-isolated (PV), Isolated (Battery)				
Operating ambient temperature range	-25 ~ +60°C				
Ingress protection	IP65				
Cooling concept	Natural cooling				
Max. operation altitude	3000 m				
Grid connection standard	G98 or G99, VDE-AR-N 4105/VDE V 0124, EN 50549-1, VDE 0126/UTE C 15/VFR:2019, RD 1699/RD 244/UNE 206006/ UNE 206007-1, CEI 0-21, C10/11, NRS 097-2-1, EIFS 2018.2, IEC 62116, IEC 61727, IEC 60068, IEC 61683, EN 50530, MEA, PEA				
Safety / EMC standard	IEC/EN 62109-1/-2, EN 61000-6-2/-3				
Features					
DC connection	MC4 connector				
AC connection	Quick connection plug				
Display	7.0" LCD display				
Communication	RS485, Optional: Wi-Fi, GPRS				

① Activation required.

S6-EH1P(3-8)K-L-PLUS, S6-EH1P(9-10)K-L-PLUS(21A)

Solis Single Phase Low Voltage Energy Storage Inverters

Features:

- Supports PV input up to 160% of the inverter's rated DC power, maximising solar utilisation
- Supports up to 21A PV input current, compatible with future higher-power PV modules
- 200% overload for 10s in off-grid mode, ensuring stable startup of motors, water pumps and air conditioners
- Seamless on/off-grid switching in under 10ms, guaranteeing an uninterrupted power supply
- More battery options, compatible with any battery (between 40V-60V)
- Supports existing PV grid-tied power connection for export control and off-grid use
- Multiple methods of generator connection and auto control, enabling flexible local deployment
- Support max 6 units in parallel, expanding system capacity
- Smart Load management, extending backup time for critical loads
- Customizable battery backup level for uninterrupted power
- Supports PV-only off-grid operation, reducing upfront costs
- SolisCloud: Smart remote control, AI optimisation, and instant troubleshooting - all in one platform
- 7-inch industrial-grade LCD screen, providing a larger, user-friendly interface for local operation
- Ingress protection IP66, for operation in harsh conditions

Models:

S6-EH1P3K-L-PLUS / S6-EH1P3.6K-L-PLUS / S6-EH1P4.6K-L-PLUS

S6-EH1P5K-L-PLUS / S6-EH1P6K-L-PLUS / S6-EH1P8K-L-PLUS

S6-EH1P9K-L-PLUS(21A) / S6-EH1P10K-L-PLUS(21A)

DATASHEET

Models	3K	3.6K	4.6K	5K	6K	8K	9K(21A)	10K(21A)
Input DC (PV side)								
Recommended max. PV array size	6 kW	7.2 kW	9.2 kW	10 kW	12 kW	16 kW	18 kW	20 kW
Max. usable PV input power	4.8 kW	5.76 kW	7.36 kW	8 kW	9.6 kW	12.8 kW	14.4 kW	16 kW
Max. input voltage	500 V							
Rated voltage	330 V							
Start-up voltage	90 V							
MPPT voltage range	90 - 435 V							
Max. input current	16 A / 16 A					32 A / 32 A	42 A / 42 A	
Max. current per DC input	16 A						21 A	
Max. short circuit current	20 A / 20 A					40 A / 40 A	48 A / 48 A	
MPPT number / Max. input strings number	2 / 2						2 / 4	
Battery								
Battery type	Li-ion / Lead-acid							
Battery voltage range	40 - 60 V							
Max. charge / discharge current	70 A	80 A	105 A	112 A	135 A	190 A	200 A	210 A
Number of battery port / Number of BMS port	1 / 1							
Communication	CAN / RS485							
Output AC (Grid side)								
Rated output power	3 kW	3.6 kW	4.6 kW	5 kW	6 kW	8 kW	9 kW	10 kW
Max. apparent output power	3 kVA	3.6 kVA	4.6 kVA	5 kVA	6 kVA	8 kVA	9 kVA	10 kVA
Rated grid voltage	L/N/PE, 220 V / 230 V							
Rated grid frequency	50 Hz / 60 Hz							
Rated grid output current	13.7 A / 13.1 A	16.4 A / 15.7 A	20.9 A / 20 A	22.8 A / 21.8 A	27.3 A / 26.1 A	36.4 A / 34.8 A	40.9 A / 39.1 A	45.5 A / 43.5 A
Power factor	> 0.99 (0.8 leading - 0.8 lagging)							
THDi	< 3%							
Input AC (Grid side)								
Max. input power	4.6 kW	5.5 kW	6.4 kW	7 kW	8.8 kW	11 kW	13.2 W	14.3 W
Input voltage range	187 - 253 V							
Max. input current	21 A	25 A	29 A	32 A	40 A	50 A	60 A	65 A
Output AC (Back-up)								
Rated output power	3 kW	3.6 kW	4.6 kW	5 kW	6 kW	8 kW	9 kW	10 kW
Max. apparent output power	2 times of rated power, 10 s							
Back-up switch time	< 10 ms							
Rated output voltage	L/N/PE, 220 V / 230 V							
Rated frequency	50 Hz / 60 Hz							
Rated output current	13.7 A / 13.1 A	16.4 A / 15.7 A	20.9 A / 20 A	22.8 A / 21.8 A	27.3 A / 26.1 A	36.4 A / 34.8 A	40.9 A / 39.1 A	45.5 A / 43.5 A
Max. AC passthrough current	35 A	35 A	40 A	40 A	40 A	50 A	60 A	65 A
THDv (@linear load)	< 2%							
Input AC (Generator side)								
Max. input power	3 kW	3.6 kW	4.6 kW	5 kW	6 kW	8 kW	9 kW	10 kW
Rated input current	13.7 A / 13.1 A	16.4 A / 15.7 A	20.9 A / 20 A	22.8 A / 21.8 A	27.3 A / 26.1 A	36.4 A / 34.8 A	40.9 A / 39.1 A	45.5 A / 43.5 A
Rated input voltage	L/N/PE, 220 V / 230 V							
Rated input frequency	50 Hz / 60 Hz							
Efficiency								
Max. efficiency	96.2%							
EU efficiency	96.1%							
BAT charged by PV / AC max. efficiency	95.3% / 93.9%							
Battery discharged efficiency	93.8%							
Protection								
Surge protection	Yes							
Output over current protection	Yes							
Insulation resistance monitoring	Yes							
Residual current detection	Yes							
Integrated PV switch	Yes							
DC reverse-polarity protection	Yes (PV only)							
Protection class / Over voltage category	I / II (PV and BAT), III (MAINS and BACKUP and GEN)							
Integrated AFCI 2.0	Optional							
Anti-islanding protection	Yes							
General Data								
Dimensions (W × H × D)	335 × 560 × 253 mm							
Weight	23 kg					23.5 kg	23.8 kg	
Inverter topology	Non-isolated (PV), Isolated (Battery)							
Self-consumption	< 40 W							
Operating temperature range	-25 ~ +60°C							
Relative humidity	0 - 100%							
Ingress protection	IP66							
Noise emission (typical)	< 40 dB(A)					< 65 dB(A)		
Cooling concept	Natural cooling					Intelligent redundant fan-cooling		
Max. operation altitude	3000 m							
Grid connection standard	NRS 097-2-1, IEC 62116, IEC 61727, IEC 60068, IEC 61683, EN 50530, EN 50549-1, MEA, PEA, NBR 16149, NBR 16150, G98, G99, CEI 0-21, NTS 631 TypeA							
Safety / EMC standard	IEC/EN 62109-1/-2, EN 61000-6-2/-3							
Features								
PV connection	MC4 connector							
Battery connection	Terminal Block							
AC connection	Terminal Block							
Display	7.0" LCD display & Bluetooth + APP							
Communication interface	Standard: WIFI+LAN+Bluetooth, CAN-BMS, CAN-Parallel×2, RS485-Meter, RS485, DRM, DI, DO×2; Optional: 4G							

S6-EH1P(9.9-18)K03-NV-YD-L

Solis Single Phase Low Voltage Energy Storage Inverters

Features:

- Supports PV input up to 160% of the inverter's rated DC power, maximising solar utilisation
- Supports up to 20A PV input current, compatible with future higher-power PV modules
- 200% overload for 10s in off-grid mode, ensuring stable startup of motors, water pumps and air conditioners
- Seamless on/off-grid switching in under 10ms, guaranteeing an uninterrupted power supply
- More battery options, compatible with any battery (between 40V-60V)
- Supports existing PV grid-tied power connection for export control and off-grid use
- Multiple methods of generator connection and auto control, enabling flexible local deployment
- Support max 6 units in parallel, expanding system capacity
- Smart Load management, extending backup time for critical loads
- Customizable battery backup level for uninterrupted power
- Supports PV-only off-grid operation, reducing upfront costs
- SolisCloud: Smart remote control, AI optimisation, and instant troubleshooting - all in one platform
- 7-inch industrial-grade LCD screen, providing a larger, user-friendly interface for local operation
- Ingress protection IP66, for operation in harsh conditions

Models:

S6-EH1P9.9K03-NV-YD-L

S6-EH1P12K03-NV-YD-L

S6-EH1P14K03-NV-YD-L

S6-EH1P16K03-NV-YD-L

S6-EH1P18K03-NV-YD-L

DATASHEET

Models	9.9K	12K	14K	16K	18K
Input DC (PV side)					
Recommended max. PV array size	19.8 kW	24 kW	28 kW	32 kW	36 kW
Max. usable PV input power	15.8 kW	19.2 kW	22.4 kW	25.6 kW	28.8 kW
Max. input voltage	550 V				
Rated voltage	380 V				
Start-up voltage	100 V				
MPPT voltage range	80 - 520 V				
Max. input current	40 A / 40 A / 40 A				42 A / 42 A / 42 A
Max. current per DC input	20 A				21 A
Max. short circuit current	50 A / 50 A / 50 A				
MPPT number / Max. input strings number	3 / 6				
Battery					
Battery type	Li-ion / Lead-acid				
Battery voltage range	40 - 60 V				
Max. charge / discharge current	208 A	250 A	290 A	290 A	320 A
Number of battery port / Number of BMS port	1 / 1				
Communication	CAN / RS485				
Output AC (Grid side)					
Rated output power	9.9 kW	12 kW	14 kW	16 kW	18 kW
Max. apparent output power	9.9 kVA	12 kVA	14 kVA	16 kVA	18 kVA
Rated grid voltage	L/N/PE, 220 V / 230 V				
Rated grid frequency	50 Hz / 60 Hz				
Rated grid output current	45 A / 43.1 A	54.5 A / 52.2 A	63.6 A / 60.9 A	72.7 A / 69.6 A	81.8 A / 78.2 A
Power factor	> 0.99 (0.8 leading - 0.8 lagging)				
THDi	< 3%				
Input AC (Grid side)					
Max. input power	14.8 kW	18 kW	21 kW	24 kW	27 kW
Input voltage range	187 - 253 V				
Max. input current	67.5 A / 64.5 A	81.8 A / 78.3 A	95.5 A / 91.3 A	109.1 A / 104.3 A	122.7 A / 117.4 A
Output AC (Back-up)					
Rated output power	9.9 kW	12 kW	14 kW	16 kW	18 kW
Max. apparent output power	2 times of rated power, 10 s				
Back-up switch time	< 10 ms				
Rated output voltage	L/N/PE, 220 V / 230 V				
Rated frequency	50 Hz / 60 Hz				
Rated output current	45 A / 43.1 A	54.5 A / 52.2 A	63.6 A / 60.9 A	72.7 A / 69.6 A	81.8 A / 78.2 A
Max. AC passthrough current	90 A				
THDv (@linear load)	< 3%				
Input AC (Generator side)					
Max. input power	9.9 kW	12 kW	14 kW	16 kW	18 kW
Rated input current	45 A / 43.1 A	54.5 A / 52.2 A	63.6 A / 60.9 A	72.7 A / 69.6 A	81.8 A / 78.2 A
Rated input voltage	L/N/PE, 220 V / 230 V				
Rated input frequency	50 Hz / 60 Hz				
Efficiency					
Max. efficiency	97.6%				
EU efficiency	97.0%				
BAT charged by PV / AC max. efficiency	> 94.9% / > 94.33%				
Battery discharged efficiency	93.51%				
Protection					
Surge protection	Yes				
Output over current protection	Yes				
Insulation resistance monitoring	Yes				
Residual current detection	Yes				
Integrated PV switch	Yes				
DC reverse-polarity protection	Yes (PV only)				
Protection class / Over voltage category	I / II (PV and BAT), III (MAINS and BACKUP and GEN)				
Integrated AFCI 2.0	Optional				
Anti-islanding protection	Yes				
General Data					
Dimensions (W × H × D)	459 × 845 × 313 mm				
Weight	55.5 kg				
Inverter topology	Non-isolated (PV), Isolated (Battery)				
Self-consumption	< 40 W				
Operating temperature range	-25 ~ +60°C				
Relative humidity	0 - 100%				
Ingress protection	IP66				
Noise emission (typical)	< 65 dB(A)				
Cooling concept	Intelligent redundant fan-cooling				
Max. operation altitude	4000 m				
Grid connection standard	NRS 097-2-1, IEC 62116, IEC 61727, IEC 60068, IEC 61683, EN 50530, EN50549-1				
Safety / EMC standard	IEC/EN 62109-1/-2, EN 61000-6-2/-3				
Features					
PV connection	MC4 connector				
Battery connection	Terminal Block				
AC connection	Terminal Block				
Display	7.0" LCD display & Bluetooth + APP				
Communication interface	Standard: WIFI+LAN+Bluetooth, CAN-BMS, CAN-Parallel × 2, RS485-Meter, RS485, DRM, DI, DO × 2; Optional: 4G				

S6-EH2P(5-8)K02-SV-YD-L

Solis Split Phase Low Voltage Energy Storage Inverters

Applicable to Brazil and Latin America

Features:

- Supports PV input up to 160% of the inverter's rated DC power, maximising solar utilisation
- Supports up to 21A PV input current, compatible with future higher-power PV modules
- 200% overload for 10s in off-grid mode, ensuring stable startup of motors, water pumps and air conditioners
- Seamless on/off-grid switching in under 10ms, guaranteeing an uninterrupted power supply
- Support split-phase unbalanced output, each phase supports output max. 50% rated inverter power
- More battery options, compatible with any battery (between 40V-60V)
- Supports existing PV grid-tied power connection for export control and off-grid use
- Multiple methods of generator connection and auto control, enabling flexible local deployment
- Support max 6 units in parallel, for expanding system capacity
- Smart Load management, extending backup time for critical loads
- Customizable battery backup level for uninterrupted power
- PV only off grid mode, to reduce the initial investment cost
- 7-inch industrial-grade LCD screen, providing a larger, user-friendly interface for local operation
- Ingress protection IP66, adapting to harsh ambient conditions

Models:

S6-EH2P5K02-SV-YD-L

S6-EH2P6K02-SV-YD-L

S6-EH2P7.5K02-SV-YD-L

S6-EH2P8K02-SV-YD-L

DATASHEET

Models	5K	6K	7.5K	8K
Input DC (PV side)				
Recommended max. PV array size	10 kW	12 kW	16 kW	16 kW
Max. usable PV input power	8 kW	9.6 kW	12.8 kW	12.8 kW
Max. input voltage	500 V			
Rated voltage	330 V			
Start-up voltage	90 V			
MPPT voltage range	90 - 435 V			
Max. input current	21 A / 21 A	21 A / 42 A	42 A / 42 A	
Max. current per DC input	21 A			
Max. short circuit current	24 A / 24 A	24 A / 48 A	48 A / 48 A	
MPPT number / Max. input strings number	2 / 2	2 / 3	2 / 4	
Battery				
Battery type	Li-ion / Lead-acid			
Battery voltage range	40 - 60 V			
Max. charge / discharge current	112 A	135 A	190 A	190 A
Number of battery port / Number of BMS port	1 / 1			
Communication	RS485 / CAN			
Output AC (Grid side)				
Rated output power	5 kW	6 kW	7.5 kW	8 kW
Max. apparent output power	5.5 kVA	6.6 kVA	7.5 kVA	8.8 kVA
Rated grid voltage	L+N+PE/2L+PE, 220 V; L1/L2/N(PE), 120(L-N)/240(L1-L2)VAC, L1/L2/N(PE), 127(L-N)/220(L1-L2)VAC			
Rated grid frequency	50 Hz / 60 Hz			
Rated grid output current	20.8 A / 22.7 A	25 A / 27.3 A	31.3 A / 34.1 A	33.3 A / 36.4 A
Power factor	> 0.99 (0.8 leading - 0.8 lagging)			
THDi	< 3%			
Input AC (Grid side)				
Max. input power	7.7 kW / 8.4 kW	8.8 kW/ 9.6 kW	11 kW / 12 kW	11 kW / 12 kW
Input voltage range	187 - 253 V			
Max. input current	35 A	40 A	50 A	50 A
Output AC (Back-up)				
Rated output power	5 kW	6 kW	7.5 kW	8 kW
Max. apparent output power	2 times of rated power, 10 s			
Back-up switch time	< 10 ms			
Rated output voltage	L1/L2/N(PE), 127 V / 220 V; L1/L2/N(PE), 120(L-N)/240(L1-L2)VAC, L1/L2/N(PE) ,127(L-N)/220(L1-L2)VAC			
Rated frequency	50 Hz / 60 Hz			
Rated output current	20.8 A / 22.7 A	25 A / 27.3 A	31.3 A / 34.1 A	33.3 A / 36.4 A
Max. AC passthrough current	35 A	40 A	50 A	50 A
THDv (@linear load)	< 3%			
Input AC (Generator side)				
Max. input power	5 kW	6 kW	7.5 kW	8 kW
Rated input current	20.8 A / 22.7 A	25 A / 27.3 A	31.3 A / 34.1 A	33.3 A / 36.4 A
Rated input voltage	L1/L2/N(PE), 127 V / 220 V; L1/L2/N(PE), 120(L-N)/240(L1-L2)VAC, L1/L2/N(PE) ,127(L-N)/220(L1-L2)VAC			
Rated input frequency	50 Hz / 60 Hz			
Efficiency				
Max. efficiency	95.4%			
EU efficiency	94.3%			
BAT charged by PV / AC max. efficiency	95.0%			
Battery discharged efficiency	93.7%			
Protection				
Surge protection	Yes			
Output over current protection	Yes			
Insulation resistance monitoring	Yes			
Residual current detection	Yes			
Integrated PV switch	Yes			
DC reverse-polarity protection	Yes			
Protection class / Over voltage category	I / II (PV and BAT), III (MAINS and BACKUP and GEN)			
Integrated AFCI 2.0	Yes			
Anti-islanding protection	Yes			
General Data				
Max. power per phase (grid & back-up)	50% rated power			
Dimensions (W × H × D)	390 × 620 × 237 mm			
Weight	28.8 kg			
Inverter topology	Non-isolated (PV), Isolated (Battery)			
Self-consumption	< 20 W			
Operating temperature range	-25 ~ +60°C			
Relative humidity	0 - 100%			
Ingress protection	IP66 (TYPE 4X)			
Noise emission (typical)	< 55 dB(A)			
Cooling concept	Intelligent redundant fan-cooling			
Max. operation altitude	4000 m			
Grid connection standard	Inmetro140, IEEE 1547			
Safety / EMC standard	IEC/EN 61000-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2, UL 1741, UL 1699B, FCC			
Features				
PV connection	MC4 connector			
Battery connection	Terminal Block			
AC connection	Terminal Block			
Display	7.0" LCD display & Bluetooth + APP			
Communication interface	Standard: Wi-Fi+LAN+Bluetooth, CAN-BMS, CAN-Parallel×2, RS485-Meter, RS485, DRM, DI, DO×2, Optional: 4G			

S6-EH2P(9.6-16)K03-SV-YD-L-US

Solis Split Phase Low Voltage Energy Storage Inverters

Applicable only to the Americas

Features:

- Supports PV input up to 160% of the inverter's rated DC power, maximising solar utilisation
- Support max 20A PV input current, compatible with future higher-power PV modules
- 300% overload for 1s in off-grid mode, ensuring stable startup of motors and air conditioner
- Seamless on/off-grid switching in under 10ms, guaranteeing an uninterrupted power supply
- Supports generator input across a wide range (20%–100% of rated power), reducing investment costs
- Supports both DC and AC coupling—making it easy to expand PV, charge batteries, and power loads reliably, even in off-grid conditions
- Battery reserve function across multiple scenarios, ensuring reliable backup power
- Smart Load management with prioritisation, extending backup time for critical loads
- Smart port enables multiple energy source inputs, including grid-tied inverters, diesel generators, and wind turbines
- Support max 6 units in parallel, for expanding system capacity
- Integrated Arc Fault Protection and Rapid Shutdown Transmitter, ensuring system safety

Models:

S6-EH2P9.6K03-SV-YD-L-US

S6-EH2P10K03-SV-YD-L-US

S6-EH2P11.4K03-SV-YD-L-US

S6-EH2P12K03-SV-YD-L-US

S6-EH2P14K03-SV-YD-L-US

S6-EH2P16K03-SV-YD-L-US

DATASHEET

Models	9.6K	10K	11.4K	12K	14K	16K
Input DC (PV side)						
Recommended max. PV power	15.36 kW	16 kW	18.24 kW	19.2 kW	22.4 kW	25.6 kW
Max. input voltage	550 V					
Rated voltage	380 V					
Start-up voltage	100 V					
MPPT voltage range	100-450 V					
Full load MPPT voltage range	160-450 V				186-450 V	
Max. input current per MPPT	40 A					
Max. short circuit current per MPPT	50 A					
Number of MPPTs / Number of strings per MPPT	3 / 2					
Battery						
Battery type	Li-ion / Lead-acid					
Battery voltage range	40 - 60 V					
Max. charge / discharge current	200 A	208 A	237.5 A	250 A	290 A	
Communication	CAN / RS485					
Number of batteries per inverter	See Battery Compatibility Sheet					
Output AC (Grid side)						
Rated output power	9.6 kW	10 kW	11.4 kW	12 kW	14 kW	16 kW
Max. apparent output power	9.6 kVA	10 kVA	11.4 kVA	12 kVA	14 kVA	16 kVA
Rated output voltage	220 V / 240 V					
Rated grid frequency	50 Hz / 60 Hz					
Rated grid output current	43.6 A / 40 A	45.5 A / 41.7 A	51.8 A / 47.5 A	54.5 A / 50 A	63.6 A / 58.3 A	72.7 A / 66.7 A
Max. output current	43.6 A / 40 A	45.5 A / 41.7 A	51.8 A / 47.5 A	54.5 A / 50 A	63.6 A / 58.3 A	72.7 A / 66.7 A
THDi	< 3%					
Input AC (Grid side)						
Input voltage range	193.6 - 242 V / 211 - 264 V					
Max. input current	200 A					
Frequency range	59.5 - 60.5 Hz / 58.8 - 61.2 Hz					
Output AC (Back-up and Off-gird)						
Rated output power	9.6 kW	10 kW	11.4 kW	12 kW	14 kW	16 kW
Max. apparent output power	2 time of rated power, 10 s; 3 times of rated power, 1 s					
Back-up switch time	< 10 ms					
Phase power	L1/L2/N(PE), 120 V / 240 V (split phase)					
Rated output voltage (L1-L2)	220 V / 240 V					
AC output voltage range	193.6-242 V / 211-264 V					
Rated grid frequency	50 Hz / 60 Hz					
Rated output current	43.6 A / 40 A	45.5 A / 41.7 A	51.8 A / 47.5 A	54.5 A / 50 A	63.6 A / 58.3 A	72.7 A / 66.7 A
Max. output over current protection, 10 sec	87.2 A / 80 A	91 A / 83.4 A	103.6 A / 95 A	109 A / 100 A	127.2 A / 116.6 A	145.4 A / 133.4 A
Max. continuous AC passthrough	200 A					
Max. allowable phase imbalance	50%					
Backup support configurations	Dedicated loads and whole-home					
Power factor	> 0.99 (0.8 leading - 0.8 lagging)					
THDv (@linear load)	< 3%					
Input Generator						
Max. input power	30 kW					
Max. input current	125 A					
Rated input frequency	50 Hz / 60 Hz					
Efficiency						
Max. efficiency	96.02%					
CEC efficiency	95.45%					
Battery charged by PV max. efficiency	96.21%					
Battery charged / discharged to AC max. efficiency	94.16%/94.22%					
Protection						
Ground fault monitoring	Yes					
Integrated AFCI	Yes					
DC reverse-polarity protection	Yes (PV only)					
Rapid shutdown NEC 2017	Integrated SunSpec-certified Transmitter					
Compatible RSD receivers	See MLRSD compatibility Sheet					
Protection class / Over voltage category	I / II					
General Data						
Dimensions (W × H × D)	534 × 930 × 297 mm					
Weight	65.8 kg					
Inverter topology	Non-isolated (PV), Isolated (Battery)					
Operating ambient temperature range	-25°C to 60°C					
Ingress protection	TYPE 4X (IP66)					
Self-consumption (night)	< 35 W					
Noise emission (typical)	<65 dB(A)					
Cooling concept	Intelligent fan-cooling					
Relative humidity range	0 - 100%					
Mounting type	Wall Bracket					
Max. operation altitude	13120 ft (4000 m)					
Grid Certifications	IEEE 1547-2018, IEEE1547.1-2020, CA Rule 21, SRD 2.0					
Safety Certifications	UL 1741 PVRSS, UL 1699B, UL 1998 (US), UL 1741, UL 1741 SB, CSA C22.2107.1-1					
Emissions	FCC Part 15 Class B					
Features						
DC connection	Terminal Block (PV port) / Terminal Block (BAT port)					
AC connection	Terminal Block					
Interface	7.0" LCD display & Bluetooth + APP					
Revenue grade meter	Optional					
Monitoring platform	SolisCloud (modbus map and API sharing available upon request)					
Communication	RS485, Optional: Cellular, Wi-Fi, LAN					

S6-EH2P(10-18)K03-SV-YD-L

Solis Split Phase Low Voltage Energy Storage Inverters

Applicable only to Latin America

Features:

- Supports PV input up to 160% of the inverter's rated DC power, maximising solar utilisation
- Support max 21A PV input current, compatible with future higher-power PV modules
- 200% overload for 10s in off-grid mode, ensuring stable startup of motors and air conditioner
- Seamless on/off-grid switching in under 10ms, guaranteeing an uninterrupted power supply
- Supports generator input across a wide range (20%–100% of rated power), reducing investment costs
- Supports both DC and AC coupling—making it easy to expand PV, charge batteries, and power loads reliably, even in off-grid conditions
- Battery reserve function across multiple scenarios, ensuring reliable backup power
- Smart Load management with prioritisation, extending backup time for critical loads
- Smart port enables multiple energy source inputs, including grid-tied inverters, diesel generators, and wind turbines
- Support max 6 units in parallel, for expanding system capacity
- Integrated Arc Fault Protection, ensuring system safety

Models:

S6-EH2P10K03-SV-YD-L

S6-EH2P12K03-SV-YD-L

S6-EH2P14K03-SV-YD-L

S6-EH2P16K03-SV-YD-L

S6-EH2P18K03-SV-YD-L

DATASHEET

Models	10K	12K	14K	16K	18K
Input DC (PV side)					
Recommended max. PV power	16 kW	19.2 kW	22.4 kW	25.6 kW	28.8 kW
Max. input voltage	550 V				
Rated voltage	380 V				
Start-up voltage	100 V				
MPPT voltage range	100-450 V				
Full load MPPT voltage range	160-450 V			186-450 V	
Max. input current per MPPT	40 A				42 A
Max. short circuit current per MPPT	50 A				
Number of MPPTs / Number of strings per MPPT	3 / 2				
Battery					
Battery type	Li-ion / Lead-acid				
Battery voltage range	40 - 60 V				
Max. charge / discharge current	208 A	250 A	290 A		320 A
Battery switch	Yes				
Communication	CAN / RS485				
Number of batteries per inverter	See Battery Compatibility Sheet				
Output AC (Grid side)					
Rated output power	10 kW	12 kW	14 kW	16 kW	18 kW
Max. apparent output power	10 kVA	12 kVA	14 kVA	16 kVA	18 kVA
Rated output voltage	220 V / 240 V				
Rated grid frequency	50 Hz / 60 Hz				
Rated grid output current	45.5 A / 41.7 A	54.5 A / 50 A	63.6 A / 58.3 A	72.7 A / 66.7 A	81.8 A / 75 A
Max. output current	45.5 A / 41.7 A	54.5 A / 50 A	63.6 A / 58.3 A	72.7 A / 66.7 A	81.8 A / 75 A
THDi	< 3%				
Input AC (Grid side)					
Input voltage range	193.6 - 242 V / 211 - 264 V				
Max. input current	200 A				
Frequency range	59.5 - 60.5 Hz / 58.8 - 61.2 Hz				
Output AC (Back-up and Off-gird)					
Rated output power	10 kW	12 kW	14 kW	16 kW	18 kW
Max. apparent output power	2 time of rated power, 10 s				
Back-up switch time	< 10 ms				
Phase power	L1/L2/N(PE), 120 V / 240 V (split phase)				
Rated output voltage (L1-L2)	220 V / 240 V				
AC output voltage range	193.6 - 242 V / 211 - 264 V				
Rated grid frequency	50 Hz / 60 Hz				
Rated output current	45.5 A / 41.7 A	54.5 A / 50 A	63.6 A / 58.3 A	72.7 A / 66.7 A	81.8 A / 75 A
Max. output over current protection, 10 sec	91 A / 83.4 A	109 A / 100 A	127.2 A / 116.6 A	145.4 A / 133.4 A	163.6 A / 150 A
Max. continuous AC passthrough	200 A				
Max. allowable phase imbalance	50%				
Backup support configurations	Dedicated loads and whole-home				
Power factor	> 0.99 (0.8 leading - 0.8 lagging)				
THDv (@linear load)	< 3%				
Input Generator					
Max. input power	30 kW				
Max. input current	125 A				
Rated input frequency	50 Hz / 60 Hz				
Efficiency					
Max. efficiency	96.02%				
CEC efficiency	95.45%				
Battery charged by PV max. efficiency	96.21%				
Battery charged / discharged to AC max. efficiency	94.16%/94.22%				
Protection					
Ground fault monitoring	Yes				
Integrated AFCI	Yes				
DC reverse-polarity protection	Yes (PV only)				
Protection class / Over voltage category	I / II				
General Data					
Dimensions (W × H × D)	534 × 930 × 297 mm				
Weight	65.8 kg				
Inverter topology	Non-isolated (PV), Isolated (Battery)				
Operating ambient temperature range	-25°C ~ 60°C				
Ingress protection	TYPE 4X				
Noise emission (typical)	<65 dB(A)				
Self-consumption (night)	< 35 W				
Cooling concept	Intelligent fan-cooling				
Relative humidity range	0 - 100%				
Mounting type	Wall Bracket				
Max. operation altitude	4000 m				
Grid Certifications	IEEE 1547-2018, IEEE1547.1-2020, CA Rule 21				
Safety Certifications	UL 1741, UL 1741 SB, CSA C22.2107.1-1, UL 1741 PVRSS, UL 1699B, UL 1998 (US)				
Emissions	FCC Parte 15 Clase B				
Features					
DC connection	Terminal Block (PV port) / Terminal Block (BAT port)				
AC connection	Terminal Block				
Interface	7.0" LCD display & Bluetooth + APP				
Revenue grade meter	Optional				
Monitoring platform	SolisCloud (modbus map and API sharing available upon request)				
Communication	RS485, Optional: Cellular, Wi-Fi, LAN				

S6-EH3P(5-18)K02-NV-YD-L

Solis Three Phase Low Voltage Energy Storage Inverters

Features:

- Supports PV input up to 160% of the inverter's rated DC power, maximising solar utilisation
- Supports up to 21A PV input current, compatible with future higher-power PV modules
- 200% overload for 10s in off-grid mode, ensuring stable startup of motors, water pumps and air conditioners
- Seamless on/off-grid switching in under 10ms, guaranteeing an uninterrupted power supply
- Support three-phase unbalanced output, each phase supports output max. 50% rated inverter power
- Supports both DC and AC coupling—making it easy to expand PV, charge batteries, and power loads reliably, even in off-grid conditions
- Multiple methods of generator connection and auto control, enabling flexible local deployment
- Support max 6 units in parallel, expanding system capacity
- Smart Load management with prioritisation, extending backup time for critical loads
- Customizable battery backup level for uninterrupted power
- Supports PV-only off-grid operation, reducing upfront costs
- SolisCloud: Smart remote control, AI optimisation, and instant troubleshooting — all in one platform
- 7-inch industrial-grade LCD screen, providing a larger, user-friendly interface for local operation
- Ingress protection IP66, for operation in harsh conditions

Models:

S6-EH3P5K02-NV-YD-L / S6-EH3P6K02-NV-YD-L

S6-EH3P8K02-NV-YD-L / S6-EH3P10K02-NV-YD-L

S6-EH3P12K02-NV-YD-L / S6-EH3P15K02-NV-YD-L

S6-EH3P18K02-NV-YD-L

DATASHEET

Models	5K	6K	8K	10K	12K	15K	18K
Input DC (PV side)							
Recommended max. PV array size	10 kW	12 kW	16 kW	20 kW	24 kW	30 kW	36 kW
Max. usable PV input power	9 kW	9.6 kW	12.8 kW	16 kW	19.2 kW	24 kW	28.8 kW
Max. input voltage	1000 V						
Rated voltage	550 V						
Start-up voltage	160 V						
MPPT voltage range	200 - 850 V						
Max. input current	20 A / 20 A	20 A / 20 A	20 A / 40 A			40 A / 40 A	42 A / 42 A
Max. current per DC input	20 A						21 A
Max. short circuit current	30 A / 30 A	30 A / 30 A	30 A / 50 A			50 A / 50 A	50 A / 50 A
MPPT number / Max. input strings number	2 / 2		2 / 3			2 / 4	
Battery							
Battery type	Li-ion / Lead-acid						
Battery voltage range	40 - 60 V						
Max. charge / discharge current	125 A	150 A	180 A	220 A	250 A	290 A	320 A
Number of battery port / Number of BMS port	2 / 1						
Max. charge / discharge current of each port	150 A						175 A
Communication	CAN / RS485						
Output AC (Grid side)							
Rated output power	5 kW	6 kW	8 kW	10 kW	12 kW	15 kW	18 kW
Max. apparent output power	5 kVA	6 kVA	8 kVA	10 kVA	12 kVA	15 kVA	18 kVA
Rated grid voltage	3/N/PE, 220 V / 380 V; 3/N/PE, 230 V / 400 V						
Rated grid frequency	50 Hz / 60 Hz						
Rated grid output current	7.6 A / 7.3 A	9.1 A / 8.7 A	12.2 A / 11.5 A	15.2 A / 14.4 A	18.2 A / 17.3 A	22.8 A / 21.7 A	27.3 A / 26.1 A
Power factor	> 0.99 (0.8 leading - 0.8 lagging)						
THDi	< 3%						
Input AC (Grid side)							
Max. input power	7.5 kW	9 kW	12kW	15 kW	18 kW	22.5 kW	27 kW
Input voltage range	323 - 437 V / 340 - 460 V						
Max. input current	11.4 A / 10.9 A	13.7 A / 13.1 A	18.3 A / 17.3 A	22.8 A / 21.7 A	27.3 A / 26.0 A	34.2 A / 32.5 A	41 A / 39.2 A
Output AC (Back-up)							
Rated output power	5 kW	6 kW	8 kW	10 kW	12 kW	15 kW	18 kW
Max. apparent output power	2 times of rated power, 10 s						
Back-up switch time	< 10 ms						
Rated output voltage	3/N/PE, 220 V / 380 V; 3/N/PE, 230 V / 400 V						
Rated frequency	50 Hz / 60 Hz						
Rated output current	7.6 A / 7.3 A	9.1 A / 8.7 A	12.2 A / 11.5 A	15.2 A / 14.4 A	18.2 A / 17.3 A	22.8 A / 21.7 A	27.3 A / 26.1 A
Max. AC passthrough current	50 A						
THDv (@linear load)	< 3%						
Input AC (Generator side)							
Max. input power	5 kW	6 kW	8 kW	10 kW	12 kW	15 kW	18 kW
Rated input current	7.6 A / 7.3 A	9.1 A / 8.7 A	12.2 A / 11.5 A	15.2 A / 14.4 A	18.2 A / 17.3 A	22.8 A / 21.7 A	27.3 A / 26.1 A
Rated input voltage	3/N/PE, 220 V / 380 V; 3/N/PE, 230 V / 400 V						
Rated input frequency	50 Hz / 60 Hz						
Efficiency							
Max. efficiency	97.5%						
EU efficiency	96.4%						
BAT charged by PV / AC max. efficiency	95.0% / 94.4%						
Battery discharged efficiency	94.5%						
Protection							
Surge protection	DC Type II / AC Type II (Optional)						
Output over current protection	Yes						
Insulation resistance monitoring	Yes						
Residual current detection	Yes						
Integrated PV switch	Yes						
DC reverse-polarity protection	Yes						
Protection class / Over voltage category	I / II (PV and BAT), III (MAINS and BACKUP and GEN)						
Integrated AFCI 2.0	Optional						
Anti-islanding protection	Yes						
General Data							
Max. power per phase	50% rated power						40% rated power
Dimensions (W × H × D)	430 × 660 × 305 mm						
Weight	42 kg						
Inverter topology	Non-isolated (PV), Isolated (Battery)						
Self-consumption	< 30 W						
Operating temperature range	-25 ~ +60°C						
Relative humidity	0 - 100%						
Ingress protection	IP66						
Noise emission (typical)	< 65 dB(A)						
Cooling concept	Intelligent fan-cooling						
Max. operation altitude	4000 m						
Grid connection standard	EN 50549-1/-10, VDE 4105&VDE 0124, NRS 097-2-1, IEC 62116, IEC 61727, IEC 60068, IEC 61683, EN 50530, SriLanka, EN 50438L, Vietnam, MEA, PEA, CEI 0-21						
Safety / EMC standard	IEC/EN 62109-1/-2, IEC/EN 61000-6-1/-2/-3/-4						
Features							
PV connection	MC4 Quick connection plug						
Battery connection	Screw terminal						
AC connection	Screw terminal						
Display	7.0" LCD display & Bluetooth + APP						
Communication interface	Standard: WIFI+LAN+Bluetooth, CAN-BMS, CAN-Parallel×2, RS485-Meter, RS485, DRM, DI, DO×4; Optional: 2G/3G/4G						

S6-EH3P(7-10)K02-LV-YD-L

Solis Three Phase Low Voltage Energy Storage Inverters

Applicable to Brazil and Philippines

Features:

- Supports PV input up to 160% of the inverter's rated DC power, maximising solar utilisation
- Supports up to 21A PV input current, compatible with future higher-power PV modules
- 200% overload for 10s in off-grid mode, ensuring stable startup of motors, water pumps and air conditioners
- Seamless on/off-grid switching in under 10ms, guaranteeing an uninterrupted power supply
- Support three-phase unbalanced output, each phase supports output max. 50% rated inverter power
- Supports both DC and AC coupling—making it easy to expand PV, charge batteries, and power loads reliably, even in off-grid conditions
- Multiple methods of generator connection and auto control, enabling flexible local deployment
- Support max 6 units in parallel, expanding system capacity
- Smart Load management with prioritisation, extending backup time for critical loads
- Customizable battery backup level for uninterrupted power
- Supports PV-only off-grid operation, reducing upfront costs
- SolisCloud: Smart remote control, AI optimisation, and instant troubleshooting — all in one platform
- 7-inch industrial-grade LCD screen, providing a larger, user-friendly interface for local operation
- Ingress protection IP66, for operation in harsh conditions

Models:

S6-EH3P7K02-LV-YD-L

S6-EH3P8K02-LV-YD-L

S6-EH3P9K02-LV-YD-L

S6-EH3P10K02-LV-YD-L

DATASHEET

Models	7K	8K	9K	10K
Input DC (PV side)				
Recommended max. PV array size	14 kW	16 kW	18 kW	20 kW
Max. usable PV input power	11.2 kW	12.8 kW	14.4 kW	16 kW
Max. input voltage	1000 V			
Rated voltage	550 V			
Start-up voltage	160 V			
MPPT voltage range	200 - 850 V			
Max. input current	20 A / 40 A			42 A / 42 A
Max. current per DC input	20 A			21 A
Max. short circuit current	30 A / 50 A			50 A / 50 A
MPPT number / Max. input strings number	2 / 3			2 / 4
Battery				
Battery type	Li-ion / Lead-acid			
Battery voltage range	40 - 60 V			
Max. charge / discharge current	156 A	178 A	200 A	235 A
Number of battery port / Number of BMS port	2 / 1			
Max. charge / discharge current of each port	150 A			
Communication	CAN / RS485			
Output AC (Grid side)				
Rated output power	7 kW	8 kW	9 kW	10 kW
Max. apparent output power	7 kVA	8 kVA	9 kVA	10 kVA
Rated grid voltage	3/N/PE, 127 V / 220 V; 3/N/PE, 133 V / 230 V			
Rated grid frequency	50 Hz / 60 Hz			
Rated grid output current	18.4 A / 17.6 A	21 A / 20.1 A	23.5 A / 22.6 A	26.3 A / 25.1 A
Power factor	> 0.99 (0.8 leading - 0.8 lagging)			
THDi	< 3%			
Input AC (Grid side)				
Max. input power	10.5 kW	12 kW	13.5 kW	15 kW
Input voltage range	187 - 253 V / 196 - 265 V			
Max. input current	27.6 A / 26.3 A	31.5 A / 30.1 A	35.4 A / 33.8 A	39.4 A / 37.6 A
Output AC (Back-up)				
Rated output power	7 kW	8 kW	9 kW	10 kW
Max. apparent output power	2 times of rated power, 10 s			
Back-up switch time	< 10 ms			
Rated output voltage	3/N/PE, 127 V / 220 V; 3/N/PE, 133 V / 230 V			
Rated frequency	50 Hz / 60 Hz			
Rated output current	18.4 A / 17.6 A	21 A / 20.1 A	23.5 A / 22.6 A	26.3 A / 25.1 A
Max. AC passthrough current	50 A			
THDv (@linear load)	< 3%			
Input AC (Generator side)				
Max. input power	7 kW	8 kW	9 kW	10 kW
Rated input current	18.4 A / 17.6 A	21 A / 20.1 A	23.5 A / 22.6 A	26.3 A / 25.1 A
Rated input voltage	3/N/PE, 127 V / 220 V; 3/N/PE, 133 V / 230 V			
Rated input frequency	50 Hz / 60 Hz			
Efficiency				
Max. efficiency	96.2%			
EU efficiency	94.9%			
BAT charged by PV / AC max. efficiency	95.6% / 92.9%			
Battery discharged efficiency	92.9%			
Protection				
Surge protection	DC Type II / AC Type II (Optional)			
Output over current protection	Yes			
Insulation resistance monitoring	Yes			
Residual current detection	Yes			
Integrated PV switch	Yes			
DC reverse-polarity protection	Yes			
Protection class / Over voltage category	I / II (PV and BAT), III (MAINS and BACKUP and GEN)			
Integrated AFCI 2.0	Optional (Brazil: Yes)			
Anti-islanding protection	Yes			
General Data				
Max. power per phase	50% rated power			45% rated power
Dimensions (W × H × D)	430 × 660 × 305 mm			
Weight	42 kg			
Inverter topology	Non-isolated (PV), Isolated (Battery)			
Self-consumption	< 30 W			
Operating temperature range	-25 ~ +60°C			
Relative humidity	0 - 100%			
Ingress protection	IP66			
Noise emission (typical)	< 65 dB(A)			
Cooling concept	Intelligent fan-cooling			
Max. operation altitude	4000 m			
Grid connection standard	Philippin, ORDINANCE (PORTARIA) No.140 and No. 515			
Safety / EMC standard	IEC/EN 62109-1/-2, IEC/EN 61000-6-1/-2/-3-4			
Features				
PV connection	MC4 Quick connection plug			
Battery connection	Screw terminal			
AC connection	Screw terminal			
Display	7.0" LCD display & Bluetooth + APP			
Communication interface	Standard: WIFI+LAN+Bluetooth, CAN-BMS, CAN-Parallel×2, RS485-Meter, RS485, DRM, DI, DO×4; Optional: 2G/3G/4G			

S6-EH3P(3-10)K-H, S6-EH3P12K-H-EU(21A)

Solis Three Phase High Voltage Energy Storage Inverters

Unique Advantages

★ Supports up to 4 MPPTs, suitable for multi-orientation and occlusion, to improve power generation

Leading Advantages

- Supports PV input up to 160% of the inverter's rated DC power, maximising solar utilisation
- Supports up to 21A PV input current, compatible with future higher-power PV modules
- 160% overload for 60s in off-grid mode, ensuring stable startup of motors, water pumps and air conditioner
- Seamless on/off-grid switching in under 10ms, guaranteeing an uninterrupted power supply
- Support three-phase unbalanced output, each phase supports output max. 50% rated inverter power
- Supports existing PV grid-tied power connection for export control and off-grid use
- Support grid side generator access, adapting to scenarios with insufficient power supply
- Support max 6 units in parallel, for expanding system capacity
- Customizable battery backup level for uninterrupted power
- PV only off grid mode, to reduce the initial investment cost
- SolisCloud: Smart remote control, AI optimisation, and instant troubleshooting - all in one platform
- Ingress protection IP66, adapting to harsh ambient conditions

Models:

S6-EH3P5K2-H / S6-EH3P6K2-H

S6-EH3P8K2-H / S6-EH3P10K2-H

S6-EH3P3K-H-EU / S6-EH3P4K-H-EU

S6-EH3P5K-H-EU / S6-EH3P6K-H-EU

S6-EH3P8K-H-EU / S6-EH3P10K-H-EU

S6-EH3P12K-H-EU(21A)

DATASHEET

Models	5K2	6K2	8K2	10K2	3K-EU	4K-EU	5K-EU	6K-EU	8K-EU	10K-EU	12K-EU(21A)
Input DC (PV side)											
Recommended max. PV array size	10 kW	12 kW	16 kW	20 kW	6 kW	8 kW	10 kW	12 kW	16 kW	20 kW	24 kW
Max. usable PV input power	8 kW	9.6 kW	12.8 kW	16 kW	4.8 kW	6.4 kW	8 kW	9.6 kW	12.8 kW	16 kW	19.2 kW
Max. input voltage	1000 V										
Rated voltage	600 V										
Start-up voltage	160 V										
MPPT voltage range	200 - 850 V										
Max. input current	16 A / 16 A				16 A / 16 A		16 A / 16 A / 16 A		4 × 16 A		4 × 21 A
Max. current per DC input	16 A										21 A
Max. short circuit current	24 A / 24 A				24 A / 24 A		24 A / 24 A / 24 A		4 × 24 A		4 × 31.5 A
MPPT number / Max. input strings number	2 / 2				2 / 2		3 / 3		4 / 4		
Battery											
Battery type	Li-ion										
Battery voltage range	120 - 600 V ①										120 - 700 V
Max. charge / discharge current	25 A		50 A		25 A				50 A		
Number of battery port / Number of BMS port	1 / 1										
Communication	CAN / RS485										
Output AC (Grid side)											
Rated output power	5 kW	6 kW	8 kW	10 kW	3 kW	4 kW	5 kW	6 kW	8 kW	10 kW	12 kW
Max. apparent output power	5 kVA	6 kVA	8 kVA	10 kVA	3 kVA	4 kVA	5 kVA	6 kVA	8 kVA	10 kVA	12 kVA
Rated grid voltage	3/N/PE, 220 V / 380 V, 230 V / 400 V										
Rated grid frequency	50 Hz / 60 Hz										
Rated grid output current	7.6 A / 7.2 A	9.1 A / 8.7 A	12.2 A / 11.5 A	15.2 A / 14.4 A	4.6 A / 4.3 A	6.1 A / 5.8 A	7.6 A / 7.2 A	9.1 A / 8.7 A	12.2 A / 11.5 A	15.2 A / 14.4 A	18.2 A / 17.3 A
Power factor	> 0.99 (0.8 leading - 0.8 lagging)										
THDi	< 3%										
Input AC (Grid side)											
Max. input power	5 kW	6 kW	8 kW	10 kW	3 kW	4 kW	5 kW	6 kW	8 kW	10 kW	12 kW
Input voltage range	304 - 437 V / 320 - 460 V										
Max. input current	11.4 A / 10.9 A	13.6 A / 13.0 A	18.2 A / 17.4 A	22.7 A / 21.7 A	6.8 A / 6.5 A	9.1 A / 8.7 A	11.4 A / 10.9 A	13.6 A / 13.0 A	18.2 A / 17.4 A	22.7 A / 21.7 A	27.3 A / 26.0 A
Output AC (Back-up)											
Rated output power	5 kW	6 kW	8 kW	10 kW	3 kW	4 kW	5 kW	6 kW	8 kW	10 kW	12 kW
Max. apparent output power	1.6 times of rated power, 60 s										
Back-up switch time	< 10 ms										
Rated output voltage	3/N/PE, 220 V / 380 V, 230 V / 400 V										
Rated frequency	50 Hz / 60 Hz										
Rated output current	7.6 A / 7.2 A	9.1 A / 8.7 A	12.2 A / 11.5 A	15.2 A / 14.4 A	4.6 A / 4.3 A	6.1 A / 5.8 A	7.6 A / 7.2 A	9.1 A / 8.7 A	12.2 A / 11.5 A	15.2 A / 14.4 A	18.2 A / 17.3 A
Max. AC passthrough current	7.6 A / 7.2 A	9.1 A / 8.7 A	12.2 A / 11.5 A	15.2 A / 14.4 A	4.6 A / 4.3 A	6.1 A / 5.8 A	7.6 A / 7.2 A	9.1 A / 8.7 A	12.2 A / 11.5 A	15.2 A / 14.4 A	18.2 A / 17.3 A
THDv (@linear load)	< 2%										< 3%
Efficiency											
Max. efficiency	96.50%	97.00%	97.50%	97.90%	95.50%	96.00%	96.50%	97.00%	97.50%	97.90%	97.85%
EU efficiency	96.77%	97.10%	97.41%	97.51%	95.51%	96.03%	96.77%	97.10%	97.41%	97.51%	97.51%
BAT charged by PV / AC max. efficiency	98.37% / 97.32%	98.45% / 97.34%	98.22% / 97.50%	98.31% / 97.50%	95.96% / 97.04%	96.57% / 97.29%	98.37% / 97.32%	98.45% / 97.34%	98.22% / 97.50%	98.31% / 97.50%	98.31% / 97.50%
Battery discharged efficiency	97.32%	97.34%	97.50%	97.50%	97.04%	97.29%	97.32%	97.34%	97.50%	97.50%	97.50%
Protection											
Surge protection	DC Type III / AC Type III				DC Type II / AC Type II (optional)						
Output over current protection	Yes										
Insulation resistance monitoring	Yes										
Residual current detection	Yes										
Integrated PV switch	Yes										
DC reverse-polarity protection	Yes										
Protection class / Over voltage category	I / II (PV and BAT), III (MAINS and BACKUP)										
Integrated AFCI 2.0	Optional										
Anti-islanding protection	Yes										
General Data											
Max. power per phase	50% rated power										
Dimensions (W × H × D)	563 × 412 × 209 mm		563 × 412 × 230 mm		563 × 412 × 209 mm				600 × 500 × 230 mm		
Weight	27.6 kg		30.2 kg		26.4 kg		27.6 kg		30.2 kg		34.5 kg
Inverter topology	Transformerless										
Self-consumption	< 25 W										
Operating temperature range	-25 ~ +60°C										
Relative humidity	0 - 100%										
Ingress protection	IP66										
Noise emission (typical)	< 46.9 dB(A)										
Cooling concept	Natural cooling										
Max. operation altitude	4000 m										
Grid connection standard	G98 or G99, VDE-AR-N 4105/VDE V 0124, EN 50549-1, VDE 0126/UTE C 15/VFR:2019, RD 1699/RD 244/UNE 206006/UNE 206007-1, CEI 0-21, C10/11, NRS 097-2-1, TOR, EIFS 2018.2, IEC 62116, IEC 61727, IEC 60068, IEC 61683, EN 50530, MEA, PEA										
Safety / EMC standard	IEC/EN 62109-1/-2, IEC/EN 61000-6-1/-3										
Features											
PV connection	MC4 connector										
Battery connection	Quick connection plug										
AC connection	Quick connection plug										
Display	LED indicator & Bluetooth + APP										
Communication interface	Standard: WIFI+LAN+Bluetooth, CAN-BMS, CAN-Parallel×2, RS485-Meter, RS485, DRM, DI, DO										

① Supports max. battery voltage to 700 V.

S6-EH3P(12-20)K-H

Solis Three Phase High Voltage Energy Storage Inverters

Smart Energy Management

- AI intelligently manages charging and discharging based on TOU (Time-of-Use) tariffs
- Seamless integration with VPP and EMS platforms for enhanced energy optimization
- Built-in control for SG-ready heat pumps

High Performance

- Supports three-phase unbalanced output, allowing up to 40% of rated inverter power per phase
- 160% PV input capacity to maximize solar energy utilization
- Switching time < 10ms

Flexible & Scalable

- Compatible with mainstream lithium batteries
- Easily expand system capacity using parallel connections and AC coupling

Simple & Fast Configuration

- 7-inch large screen uses U.S.-made ZEITLER industrial-grade components
- Bluetooth app support for quick and easy setup

Models:

S6-EH3P12K-H

S6-EH3P15K-H

S6-EH3P20K-H

DATASHEET

Models	12K	15K	20K
Input DC (PV side)			
Recommended max. PV array size	24 kW	30 kW	40 kW
Max. usable PV input power	19.2 kW	24 kW	32 kW
Max. input voltage		1000 V	
Rated voltage		600 V	
Start-up voltage		160 V	
MPPT voltage range		200 - 850 V	
Max. input current		4 × 20 A	
Max. current per DC input		20 A	
Max. short circuit current		4 × 30 A	
MPPT number / Max. input strings number		4 / 4	
Battery			
Battery type		Li-ion	
Battery voltage range		120 - 800 V	
Max. charge / discharge current		50 A	
Number of battery port / Number of BMS port		1 / 1	
Communication		CAN / RS485	
Output AC (Grid side)			
Rated output power	12 kW	15 kW	20 kW
Max. apparent output power	12 kVA	15 kVA	20 kVA
Rated grid voltage		3/N/PE, 220 V / 380 V, 230 V / 400 V	
Rated grid frequency		50 Hz / 60 Hz	
Rated grid output current	18.2 A / 17.3 A	22.8 A / 21.7 A	30.4 A / 28.9 A
Power factor		> 0.99 (0.8 leading - 0.8 lagging)	
THDi		< 3%	
Input AC (Grid side)			
Max. input power	18 kW	22.5 kW	30 kW
Input voltage range		304 - 437 V / 320 - 460 V	
Max. input current	27.3 A / 26.0 A	34.2 A / 32.5 A	45.6 A / 43.3 A
Output AC (Back-up)			
Rated output power	12 kW	15 kW	20 kW
Max. apparent output power		1.6 time of rated power, 10 s	
Back-up switch time		< 10 ms	
Rated output voltage		3/N/PE, 220 V / 380 V, 230 V / 400 V	
Rated frequency		50 Hz / 60 Hz	
Rated output current	18.2 A / 17.3 A	22.8 A / 21.7 A	30.4 A / 28.9 A
Max. AC passthrough current	27.3 A / 26.0 A	34.2 A / 32.5 A	45.6 A / 43.3 A
THDv (@linear load)		< 3%	
Input AC (Generator side)			
Max. input power	12 kW	15 kW	20 kW
Rated input current	18.2 A / 17.3 A	22.8 A / 21.7 A	30.4 A / 28.9 A
Rated input voltage		3/N/PE, 220 V / 380 V, 230 V / 400 V	
Rated input frequency		50 Hz / 60 Hz	
Efficiency			
Max. efficiency		97.7%	
EU efficiency		97.5%	
BAT charged by PV / AC max. efficiency		98.5% / 97.2%	
Battery discharged efficiency		97.2%	
Protection			
Surge protection		DC Type II / AC Type II (Optional)	
Output over current protection		Yes	
Insulation resistance monitoring		Yes	
Residual current detection		Yes	
Integrated PV switch		Yes	
DC reverse-polarity protection		Yes	
Protection class / Over voltage category		I / II (PV and BAT), III (MAINS and BACKUP and GEN)	
Anti-islanding protection		Yes	
General Data			
Max. power per phase		40% rated power	
Dimensions (W × H × D)		563 × 546 × 250 mm	
Weight		35.2 kg	
Inverter topology		Transformerless	
Self-consumption		< 25 W	
Operating temperature range		-25 ~ +60°C	
Relative humidity		0 - 100%	
Ingress protection		IP66	
Noise emission (typical)		< 65 dB(A)	
Cooling concept		Intelligent redundant fan-cooling	
Max. operation altitude		2000 m	
Grid connection standard		EN 50549-1/-10, VDE4105, CEI 0-21, CEI 0-16, NC-RFG TypeB, NRS 097-2-1, LTU-1, G99, PEA	
Safety / EMC standard		IEC/EN 62109-1/-2, IEC/EN 61000-6-1/-2/-3/-4	
Features			
PV connection		MC4 connector	
Battery connection		Lever terminal	
AC connection		OT terminal	
Display		7.0" LCD display & Bluetooth + APP	
Communication interface		Standard: WIFI+LAN+Bluetooth, CAN-BMS, CAN-Parallel×2, RS485-Meter, RS485, DRM, DI, DO×3	

S5-EA1P3K-L

Solis Single Phase Low Voltage AC-Coupled Inverters

Features:

- Compatible with lead-acid and lithium batteries, with multiple battery protection features
- Compatible with any existing grid-tied PV system, option to upgrade
- Intelligent debugging APP which support one-click inverter configuration
- Various work mode for different application scenario
- Natural cooling without external fan

Models:

S5-EA1P3K-L

DATASHEET

Models	3K
Output AC (Grid side)	
Rated output power	3 kW
Max. output power	3 kW
Max. apparent output power	3 kVA
Operation phase	1/N/PE
Rated grid voltage	220 V / 230 V
Grid voltage range	184 - 264 V
Rated grid frequency	50 Hz / 60 Hz
Rated grid output current	13.6 A / 13 A
Max. output current	20 A
Power factor	> 0.99 (0.8 leading - 0.8 lagging)
THDi	< 3%
Battery	
Battery type	Li-ion / Lead-acid
Battery voltage range	40 - 60 V
Battery capacity	50 - 2000 Ah
Max. charge / discharge current	60 A
Communication	CAN
Input AC (Grid side)	
Rated input voltage	220 V / 230 V
Input voltage range	184 - 264 V
Max. input current	13.6 A / 13 A
Rated grid frequency	50 Hz / 60 Hz
Frequency range	45 - 55 Hz / 55 - 65 Hz
Efficiency	
Max. battery charge efficiency	94.0%
Max. battery discharge efficiency	94.5%
Protection	
Battery reverse protection	Yes
Battery over and under voltage protection	Yes
Short circuit protection	Yes
Output over current protection	Yes
Temperature protection	Yes
General Data	
Dimensions (W × H × D)	405 × 510 × 150 mm
Weight	12.1 kg
Topology	High frequency isolation
Operating ambient temperature range	-25 ~ +60°C
Ingress protection	IP65
Cooling concept	Natural cooling
Max. operation altitude	2000 m
Grid connection standard	G98 or G99, VDE-AR-N 4105/VDE V 0124, EN 50549-1, VDE 0126/UTE C 15/VFR:2019, RD 1699/RD 244/UNE 206006/ UNE 206007-1, CEI 0-21, C10/11, NRS 097-2-1, TOR, EIFS 2018.2, IEC 62116, IEC 61727, IEC 60068, IEC 61683, MEA, PEA
Safety / EMC standard	IEC 62477, EN 61000-6-2/-3
Features	
DC connection	Screw terminal
AC connection	Screw clamp terminal (max. 6 mm^2)
Display	LCD
Communication	RS485, CAN, Optional: Wi-Fi, GPRS

S6-EA1P(3.6-6)K-L

Solis Single Phase Low Voltage AC-Coupled Inverters

Features:

- AI intelligently manages charging and discharging based on TOU (Time-of-Use) tariffs
- Supports general setting options for lithium batteries, suitable for non-communicating batteries
- Real-time battery monitoring, remote upgrade, and battery healing function to prolong battery life
- Supports peak shaving control
- Facilitates low-power standby mode to minimize overall system power usage

Models:

S6-EA1P3.6K-L

S6-EA1P4.6K-L

S6-EA1P5K-L

S6-EA1P6K-L

DATASHEET

Models	3.6K	4.6K	5K	6K
Battery				
Battery type	Li-ion			
Battery voltage range	40 - 60 V			
Max. charge / discharge current	75 A	96 A	105 A	125 A
Communication	CAN			
Input AC (Grid side)				
Input voltage range	187 - 253 V			
Max. input current	16.4 A / 15.7 A	21 A / 20 A	22.8 A / 21.8 A	27.3 A / 26.1 A
Frequency range	45 - 55 Hz / 55 - 65 Hz			
Output AC (Grid side)				
Rated output power	3.6 kW	4.6 kW	5 kW	6 kW
Max. apparent output power	3.6 kVA	4.6 kVA	5 kVA	6 kVA
Operation phase	1/N/PE			
Rated grid voltage	220 V / 230 V			
Grid voltage range	187 - 253 V			
Rated grid frequency	50 Hz / 60 Hz			
Rated grid output current	16.4 A / 15.7 A	21 A / 20 A	22.8 A / 21.8 A	27.3 A / 26.1 A
Max. output current	16.4 A / 15.7 A	21 A / 20 A	22.8 A / 21.8 A	27.3 A / 26.1 A
Power factor	> 0.99 (0.8 leading - 0.8 lagging)			
THDi	< 3%			
Efficiency				
BAT charged / discharged to AC max. efficiency	> 93.5%			
Protection				
Protection class	I			
Over voltage category	DC II / AC III			
Battery reverse protection	Yes			
Battery over and under voltage protection	Yes			
Short circuit protection	Yes			
Output over current protection	Yes			
Temperature protection	Yes			
General Data				
Dimensions (W × H × D)	440 × 465 × 192 mm			
Weight	19.9 kg			
Topology	High frequency isolation			
Operating ambient temperature range	-25 ~ +60°C			
Ingress protection	IP66			
Cooling concept	Natural cooling			
Max. operation altitude	4000 m			
Grid connection standard	C10/11, 50549, G98, G99, VDE4105, AS4777.2, France			
Safety / EMC standard	IEC/EN 62109-1/-2, EN 61000-6-2/-3			
Features				
DC connection	Terminal Block			
AC connection	Quick connection plug			
Display	LED indicator & Bluetooth + APP			
Communication	RS485, CAN, Optional: Wi-Fi, LAN			

S6-EA3P(5-10)KAA-NV-ND-H

Solis Three Phase High Voltage AC-Coupled Inverters

Features:

- Supports six different battery charging and discharging TOU (Time of Use) settings to lower your electricity bill
- Max. charge/discharge current up to 50A
- Supports peak shaving control
- Dual RS485 port, supports remote upgrade and VPP remote control
- Real-time battery monitoring, remote upgrade, and battery healing function to prolong battery life
- Compatible with mainstream lithium batteries

Models:

S6-EA3P5KAA-NV-ND-H

S6-EA3P6KAA-NV-ND-H

S6-EA3P8KAA-NV-ND-H

S6-EA3P10KAA-NV-ND-H

DATASHEET

Models	5K	6K	8K	10K
Battery				
Battery type	Li-ion			
Battery voltage range	120 - 600 V			
Max. charge / discharge power	5 kW	6 kW	8 kW	10 kW
Charge / discharge current	0 - 25 A		0 - 50 A	
Battery Isc	80 A			
Communication	CAN / RS485			
Output AC (Grid side)				
Rated output power	5 kW	6 kW	8 kW	10 kW
Max. apparent output power	5 kVA	6 kVA	8 kVA	10 kVA
Rated grid voltage	3/N/PE, 380 V / 400 V			
Grid voltage range	320 - 460 V			
Rated grid frequency	50 Hz / 60 Hz			
Rated grid output current	7.6 A / 7.2 A	9.1 A / 8.7 A	12.2 A / 11.5 A	15.2 A / 14.4 A
Max. output current	7.6 A / 7.2 A	9.1 A / 8.7 A	12.2 A / 11.5 A	15.2 A / 14.4 A
Power factor	> 0.99 (0.8 leading - 0.8 lagging)			
THDi	< 3%			
Input AC (Grid side)				
Max. input power	7.5 kW	9 kW	12 kW	15 kW
Rated input current	11.4 A	13.8 A	18.2 A	22.8 A
Rated input voltage	3/N/PE, 380 V / 400 V			
Rated frequency	50 Hz / 60 Hz			
Efficiency				
EU efficiency	97.51%			
BAT charged / discharged to AC max. efficiency	97.50%			
Protection				
Anti-islanding protection	Yes			
Output over current protection	Yes			
Short circuit protection	Yes			
Battery reverse protection	Yes			
Protection class / Over voltage category	I / II (Battery), III (Main)			
General Data				
Dimensions (W × H × D)	600 × 500 × 210 mm		600 × 500 × 230 mm	
Weight	24.3 kg		26.9 kg	
Topology	Transformerless			
Self-consumption (night)	< 25 W			
Operating ambient temperature range	-25 ~ +60°C (> 45°C derating)			
Relative humidity	0 - 95%			
Ingress protection	IP66			
Noise emission (typical)	< 46.9 dB(A)			
Cooling concept	Natural cooling			
Max. operation altitude	4000 m			
Grid connection standard	VDE-AR-N 4105/EN 50549-10 & EN 50549-1/EN50549SW/EN 50549FI/DK1 & DK2			
Safety standard	IEC/EN 62109-1/-2, IEC/EN 61000-6-1/-3			
Features				
DC connection	Quick connection plug			
AC connection	Quick connection plug			
Display	LED indicator & Bluetooth + APP			
Communication	CAN, RS485, Optional: Wi-Fi, Cellular, LAN			

S6-EA3P(5-10)KAA-NV-YD-H-PRO

Solis Three Phase High Voltage AC-Coupled Inverters

3 Unique Advantages

★ Supports connection to single-phase grid (Netherlands only) and three-phase unbalanced output, each phase supports output max. 50% rated inverter power

★ For households equipped with Solis grid-tied inverters: Works seamlessly with Solis grid-tied inverters to form a zero-export system

★ For households with third-party grid-tied inverters: Supports AC coupling for PV, enabling flexible system expansion and retrofitting

6 Leading Advantages

- Supports battery charge/discharge current up to 50A. Compatible with 50Ah battery cells to reduce initial investment
- Supports SG-Ready heat pump connectivity for smarter home energy applications
- Compact, space-saving design adapts flexibly to narrow installation environments such as lofts and corners
- SolisCloud: Smart remote control, AI optimisation, and instant troubleshooting - all in one platform
- Ingress protection IP66, adapting to harsh ambient conditions
- 4.3 inch touchable LCD screen. More convenient and efficient screen operations

Models:

S6-EA3P5KAA-NV-YD-H-PRO

S6-EA3P6KAA-NV-YD-H-PRO

S6-EA3P8KAA-NV-YD-H-PRO

S6-EA3P10KAA-NV-YD-H-PRO

DATASHEET

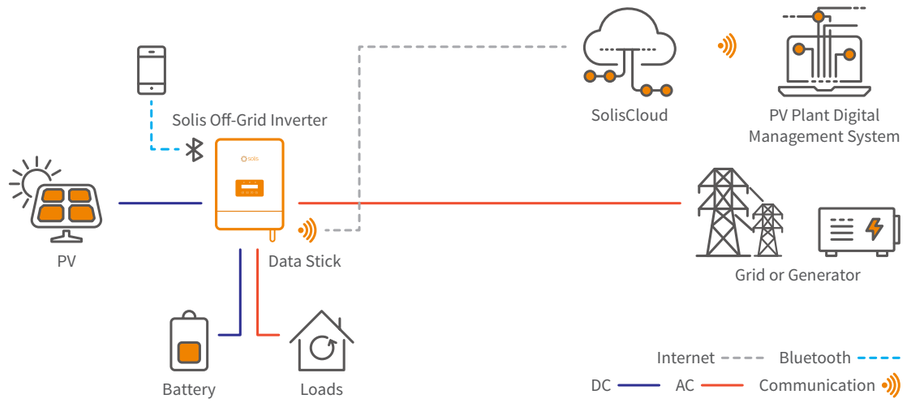
Models	5K	6K	8K	10K
Battery				
Battery type	Li-ion			
Battery voltage range	120 - 700 V			
Charge / discharge current	0 - 25 A	0 - 30 A	0 - 40 A	0 - 50 A
Battery Isc	80 A			
Communication	CAN / RS485			
Output AC (Grid side)				
Rated output power	5 kW	6 kW	8 kW	10 kW
Max. apparent output power	5 kVA	6 kVA	8 kVA	10 kVA
Rated grid voltage	3/N/PE, 380 V / 400 V			
Rated grid frequency	50 Hz / 60 Hz			
Rated grid output current	7.6 A / 7.3 A	9.1 A / 8.7 A	12.2 A / 11.6 A	15.2 A / 14.5 A
Power factor	> 0.99 (0.8 leading - 0.8 lagging)			
THDi	< 3%			
Input AC (Grid side)				
Max. input power	5 kW	6 kW	8 kW	10 kW
Rated input current	7.6 A / 7.3 A	9.1 A / 8.7 A	12.2 A / 11.6 A	15.2 A / 14.5 A
Rated input voltage	3/N/PE, 380 V / 400 V			
Efficiency				
BAT charged / discharged to AC max. efficiency	97.32%	97.34%	97.50%	
Protection				
Anti-islanding protection	Yes			
Output over current protection	Yes			
Short circuit protection	Yes			
Battery reverse protection	Yes			
Protection class / Over voltage category	I / II (Battery), III (Main)			
Surge protection	AC Type II (Optional)			
General Data				
Max. power per phase	50% rated power			
Dimensions (W × H × D)	448 × 413 × 214 mm			
Weight	20 kg			
Topology	Non-isolated			
Self-consumption (night)	< 25 W			
Operating ambient temperature range	-25 ~ +60°C (> 45°C derating)			
Relative humidity	0 - 100%			
Ingress protection	IP66			
Noise emission (typical)	< 47 dB(A)			
Cooling concept	Natural cooling			
Max. operation altitude	4000 m			
Grid connection standard	EN 50549-10 & EN 50549-1, G98, G99, G99 NI, VDE-AR-N 4105/VDE V 0124, C10/11			
Safety standard	IEC/EN 62109-1/-2, IEC/EN 61000-6-1/-3			
Features				
DC connection	Quick connection plug			
AC connection	Quick connection plug			
Display	4.3" touchable LCD display & Bluetooth + APP			
Communication	CAN, RS485-19200, Optional: Wi-Fi, Cellular, LAN			

Off-grid Energy Storage Solutions

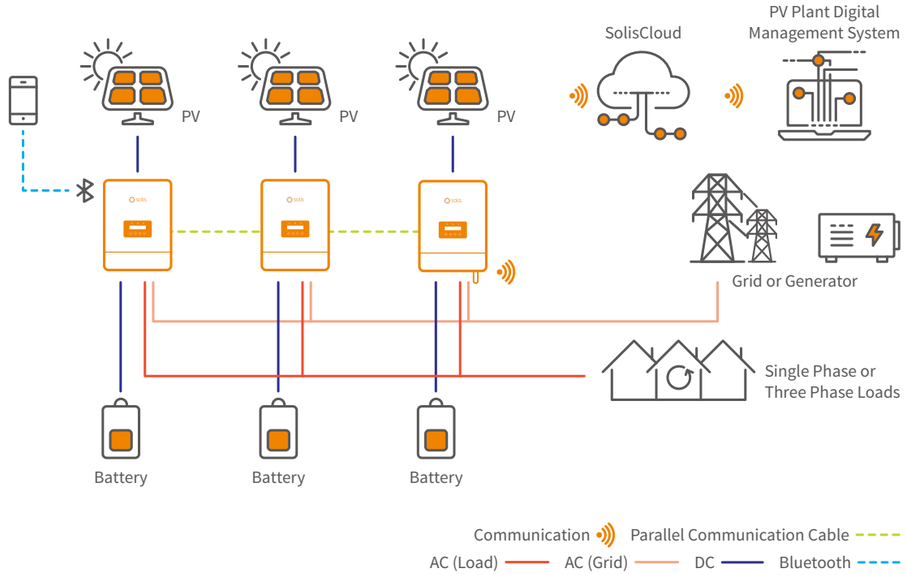
Solis EO series inverter is designed for residential off-grid systems in the countries without stable grid power, which can work with batteries to supply power to load and can also charge the batteries through PV plants, grid or generator.

The product has a variety of application scenarios combination modes, and can realize modular system assembly configuration according to needs. And can provide multiple products in parallel to form up to 30kW single-phase parallel operation system, which is very suitable for small industrial, commercial or residential energy storage projects.

Off-grid Energy Storage Solution - Single EO Inverter



Off-grid Energy Storage Solution - Multiple Parallel EO Inverters



S6-EO1P(4-6)K-48

Solis Single Phase Low Voltage Off-Grid Inverters

Applicable to all regions except Europe and Brazil

Features:

- Compatible with generator as backup power supply for off grid system
- Easily expand system capacity using parallel connections and AC coupling
- 10 seconds of 200% overload capability
- Multiple battery options including fast configuration for non-communicating batteries
- Support one click fast charging mode
- Supports dual backup load for intelligent load prioritzing

Models:

S6-EO1P4K-48

S6-EO1P5K-48

S6-EO1P6K-48

DATASHEET

Models	4K	5K	6K
Solar Charger			
Max. usable PV input power	5.5 kW	6.5 kW	6.5 kW
Max. input voltage	500 V		
Rated voltage	360 V		
Start-up voltage	90 V		
MPPT voltage range	90 - 430 V		
Max. input current	16 A / 16 A		
Max. short circuit current	40 A		
Max. solar charge current	100 A		120 A
MPPT number / Max. input strings number	1 / 2		
Battery			
Battery type	Li-ion / Lead-acid		
Rated battery voltage	40 - 60 V		
Max. charge / discharge power	5 kW / 5 kW		6 kW
Max. charge / discharge current	100 A		120 A
Communication	CAN		
Inverter Output			
Rated output power	4 kVA / 4 kW	5 kVA / 5 kW	6 kVA / 6 kW
Operation phase	L/N/PE		
Rated grid voltage	230 V ± 1%		
Rated grid frequency	50 Hz / 60 Hz ± 0.1%		
Surge capacity	8 kVA	10 kVA	12 kVA
Max. output current	20 A	25 A	30 A
Output voltage waveform	Pure sine wave		
Transfer time	10 ms typical, 20 ms Max		
THDv (@linear load)	< 3%		
Peak efficiency (PV-AC)	96.6%		
AC Charger (grid port and generator port)			
Max. input power	6 kW	7 kW	7 kW
Rated input voltage	L/N/PE, AC 230 V		
Selectable voltage range	90 - 280 V		
AC frequency range	50 Hz / 60 Hz		
Max. input current	26 A	30 A	30 A
Max. AC charge current	60 A	80 A	80 A
Protection			
Output over voltage protection	Yes		
Output over current protection	Yes		
Short circuit protection	Yes		
Surge protection	Yes		
Temperature protection	Yes		
Integrated AFCI 2.0	Optional		
General Data			
Dimensions (W × H × D)	340 × 480 × 170 mm		
Weight	13.8 kg		
Topology	High frequency non-isolation		
Relative humidity	5% - 95% (Non-condensing)		
Operating ambient temperature range	-10 ~ +60°C		
Storage temperature range	-25 ~ +60°C		
Ingress protection	IP21		
Max. operation altitude	2000 m		
Parallel capability	6 units		
Safety standard	IEC 62109, IEC 61000, 55011		
Features			
DC connection	Terminal connectors		
AC connection	Terminal connectors		
Display	LCD		
Communication	CAN, BMS, Dry-contact, Bluetooth, Optional: Wi-Fi		

S6-EO1P(4-5)K-48-EU

Solis Single Phase Low Voltage Off-Grid Inverters

Applicable only to Europe

Features:

- Compatible with generator as backup power supply for off grid system
- Easily expand system capacity using parallel connections and AC coupling
- 10 seconds of 200% overload capability
- Multiple battery options including fast configuration for non-communicating batteries
- Support one click fast charging mode
- Supports dual backup load for intelligent load prioritzing

Models:

S6-EO1P4K-48-EU

S6-EO1P5K-48-EU

DATASHEET

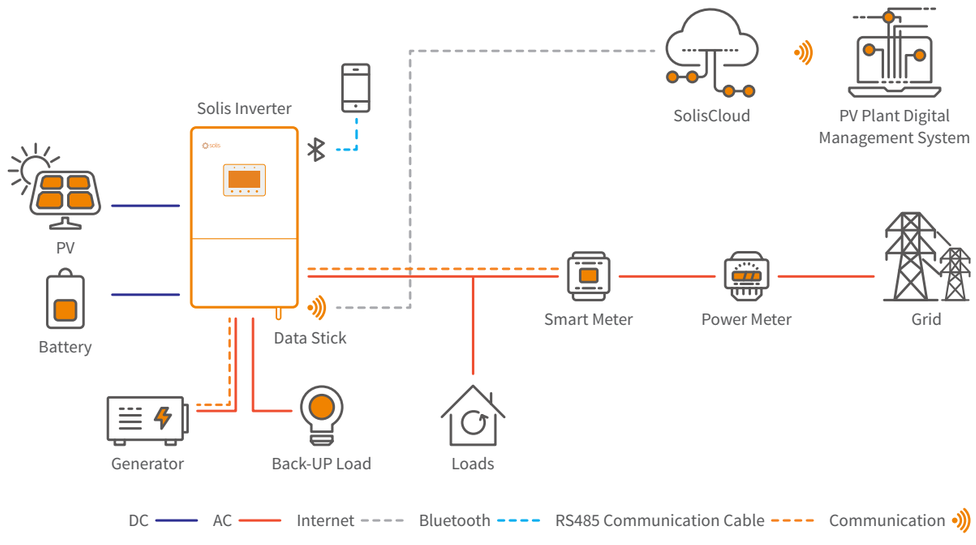
Models	4K	5K
Solar Charger		
Max. usable PV input power	5.5 kW	6.5 kW
Max. input voltage	500 V	
Rated voltage	360 V	
Start-up voltage	90 V	
MPPT voltage range	90 - 430 V	
Max. input current	16 A / 16 A	
Max. short circuit current	40 A	
Max. solar charge current	100 A	
MPPT number / Max. input strings number	1 / 2	
Battery		
Battery type	Li-ion / Lead-acid	
Rated battery voltage	40 - 60 V	
Max. charge / discharge power	5 kW / 5 kW	
Max. charge / discharge current	100 A	
Communication	CAN	
Inverter Output		
Rated output power	4 kVA / 4 kW	5 kVA / 5 kW
Operation phase	L/N/PE	
Rated grid voltage	230 V ± 1%	
Rated grid frequency	50 Hz / 60 Hz ± 0.1%	
Surge capacity	8 kVA	10 kVA
Max. output current	20 A	25 A
Output voltage waveform	Pure sine wave	
Transfer time	10 ms typical, 20 ms Max	
THDv (@linear load)	< 3%	
Peak efficiency (PV-AC)	96.6%	
AC Charger (grid port and generator port)		
Max. input power	6 kW	7 kW
Rated input voltage	L/N/PE, AC 230 V	
Selectable voltage range	90 - 280 V	
AC frequency range	50 Hz / 60 Hz	
Max. input current	26 A	30 A
Max. AC charge current	60 A	80 A
Protection		
Output over voltage protection	Yes	
Output over current protection	Yes	
Short circuit protection	Yes	
Surge protection	Yes	
Temperature protection	Yes	
Integrated AFCI 2.0	Optional	
General Data		
Dimensions (W × H × D)	340 × 495 × 170 mm	
Weight	14.1 kg	
Topology	High frequency non-isolation	
Relative humidity	5% - 95% (Non-condensing)	
Operating ambient temperature range	-10 ~ +60°C	
Storage temperature range	-25 ~ +60°C	
Ingress protection	IP21	
Max. operation altitude	2000 m	
Parallel capability	6 units	
Safety standard	IEC 62109, IEC 61000, 55011	
Features		
DC connection	Terminal connectors	
AC connection	Terminal connectors	
Display	LCD	
Communication	CAN, BMS, Dry-contact, Bluetooth, Optional: Wi-Fi	

Commercial Energy Storage Solutions

Solis commercial storage products are highly integrated three-phase energy storage inverters, they have multiple functions, high safety level, strong energy supply reliability, which is a powerful tool for commercial PV energy storage projects.

They has 3/4/10 MPPT design, PV string current up to 21A, can be adapted to a variety of high-efficiency high-power PV module, to meet a variety of complex commercial roof application requirements; At the same time, the product can be compatible with a variety of generators can automatically control the generator start and stop, and support the generator port function expansion, to achieve backup loads redundancy or grid-tied PV system coupling networking; the product supports up to 6 parallel operation, and contains rich security protection and intelligent control operation functions, which is very suitable for small enterprises PV energy storage needs.

Commercial Energy Storage Solution



Models:

S6-EH3P(29.9-60)K-H(21A)
S6-EH3P(30-35)K-H-LV(21A)
S6-EH3P(75-125)K10-NV-YD-H
S6-EH3P(60-75)K10-LV-YD-H

Output:

29.9 kW - 125 kW

S6-EH3P(29.9-60)K-H(21A)

Solis Three Phase High Voltage Energy Storage Inverters

10 Unique Advantages

★ Supports PV input up to 100kW, maximising solar utilisation
★ Supports a maximum string input current of 21A, ensuring compatibility with high-power PV modules
★ Compatible with 100–314Ah battery modules, reducing overall system costs
★ Supports fast battery charging with a maximum charging current of 168A
★ Two independent battery ports for flexible configurations and easy capacity expansion
★ Delivers 160% overload for 2s in off-grid mode, ensuring stable startup of heavy loads
★ Offers flexible control for weak grid and genset-hybrid scenarios, reducing investment costs
★ SolisCloud: Smart remote control, AI optimisation, and instant troubleshooting - all in one platform
★ Integrates PV and storage for demand management and anti-reverse flow functions
★ Provides dynamic reactive power compensation to improve grid power factor and reduce reactive power charges

6 Leading Advantages

- Supports both DC and AC coupling, for flexible retrofits and system expansions
- Ensures reliable backup power across diverse scenarios through battery reserve management
- Extends supply time for critical loads with intelligent load prioritization
- Offers a versatile three-in-one interface for seamless integration of on-grid PV, wind power, and diesel generators
- Achieves on- and off-grid transitions in less than 10ms, ensuring an uninterrupted power supply
- Supports multi-unit parallel operation up to 600kW (Solis STS cabinet recommended for systems over 6 units)

Models:

S6-EH3P29.9K-H(21A) / S6-EH3P30K-H(21A)

S6-EH3P40K-H(21A) / S6-EH3P49K-H(21A)

S6-EH3P50K-H(21A) / S6-EH3P60K-H(21A)

DATASHEET

Models	29.9K	30K	40K	49K	50K	60K
Input DC (PV side)						
Recommended max. PV array size	59.8 kW	60 kW	80 kW	98 kW	100 kW	100 kW
Max. usable PV input power	59.8 kW	60 kW	80 kW	98 kW	100 kW	100 kW
Max. input voltage	1000 V					
Rated voltage	600 V					
Start-up voltage	180 V					
MPPT voltage range	150 - 850 V					
Max. input current	3 × 42 A		4 × 42 A			
Max. current per DC input	42 A					
Max. current per PV string	21 A					
Max. short circuit current	3 × 60 A		4 × 60 A			
MPPT number / Max. input strings number	3 / 6		4 / 8			
Battery						
Battery type	Li-ion					
Battery voltage range	150 - 800 V					
Max. charge / discharge current	80 A × 2					84 A × 2
Number of battery ports	2					
Max. charge / discharge power of each input	32.1 kW	33 kW	35 kW			
Communication	CAN / RS485					
Output AC (Back-up)						
Rated output power	29.9 kW	30 kW	40 kW	49 kW	50 kW	60kW
Max. apparent output power	1.6 times of rated power, 2 s; 1.5 times of rated power, 10 s					
Back-up switch time	< 10 ms					
Rated output voltage	3/N/PE, 220 V / 380 V, 230 V / 400 V					
Rated frequency	50 Hz / 60 Hz					
THDv (@linear load)	< 2%					
Input AC (Grid side)						
Max. input current	90.8 A / 86.4 A	91.2 A / 86.6 A	121.6 A / 115.4 A	149 A / 141.4 A	152 A / 144.4 A	152 A / 152 A
Input AC (Generator)						
Max. input power	29.9 kW	30 kW	40 kW	49 kW	50 kW	60 kW
Rated input current	45.4 A / 43.2 A	45.6 A / 43.3 A	60.8 A / 57.7 A	74.5 A / 70.7 A	76 A / 72.2 A	91.2 A / 86.6 A
Rated input voltage	3/N/PE, 220 V / 380 V, 230 V / 400 V					
Rated input frequency	50 Hz / 60 Hz					
Output AC (Grid side)						
Rated output power	29.9 kW	30 kW	40 kW	49 kW	50 kW	60 kW
Max. apparent output power	29.9 kVA	30 kVA	40 kVA	49 kVA	50 kVA	60 kVA
Rated grid voltage	3/N/PE, 220 V / 380 V, 230 V / 400 V					
Rated grid frequency	50 Hz / 60 Hz					
Rated grid output current	45.4 A / 43.2 A	45.6 A / 43.3 A	60.8 A / 57.7 A	74.5 A / 70.7 A	76 A / 72.2 A	91.2 A / 86.6 A
Power factor	> 0.99 (0.8 leading - 0.8 lagging)					
THDi	< 3%					
Efficiency						
Max. efficiency	97.7%					
EU efficiency	97.3%					
Battery charged efficiency	98.5%					
Battery discharged efficiency	97.5%					
Protection						
Surge protection	DC Type II / AC Type II					
Output over current protection	Yes					
Insulation resistance monitoring	Yes					
Residual current detection	Yes					
Integrated PV switch	Yes					
DC reverse-polarity protection	Yes					
Protection class / Over voltage category	I / PV II, battery II, AC III					
Integrated AFCI 2.0	Optional					
General Data						
Max. allowable phase imbalance (grid & back-up)	100%					
Max. power per phase (grid & back-up)	33%					
Dimensions (W × H × D)	530 × 880 × 290 mm					
Weight	76 kg					
Topology	Transformerless					
Operating ambient temperature range	-25 ~ +60°C					
Relative humidity	0 - 100%					
Ingress protection	IP66					
Cooling concept	Intelligent redundant fan-cooling					
Max. operation altitude	4000 m					
Grid connection standard	G99, VDE-AR-N 4105/VDE V 0124, EN 50549-1/EN 50549-10, PTPiREE, VDE 0126/XP C15/VFR:2019, NTS 631/RD 1699/RD 244/UNE 217002, CEI 0-21, C10/11, NRS 097-2-1, TOR, EIFS 2018.2, IEC 62116, IEC 61727, DEWA, MEA, PEA, PORTARIA Nº 140/PORTARIA Nº 515					
Safety / EMC standard	IEC/EN 62109-1/-2, IEC/EN 61000-6-2/-4, EN 55011					
Features						
PV connection	MC4 connector					
Battery connection	Terminal connector					
AC connection	OT terminal					
Display	7.0" LCD display & Bluetooth + APP					
Communication interface	Standard: WIFI+LAN+Bluetooth, CAN-BMS×2, CAN-Parallel×2, RS485-Meter, RS485, DRM, DI×3, DO×3; Optional: 4G					

S6-EH3P(30-35)K-H-LV(21A)

Solis Three Phase High Voltage Energy Storage Inverters

10 Unique Advantages

★ Supports up to 2x rated PV input, maximizing solar energy utilization
★ Supports a maximum string input current of 21A, ensuring compatibility with high-power PV modules
★ Compatible with 100–314Ah battery modules, reducing overall system costs
★ Supports fast battery charging with a maximum charging current of 160A
★ Two independent battery ports for flexible configurations and easy capacity expansion
★ Delivers 160% overload for 2s in off-grid mode, ensuring stable startup of heavy loads
★ Offers flexible control for weak grid and genset-hybrid scenarios, reducing investment costs
★ SolisCloud: Smart remote control, AI optimisation, and instant troubleshooting - all in one platform
★ Integrates PV and storage for demand management and anti-reverse flow functions
★ Provides dynamic reactive power compensation to improve grid power factor and reduce reactive power charges

6 Leading Advantages

- Supports both DC and AC coupling, for flexible retrofits and system expansions
- Ensures reliable backup power across diverse scenarios through battery reserve management
- Extends supply time for critical loads with intelligent load prioritization
- Offers a versatile three-in-one interface for seamless integration of on-grid PV, wind power, and diesel generators
- Achieves on- and off-grid transitions in less than 10ms, ensuring an uninterrupted power supply
- Supports multi-unit parallel operation up to 350kW (Solis STS cabinet recommended for systems over 6 units)

Models:

S6-EH3P30K-H-LV(21A)

S6-EH3P35K-H-LV(21A)

DATASHEET

Models	30K	35K
Input DC (PV side)		
Recommended max. PV array size	60 kW	70 kW
Max. usable PV input power	60 kW	70 kW
Max. input voltage	1000 V	
Rated voltage	600 V	
Start-up voltage	180 V	
MPPT voltage range	150 - 850 V	
Max. input current	3 × 42 A	
Max. current per DC input	42 A	
Max. current per PV string	21 A	
Max. short circuit current	3 × 60 A	
MPPT number / Max. input strings number	3 / 6	
Battery		
Battery type	Li-ion	
Battery voltage range	150 - 800 V	
Max. charge / discharge current	80 A × 2	
Number of battery ports	2	
Max. charge / discharge power of each input	33 kW	35 kW
Communication	CAN / RS485	
Output AC (Back-up)		
Rated output power	30 kW	35 kW
Max. apparent output power	1.6 times of rated power, 2 s; 1.5 times of rated power, 10 s	
Back-up switch time	< 10 ms	
Rated output voltage	3/(N)/PE, 127 V / 220 V; 3/(N)/PE, 133 V / 230 V	
Rated frequency	50 Hz / 60 Hz	
THDv (@linear load)	< 2%	
Input AC (Grid side)		
Max. input current	152 A / 152 A	
Input AC (Generator)		
Max. input power	30 kW	35 kW
Rated input current	78.7 A / 75.3 A	91.8 A / 87.8 A
Rated input voltage	3/(N)/PE, 127 V / 220 V; 3/(N)/PE, 133 V / 230 V	
Rated input frequency	50 Hz / 60 Hz	
Output AC (Grid side)		
Rated output power	30 kW	35 kW
Max. apparent output power	30 kVA	35 kVA
Rated grid voltage	3/(N)/PE, 127 V / 220 V; 3/(N)/PE, 133 V / 230 V	
Rated grid frequency	50 Hz / 60 Hz	
Rated grid output current	78.7 A / 75.3 A	91.8 A / 87.8 A
Power factor	> 0.99 (0.8 leading - 0.8 lagging)	
THDi	< 3%	
Efficiency		
Max. efficiency	96.3%	
EU efficiency	95.5%	
Battery charged efficiency	97.4%	
Battery discharged efficiency	95.8%	
Protection		
Surge protection	DC Type II / AC Type II	
Output over current protection	Yes	
Insulation resistance monitoring	Yes	
Residual current detection	Yes	
Integrated PV switch	Yes	
DC reverse-polarity protection	Yes	
Protection class / Over voltage category	I / PV II, battery II, AC III	
Integrated AFCI 2.0	Optional	
General Data		
Max. allowable phase imbalance (grid & back-up)	100%	
Max. power per phase (grid & back-up)	33%	
Dimensions (W × H × D)	530 × 880 × 290 mm	
Weight	76 kg	
Topology	Transformerless	
Operating ambient temperature range	-25 ~ +60°C	
Relative humidity	0 - 100%	
Ingress protection	IP66	
Cooling concept	Intelligent redundant fan-cooling	
Max. operation altitude	4000 m	
Grid connection standard	G99, VDE-AR-N 4105/VDE V 0124, EN 50549-1/EN 50549-10, PTPiREE, VDE 0126/XP C15/VFR:2019, NTS 631/RD 1699/RD 244/UNE 217002, CEI 0-21, C10/11, NRS 097-2-1, TOR, EIFS 2018.2, IEC 62116, IEC 61727, DEWA, MEA, PEA, PORTARIA Nº 140/PORTARIA Nº 515	
Safety / EMC standard	IEC/EN 62109-1/-2, IEC/EN 61000-6-2/-4, EN 55011	
Features		
PV connection	MC4 connector	
Battery connection	Terminal connector	
AC connection	OT terminal	
Display	7.0" LCD display & Bluetooth + APP	
Communication interface	Standard: WIFI+LAN+Bluetooth, CAN-BMS×2, CAN-Parallel×2, RS485-Meter, RS485, DRM, DI×3, DO×3; Optional: 4G	

S6-EH3P(75-125)K10-NV-YD-H

Solis Three Phase High Voltage Energy Storage Inverters

12 Unique Advantages

★ Supports up to 2x rated PV input, maximizing solar energy utilization
★ Supports a maximum string input current of 21A, ensuring compatibility with high-power PV modules
★ Compatible with 100–314Ah battery modules, reducing overall system costs
★ Supports fast battery charging with a maximum charging current of 200A
★ Two independent battery ports for flexible configurations and easy capacity expansion
★ Delivers 160% overload for 200ms in off-grid mode, ensuring stable startup of heavy loads
★ Offers flexible control for weak grid and genset-hybrid scenarios, reducing investment costs
★ SolisCloud: Smart remote control, AI optimisation, and instant troubleshooting - all in one platform
★ Integrates PV and storage for demand management and anti-reverse flow functions
★ Provides dynamic reactive power compensation to improve grid power factor and reduce reactive power charges
★ Utility bypass function allows direct grid supply to backup loads
★ Patented cooling technology ensures reliable operation even under high-temperature conditions

6 Leading Advantages

- Supports both DC and AC coupling, for flexible retrofits and system expansions
- Ensures reliable backup power across diverse scenarios through battery reserve management
- Extends supply time for critical loads with intelligent load prioritization
- Offers a versatile three-in-one interface for seamless integration of on-grid PV, wind power, and diesel generators
- Achieves on- and off-grid transitions in less than 10ms, ensuring an uninterrupted power supply
- Supports multi-unit parallel operation up to 1.25MW (Solis STS cabinet recommended for systems over 6 units)

Models:

S6-EH3P75K10-NV-YD-H

S6-EH3P80K10-NV-YD-H

S6-EH3P99.9K10-NV-YD-H

S6-EH3P100K10-NV-YD-H

S6-EH3P125K10-NV-YD-H

DATASHEET

Models	75K	80K	99.9K	100K	125K
Input DC (PV side)					
Recommended max. PV array size	150 kW	160 kW	200 kW	200 kW	250 kW
Max. usable PV input power	150 kW	160 kW	200 kW	200 kW	250 kW
Max. input voltage	1000 V				
Rated voltage	600 V				
Start-up voltage	180 V				
MPPT voltage range	150 - 950 V				
Max. input current	10 × 42 A				
Max. short circuit current	10 × 60 A				
MPPT number / Max. input strings number	10 / 20				
Battery					
Battery type	Li-ion				
Battery voltage range	300 - 950 V				
Max. charge / discharge current	100 A × 2 / 100 A × 2				
Number of battery ports	2				
Max. charge / discharge current of each port	100 A				
Communication	CAN / RS485				
Output AC (Back-up)					
Rated output power	75 kW	80 kW	99.9 kW	100 kW	125 kW
Max. apparent output power	75-100K: 1.6 times of rated power, 10 s; 2 times of rated power, 200 ms; 125K: 1.4 times of rated power, 10 s; 1.6 times of rated power, 200 ms				
Back-up switch time	< 10 ms				
Rated output voltage	3/N/PE, 220 V / 380 V; 3/N/PE, 230 V / 400 V				
Rated frequency	50 Hz / 60 Hz				
THDv (@linear load)	< 3%				
Input AC (Grid side)					
Max. input current	250 A				
Input AC (Generator)					
Max. input power	75 kW	80 kW	99.9 kW	100 kW	125 kW
Rated input current	114.0 A / 108.3 A	121.6 A / 115.5 A	151.8 A / 144.2 A	151.9 A / 144.3 A	189.9 A / 180.4 A
Rated input voltage	3/N/PE, 220 V / 380 V; 3/N/PE, 230 V / 400 V				
Rated input frequency	50 Hz / 60 Hz				
Output AC (Grid side)					
Rated output power	75 kW	80 kW	99.9 kW	100 kW	125 kW
Max. apparent output power	75 kVA	80 kVA	99.9 kVA	100 kVA	125 kVA
Rated grid voltage	3/N/PE, 220 V / 380 V; 3/N/PE, 230 V / 400 V				
Rated grid frequency	50 Hz / 60 Hz				
Rated grid output current	114 A / 108.3 A	121.6 A / 115.5 A	151.8 A / 144.2 A	151.9 A / 144.3 A	189.9 A / 180.4 A
Power factor	> 0.99 (0.8 leading - 0.8 lagging)				
THDi	< 3%				
Efficiency					
Max. efficiency	97.5%				
EU efficiency	96.9%	96.9%	97.1%	97.1%	97.2%
BAT charged / discharged to AC max. efficiency	97.0%				
Protection					
Anti-islanding protection	Yes				
Output over current protection	Yes				
Short circuit protection	Yes				
Integrated DC switch	Yes				
DC reverse-polarity protection	Yes				
Protection class / Over voltage category	I/ DC II, AC III				
Surge protection	DC Type II / AC Type II				
Integrated AFCI 2.0	Optional (Brazil: Yes)				
General Data					
Max. power per phase (grid & back-up)	25 kW	26.66 kW	33.3 kW	33.33 kW	41.66 kW
Dimensions (W × H × D)	1174 × 814 × 400 mm				
Weight	170 kg				
Topology	Transformerless				
Operating ambient temperature range	-25 ~ +60°C				
Relative humidity	0 - 100%				
Ingress protection	IP66				
Cooling concept	Intelligent redundant fan-cooling				
Max. operation altitude	3000 m				
Grid connection standard ①	G99, VDE-AR-N 4105/VDE V 0124, EN 50549-1&2/EN 50549-10, VDE 0126/UTE C 15/VFR:2019, NTS 631/RD 1699/RD 244/ UNE 206006/UNE 206007-1, CEI 0-21, C10/11, NRS 097-2-1, TOR, EIFS 2018.2, IEC 62116, IEC 61727, IEC 60068, IEC 61683, EN 50530, MEA, PEA,PORTARIA Nº 140, DE 21 DE MARÇO DE 2022; Brazil (75K: ORDINANCE (PORTARIA) NO.140, ORDINANCE NO. 515; 100K/125K: NBR 16149, NBR 16150, IEC 62116)				
Safety / EMC standard ①	IEC/EN 62109-1/-2, IEC/EN 61000-6-2/-4, EN 55011				
Features					
PV connection	MC4 Quick connection plug				
Battery connection	Terminal connector				
AC connection	Terminal block				
Display	7.0" LCD display & Bluetooth + APP				
Communication interface	Standard: WIFI+LAN+Bluetooth, CAN-BMS × 2, CAN-Parallel × 2, LAN, RS485-Meter, RS485, DRM, DI × 5, DO × 4; Optional: 4G				

① This column only shows the planned certification standards. Please confirm the specific time of obtaining the standards with the local team.

S6-EH3P(60-75)K10-LV-YD-H

Solis Three Phase High Voltage Energy Storage Inverters

12 Unique Advantages

★ Supports up to 2x rated PV input, maximizing solar energy utilization
★ Supports a maximum string input current of 21A, ensuring compatibility with high-power PV modules
★ Compatible with 100–314Ah battery modules, reducing overall system costs
★ Supports fast battery charging with a maximum charging current of 200A
★ Two independent battery ports for flexible configurations and easy capacity expansion
★ Delivers 200% overload for 200ms in off-grid mode, ensuring stable startup of heavy loads
★ Offers flexible control for weak grid and genset-hybrid scenarios, reducing investment costs
★ SolisCloud: Smart remote control, AI optimisation, and instant troubleshooting - all in one platform
★ Integrates PV and storage for demand management and anti-reverse flow functions
★ Provides dynamic reactive power compensation to improve grid power factor and reduce reactive power charges
★ Utility bypass function allows direct grid supply to backup loads
★ Patented cooling technology ensures reliable operation even under high-temperature conditions

6 Leading Advantages

- Supports both DC and AC coupling, for flexible retrofits and system expansions
- Ensures reliable backup power across diverse scenarios through battery reserve management
- Extends supply time for critical loads with intelligent load prioritization
- Offers a versatile three-in-one interface for seamless integration of on-grid PV, wind power, and diesel generators
- Achieves on- and off-grid transitions in less than 10ms, ensuring an uninterrupted power supply
- Supports multi-unit parallel operation up to 750kW (Solis STS cabinet recommended for systems over 6 units)

Models:

S6-EH3P60K10-LV-YD-H

S6-EH3P75K10-LV-YD-H

DATASHEET

Models	60K	75K
Input DC (PV side)		
Recommended max. PV array size	120 kW	150 kW
Max. usable PV input power	120 kW	150 kW
Max. input voltage	1000 V	
Rated voltage	600 V	
Start-up voltage	180 V	
MPPT voltage range	150 - 950 V	
Max. input current	10 × 42 A	
Max. short circuit current	10 × 60 A	
MPPT number / Max. input strings number	10 / 20	
Battery		
Battery type	Li-ion	
Battery voltage range	300 - 950 V	
Max. charge / discharge current	100 A × 2 / 100 A × 2	
Number of battery ports	2	
Max. charge / discharge current of each port	100 A	
Communication	CAN / RS485	
Output AC (Back-up)		
Rated output power	60 kW	75 kW
Max. apparent output power	1.6 times of rated power, 10 s; 2 times of rated power, 200 ms	1.4 times of rated power, 10 s; 1.6 times of rated power, 200 ms
Back-up switch time	< 10 ms	
Rated output voltage	3/(N)/PE, 127 V / 220 V; 3/(N)/PE, 133 V / 230 V	
Rated frequency	50 Hz / 60 Hz	
THDv (@linear load)	< 3%	
Input AC (Grid side)		
Max. input current	250 A	
Input AC (Generator)		
Max. input power	60 kW	75 kW
Rated input current	157.5 A / 150.6 A	196.8 A / 188.2 A
Rated input voltage	3/(N)/PE, 127 V / 220 V; 3/(N)/PE, 133 V / 230 V	
Rated input frequency	50 Hz / 60 Hz	
Output AC (Grid side)		
Rated output power	60 kW	75 kW
Max. apparent output power	60 kVA	75 KVA
Rated grid voltage	3/(N)/PE, 127 V / 220 V; 3/(N)/PE, 133 V / 230 V	
Rated grid frequency	50 Hz / 60 Hz	
Rated grid output current	157.5 A / 150.6 A	196.8 A / 188.2 A
Power factor	> 0.99 (0.8 leading - 0.8 lagging)	
THDi	< 3%	
Efficiency		
Max. efficiency	96.0%	
EU efficiency	94.5%	94.6%
BAT charged / discharged to AC max. efficiency	95.6%	
Protection		
Anti-islanding protection	Yes	
Output over current protection	Yes	
Short circuit protection	Yes	
Integrated DC switch	Yes	
DC reverse-polarity protection	Yes	
Protection class / Over voltage category	I / DC II, AC III	
Surge protection	DC Type II / AC Type II	
Integrated AFCI 2.0	Optional	
General Data		
Max. power per phase (grid & back-up)	20 kW	25 kW
Dimensions (W × H × D)	1174 × 814 × 400 mm	
Weight	170 kg	
Topology	Transformerless	
Operating ambient temperature range	-25 ~ +60°C	
Relative humidity	0 - 100%	
Ingress protection	IP66	
Cooling concept	Intelligent redundant fan-cooling	
Max. operation altitude	3000 m	
Grid connection standard ①	G99, VDE-AR-N 4105/VDE V 0124, EN 50549-1&2/EN 50549-10, VDE 0126/UTE C 15/VFR:2019, NTS 631/RD 1699/ RD 244/UNE 206006/UNE 206007-1, CEI 0-21, C10/11, NRS 097-2-1, TOR, EIFS 2018.2, IEC 62116, IEC 61727, IEC 60068, IEC 61683, EN 50530, MEA, PEA,PORTARIA Nº 140, DE 21 DE MARÇO DE 2022	
Safety / EMC standard ①	IEC/EN 62109-1/-2, IEC/EN 61000-6-2/-4, EN 55011	
Features		
PV connection	MC4 Quick connection plug	
Battery connection	Terminal connector	
AC connection	Terminal block	
Display	7.0" LCD display & Bluetooth + APP	
Communication interface	Standard: WIFI+LAN+Bluetooth, CAN-BMS × 2, CAN-Parallel × 2, LAN, RS485-Meter, RS485, DRM, DI × 5, DO × 4; Optional: 4G	

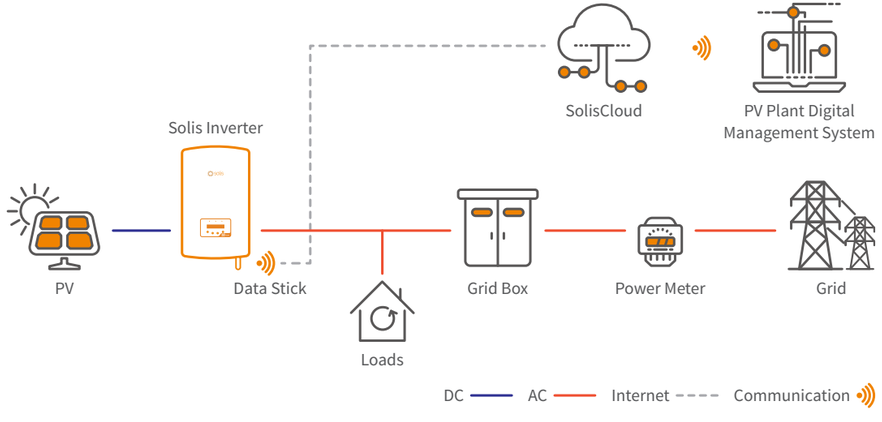
① This column only shows the planned certification standards. Please confirm the specific time of obtaining the standards with the local team.

Residential Solar PV Solutions

Solis residential string inverters are cost-effective and efficient green power leaders, providing smarter green power solutions for your residential buildings. A variety of models and solutions meet the needs of modern homes.

The portfolio includes single-phase and small three-phase string inverters, with a wide range of models, providing the best home green power solutions based on your application scenarios and specific needs.
Solis Residential inverters are small and light, allowing for just one person to complete the installation. The overall design is sleek and modern, with low noise, particularly suitable for home installation without affecting people's daily activities.
Via online or App, you can connect to SolisCloud for intelligent energy management. Simple operation and convenient.
Solis residential solutions are technically advanced, flexible and simplify integration with digital home automation equipment and smart grids.

Residential Solar PV Solution



Models:

S6-GR1P0.8K-UM
S6-GR1P(0.7-3.6)K-M
S6-GR1P(2.5-6)K
S6-GR1P(2.5-6)K-S
S6-GR1P(7-8)K02-NV-YD-HC
S5-GR1P(7-10)K
S6-GR1P(8-10)K03-NV-ND
S5-GR3P(3-20)K
S5-GR3P(5-10)K-LV

Output:

0.7 kW - 20 kW

S6-GR1P0.8K-UM

Solis Single Phase Grid-Tied Inverters

Features:

- Integrated WiFi, easy to use
- Lightweight design, rack mounting, easy installation
- Suiable for balcony system

Models:

S6-GR1P0.8K-UM

DATASHEET

Models	0.8K
Input DC	
Recommended max. PV power	1.2 kW
Max. input voltage	500 V ①
Rated voltage	60 V
Start-up voltage	40 V
MPPT voltage range	30 - 500 V
Max. input current	16 A
Max. short circuit current	25 A
MPPT number / Max. input strings number	1 / 1
Output AC	
Rated output power	0.8 kW
Max. apparent output power	0.8 kVA
Max. output power	0.8 kW
Rated grid voltage	1/N/PE, 230 V
Rated grid frequency	50 Hz
Rated grid output current	3.5 A
Max. output current	3.5 A
Power factor	> 0.99 (0.8 leading - 0.8 lagging)
THDi	< 3%
Efficiency	
Max. efficiency	96.6%
MPPT efficiency	99.5%
Protection	
Short circuit protection	Yes
Output over current protection	Yes
Surge protection	Yes
Grid monitoring	Yes
Anti-islanding protection	Yes
Temperature protection	Yes
General Data	
Dimensions (W × H × D)	265 × 255 × 64 mm
Weight	2.9 kg
Topology	Transformerless
Self-consumption (night)	< 1 W
Operating ambient temperature range	-25 ~ +60°C
Relative humidity	0 - 100%
Ingress protection	IP65
Noise emission (typical)	< 20 dB(A)
Cooling concept	Natural cooling
Max. operation altitude	2000 m
Grid connection standard	VDE-AR-N 4105: 2018, TOR typeA
Safety / EMC standard	IEC/EN 62109-1/-2, IEC/EN 61000-6-1/-2/-3/-4
Features	
DC connection	MC4 connector
AC connection	Quick connection plug
Display	LED indicator & Wi-Fi / Bluetooth + APP
Communication	Wi-Fi + Bluetooth

① When actual input voltage is over 120V, a DC switch on the PV side and a qualified installer is required.

S6-GR1P(0.7-3.6)K-M

Solis Single Phase Grid-Tied Inverters

Features:

- Max. efficiency 97.3%
- Wide voltage range and low startup voltage
- Supports export power control
- AFCI protection, proactively reduces fire risk
- 24-hour load consumption monitoring
- Adaptive weak grid

Models:

S6-GR1P0.7K-M / S6-GR1P1K-M

S6-GR1P1.5K-M / S6-GR1P2K-M

S6-GR1P2.5K-M / S6-GR1P3K-M

S6-GR1P3.6K-M

360º View

DATASHEET

Models	0.7K	1K	1.5K	2K	2.5K	3K	3.6K
Input DC							
Recommended max. PV power	1.1 kW	1.5 kW	2.3 kW	3 kW	3.8 kW	4.5 kW	5.4 kW
Max. input voltage	550 V						
Rated voltage	200 V			330 V			
Start-up voltage	60 V			90 V			
MPPT voltage range	50 - 500 V			80 - 500 V			
Max. input current	14 A						19 A
Max. short circuit current	22 A						24 A
MPPT number / Max. input strings number	1 / 1						1 / 2
Output AC							
Rated output power	0.7 kW	1 kW	1.5 kW	2 kW	2.5 kW	3 kW	3.6 kW
Max. apparent output power	0.77 kVA	1.1 kVA	1.65 kVA	2.2 kVA	2.75 kVA	3.3 kVA	3.6 kVA
Max. output power	0.77 kW	1.1 kW	1.65 kW	2.2 kW	2.75 kW	3.3 kW	3.6 kW
Rated grid voltage	1/N/PE, 220 V / 230 V						
Rated grid frequency	50 Hz / 60 Hz						
Rated grid output current	3.2 A / 3.0 A	4.5 A / 4.3 A	6.8 A / 6.5 A	9.1 A / 8.7 A	11.4 A / 10.9 A	13.6 A / 13 A	16 A
Max. output current	4.4 A	5.2 A	8.1 A	10.5 A	13.3 A	15.7 A	16 A
Power factor	> 0.99 (0.8 leading - 0.8 lagging)						
THDi	< 3%						
Efficiency							
Max. efficiency	96.6%		96.6%	97.1%	97.1%		97.3%
EU efficiency	95.3%		95.4%	96.4%	96.7%		96.8%
Protection							
DC reverse-polarity protection	Yes						
Short circuit protection	Yes						
Output over current protection	Yes						
Surge protection	Yes						
Grid monitoring	Yes						
Anti-islanding protection	Yes						
Temperature protection	Yes						
Multi peak scan	Yes						
Integrated AFCI 2.0	Optional						
Integrated DC switch	Yes						
General Data							
Dimensions (W × H × D)	310 × 373 × 160 mm						
Weight	7.7 kg			8 kg			8.1 kg
Topology	Transformerless						
Self-consumption (night)	< 1 W						
Operating ambient temperature range	-25 ~ +60°C						
Relative humidity	0 - 100%						
Ingress protection	IP66						
Noise emission (typical)	< 20 dB(A)						
Cooling concept	Natural cooling						
Max. operation altitude	4000 m						
Grid connection standard	G98 or G99, VDE-AR-N 4105/VDE V 0124, EN 50549-1, VDE 0126/UTE C 15/VFR:2019, RD 1699/RD 244/UNE 206006/ UNE 206007-1, CEI 0-21, C10/11, NRS 097-2-1, EIFS 2018.2, IEC 62116, IEC 61727, IEC 60068, IEC 61683, EN 50530, MEA, PEA						
Safety / EMC standard	IEC/EN 62109-1/-2, IEC/EN 61000-6-1/-2/-3/-4						
Features							
DC connection	MC4 connector						
AC connection	Quick connection plug						
Display	LCD						
Communication	RS485, Optional: Wi-Fi, GPRS						

S6-GR1P(2.5-6)K

Solis Single Phase Grid-Tied Inverters

Features:

- Max. efficiency 97.7%
- Wide voltage range and low startup voltage
- Supports export power control
- AFCI protection, proactively reduces fire risk
- 24-hour load consumption monitoring
- Adaptive weak grid

Models:

S6-GR1P2.5K / S6-GR1P3K

S6-GR1P3.6K / S6-GR1P4K

S6-GR1P4.6K / S6-GR1P5K

S6-GR1P6K

360º View

DATASHEET

Models	2.5K	3K	3.6K	4K	4.6K	5K	6K
Input DC							
Recommended max. PV power	3.75 kW	4.5 kW	5.4 kW	6 kW	6.9 kW	7.5 kW	9 kW
Max. input voltage	550 V	600 V					
Rated voltage	250 V	330 V					
Start-up voltage	60 V	120 V					
MPPT voltage range	50 - 450 V	90 - 520 V					
Max. input current	14 A / 14 A						
Max. short circuit current	22 A / 22 A						
MPPT number / Max. input strings number	2 / 2						
Output AC							
Rated output power	2.5 kW	3 kW	3.6 kW	4 kW	4.6 kW	5 kW	6 kW
Max. apparent output power	2.8 kVA	3.3 kVA	4 kVA	4.4 kVA	5 kVA	5 kVA	6 kVA
Max. output power	2.8 kW	3.3 kW	4 kW	4.4 kW	5 kW	5 kW	6 kW
Rated grid voltage	1/N/PE, 220 V / 230 V						
Rated grid frequency	50 Hz / 60 Hz						
Rated grid output current	11.4 A / 10.9 A	13.6 A / 13.0 A	16.0 A / 15.7 A	18.2 A / 17.4 A	20.9 A / 20.0 A	22.7 A / 21.7 A	27.3 A
Max. output current	13.3 A	15.7 A	16.0 A	21.0 A	23.8 A	25.0 A	27.3 A
Power factor	> 0.99 (0.8 leading - 0.8 lagging)						
THDi	< 3%						
Efficiency							
Max. efficiency	97.3%	97.3%		97.6%		97.7%	
EU efficiency	96.5%	96.6%		97.1%		97.1%	
Protection							
DC reverse-polarity protection	Yes						
Short circuit protection	Yes						
Output over current protection	Yes						
Surge protection	Yes						
Grid monitoring	Yes						
Anti-islanding protection	Yes						
Temperature protection	Yes						
Multi peak scan	Yes						
Integrated AFCI	Yes ①						
Integrated DC switch	Yes						
General Data							
Dimensions (W × H × D)	310 × 543 × 160 mm						
Weight	11 kg	11.2 kg		12 kg			
Topology	Transformerless						
Self-consumption (night)	< 1 W						
Operating ambient temperature range	-25 ~ +60°C						
Relative humidity	0 - 100%						
Ingress protection	IP66						
Noise emission (typical)	< 20 dB(A)						
Cooling concept	Natural cooling						
Max. operation altitude	4000 m						
Grid connection standard	G98 ② or G99, VDE-AR-N 4105/VDE V 0124, EN 50549-1, VDE 0126/UTE C 15/VFR:2019, RD 1699/RD 244/UNE 206006/ UNE 206007-1, CEI 0-21, C10/11, NRS 097-2-1, EIFS 2018.2, IEC 62116, IEC 61727, IEC 60068, IEC 61683, EN 50530, MEA, PEA						
Safety / EMC standard	IEC/EN 62109-1/-2, IEC/EN 61000-6-2/-3						
Features							
DC connection	MC4 connector						
AC connection	Quick connection plug						
Display	LCD						
Communication	RS485, Optional: Wi-Fi, GPRS						

① Activation required. ② G98 for 2.5K-3.6K.

S6-GR1P(2.5-6)K-S

Solis Single Phase Grid-Tied Inverters

Features:

- String current up to 16A
- Supports export power control
- AFCI protection, proactively reduces fire risk
- Compact design for easy installation
- 24-hour load consumption monitoring
- Adaptive weak grid

Models:

S6-GR1P2.5K-S / S6-GR1P3K-S

S6-GR1P3.6K-S / S6-GR1P4K-S

S6-GR1P4.6K-S / S6-GR1P5K-S

S6-GR1P6K-S

DATASHEET

Models	2.5K	3K	3.6K	4K	4.6K	5K	6K
Input DC							
Recommended max. PV power	3.75 kW	4.5 kW	5.4 kW	6 kW	6.9 kW	7.5 kW	9 kW
Max. input voltage	550 V						
Rated voltage	250 V	330 V					
Start-up voltage	60 V	100 V					
MPPT voltage range	50 - 550 V	90 - 550 V					
Max. input current	16 A / 16 A						
Max. short circuit current	22 A / 22 A						
MPPT number / Max. input strings number	2 / 2						
Output AC							
Rated output power	2.5 kW	3 kW	3.6 kW	4 kW	4.6 kW	5 kW	6 kW
Max. apparent output power	2.5 kVA	3 kVA	3.6 kVA	4 kVA	4.6 kVA	5 kVA	6 kVA
Max. output power	2.5 kW	3 kW	3.6 kW	4 kW	4.6 kW	5 kW	6 kW
Rated grid voltage	1/N/PE, 220 V / 230 V						
Rated grid frequency	50 Hz / 60 Hz						
Rated grid output current	11.4 A / 10.9 A	13.6 A / 13 A	16 A / 15.7 A	18.2 A / 17.4 A	20.9 A / 20 A	22.7 A / 21.7 A	27.3 A / 26.1 A
Max. output current	11.4 A	13.6 A	16 A	18.2 A	20.9 A	22.7 A	27.3 A
Power factor	> 0.99 (0.8 leading - 0.8 lagging)						
THDi	< 3%						
Efficiency							
Max. efficiency	97.3%	97.3%		97.6%		97.7%	
EU efficiency	96.5%	96.6%		97.1%		97.1%	
Protection							
DC reverse-polarity protection	Yes						
Short circuit protection	Yes						
Output over current protection	Yes						
Surge protection	Yes						
Grid monitoring	Yes						
Anti-islanding protection	Yes						
Temperature protection	Yes						
Multi peak scan	Yes						
Integrated AFCI 2.0	Optional						
Integrated DC switch	Yes						
General Data							
Dimensions (W × H × D)	330 × 371 × 161 mm						
Weight	8.2 kg	8.3 kg		8.9 kg			9 kg
Topology	Transformerless						
Self-consumption (night)	< 1 W						
Operating ambient temperature range	-25 ~ +60°C						
Relative humidity	0 - 100%						
Ingress protection	IP66						
Noise emission (typical)	< 20 dB(A)						
Cooling concept	Natural cooling				Natural cooling with internal fan		
Max. operation altitude	4000 m						
Grid connection standard	G98 or G99, VDE-AR-N 4105/VDE V 0124, EN 50549-1, VDE 0126/UTE C 15/VFR:2019, RD 1699/RD 244/UNE 206006/ UNE 206007-1, CEI 0-21, C10/11, NRS 097-2-1, EIFS 2018.2, IEC 62116, IEC 61727, IEC60068, IEC 61683, EN 50530, MEA, PEA						
Safety / EMC standard	IEC/EN 62109-1/-2, IEC/EN 61000-6-2/-3						
Features							
DC connection	MC4 connector						
AC connection	Quick connection plug						
Display	LED digital display & Bluetooth + APP						
Communication	RS485, USB, Optional: Wi-Fi, GPRS						

S6-GR1P(7-8)K02-NV-YD-HC

Solis Single Phase Grid-Tied Inverters

Features:

- Max. efficiency 97.7%
- String current up to 18A/32A
- Supports export power control
- AFCI protection, proactively reduces fire risk
- 24-hour load consumption monitoring
- Adaptive weak grid

Models:

S6-GR1P7K02-NV-YD-HC

S6-GR1P8K02-NV-YD-HC

DATASHEET

Models	7K	8K
Input DC		
Recommended max. PV power	10.5 kW	12 kW
Max. input voltage	550 V	
Rated voltage	330 V	
Start-up voltage	90 V	
MPPT voltage range	90 - 500 V	
Max. input current	18 A / 32 A	
Max. short circuit current	20 A / 40 A	
MPPT number / Max. input strings number	2 / 3	
Output AC		
Rated output power	7 kW	8 kW
Max. apparent output power	7 kVA	8 kVA
Max. output power	7 kW	8 kW
Rated grid voltage	1/N/PE, 220 V / 230 V	
Rated grid frequency	50 Hz / 60 Hz	
Rated grid output current	31.8 A / 30.4 A	36.4 A / 34.8 A
Max. output current	31.8 A	36.4 A
Power factor	> 0.99 (0.8 leading - 0.8 lagging)	
THDi	< 3%	
Efficiency		
Max. efficiency	97.7%	
EU efficiency	96.8%	
Protection		
DC reverse-polarity protection	Yes	
Short circuit protection	Yes	
Output over current protection	Yes	
Surge protection	Yes	
Grid monitoring	Yes	
Anti-islanding protection	Yes	
Temperature protection	Yes	
Multi peak scan	Yes	
Integrated AFCI 2.0	Optional	
Integrated DC switch	Yes	
General Data		
Dimensions (W × H × D)	310 × 550 × 180 mm	
Weight	13.2 kg	
Topology	Transformerless	
Self-consumption (night)	< 1 W	
Operating ambient temperature range	-25 ~ +60°C	
Relative humidity	0 - 100%	
Ingress protection	IP66	
Noise emission (typical)	< 40 dB(A)	
Cooling concept	Natural cooling with internal fan	
Max. operation altitude	4000 m	
Grid connection standard	G99	
Safety / EMC standard	IEC/EN 62109-1/-2, IEC/EN 61000-6-1/-2/-3/-4	
Features		
DC connection	MC4 connector	
AC connection	Quick connection plug	
Display	LCD	
Communication	RS485, Optional: Wi-Fi, GPRS	

S5-GR1P(7-10)K

Solis Single Phase Grid-Tied Inverters

Features:

- Max. efficiency 98.0%
- Wide voltage range and low startup voltage
- 3 MPPT design, suitable for multi-facing roof
- AFCI protection, proactively reduces fire risk
- 24-hour load consumption monitoring
- Adaptive weak grid

Models:

S5-GR1P7K / S5-GR1P8K

S5-GR1P9K / S5-GR1P10K

DATASHEET

Models	7K	8K	9K	10K
Input DC				
Recommended max. PV power	10.5 kW	12 kW	13.5 kW	15 kW
Max. input voltage	600 V			
Rated voltage	330 V			
Start-up voltage	120 V			
MPPT voltage range	100 - 500 V			
Max. input current	14 A / 14 A / 14 A			
Max. short circuit current	22 A / 22 A / 22 A			
MPPT number / Max. input strings number	3 / 3			
Output AC				
Rated output power	7 kW	8 kW	9 kW	10 kW
Max. apparent output power	7.7 kVA	8.8 kVA	9.9 kVA	10 kVA
Max. output power	7.7 kW	8.8 kW	9.9 kW	10 kW
Rated grid voltage	1/N/PE, 220 V / 230 V			
Rated grid frequency	50 Hz / 60 Hz			
Rated grid output current	31.8 A / 30.4 A	36.4 A / 34.8 A	40.9 A / 39.1 A	45.5 A / 43.5 A
Max. output current	33.7 A	36.6 A	41.3 A	45.9 A
Power factor	> 0.99 (0.8 leading - 0.8 lagging)			
THDi	< 3%			
Efficiency				
Max. efficiency	98.0%			
EU efficiency	97.1%			
Protection				
DC reverse-polarity protection	Yes			
Short circuit protection	Yes			
Output over current protection	Yes			
Surge protection	Yes			
Grid monitoring	Yes			
Anti-islanding protection	Yes			
Temperature protection	Yes			
Multi peak scan	Yes			
Integrated AFCI 2.0	Optional			
Integrated DC switch	Yes			
General Data				
Dimensions (W × H × D)	333 × 579 × 253 mm			
Weight	18.5 kg			
Topology	Transformerless			
Self-consumption (night)	< 1 W			
Operating ambient temperature range	-25 ~ +60°C			
Relative humidity	0 - 100%			
Ingress protection	IP66			
Noise emission (typical)	< 30 dB(A)			
Cooling concept	Natural cooling	Natural cooling with internal fan		
Max. operation altitude	4000 m			
Grid connection standard	G99, IEC 62116, IEC 61727, IEC 61683			
Safety / EMC standard	IEC/EN 62109-1/-2, IEC/EN 61000-6-1/-2/-3/-4			
Features				
DC connection	MC4 connector			
AC connection	OT Terminal			
Display	LCD			
Communication	RS485, Optional: Wi-Fi, GPRS			

S6-GR1P(8-10)K03-NV-ND

Solis Single Phase Grid-Tied Inverters

Features:

- String current up to 20A
- 3 MPPT design, suitable for multi-facing roof
- Wide voltage range and low startup voltage
- Supports export power control
- Integrated CT and Meter interface
- AFCI protection, proactively reduces fire risk
- 24-hour load consumption monitoring

Models:

S6-GR1P8K03-NV-ND

S6-GR1P9K03-NV-ND

S6-GR1P10K03-NV-ND

DATASHEET

Models	8K	9K	10K
Input DC			
Recommended max. PV power	12 kW	13.5 kW	15 kW
Max. input voltage		550 V	
Rated voltage		330 V	
Start-up voltage		60 V	
MPPT voltage range		50 - 500 V	
Max. input current		20 A / 20 A / 20 A	
Max. short circuit current		25 A / 25 A / 25 A	
MPPT number / Max. input strings number		3 / 3	
Output AC			
Rated output power	8 kW	9 kW	10 kW
Max. apparent output power	8 kVA	9 kVA	10 kVA
Max. output power	8 kW	9 kW	10 kW
Rated grid voltage		1/N/PE, 220 V / 230 V	
Rated grid frequency		50 Hz / 60 Hz	
Rated grid output current	36.4 A / 34.8 A	40.9 A / 39.1 A	45.5 A / 43.5 A
Max. output current	36.4 A	40.9 A	45.5 A
Power factor		> 0.99 (0.8 leading - 0.8 lagging)	
THDi		< 3%	
Efficiency			
Max. efficiency		98.0%	
EU efficiency		97.1%	
Protection			
DC reverse-polarity protection		Yes	
Short circuit protection		Yes	
Output over current protection		Yes	
Surge protection		Yes	
Grid monitoring		Yes	
Anti-islanding protection		Yes	
Temperature protection		Yes	
Multi peak scan		Yes	
Integrated AFCI 2.0		Optional	
Integrated DC switch		Yes	
General Data			
Dimensions (W × H × D)		335 × 510 × 220 mm	
Weight		16.1 kg	
Topology		Transformerless	
Self-consumption (night)		< 1 W	
Operating ambient temperature range		-25 ~ +60°C	
Relative humidity		0 - 100%	
Ingress protection		IP66	
Noise emission (typical)		< 40 dB(A)	
Cooling concept		Natural cooling with internal fan	
Max. operation altitude		4000 m	
Grid connection standard		IEC 62116, IEC 61727, IEC 61683, G99, EN 50549-1, EN 50549-10	
Safety / EMC standard		IEC/EN 62109-1/-2, IEC/EN 61000-6-1/-2/-3/-4	
Features			
DC connection		MC4 connector	
AC connection		OT Terminal	
Display		LED digital display & Bluetooth + APP	
Communication		RS485, Optional: Wi-Fi, GPRS	

S5-GR3P(3-20)K

Solis Three Phase Grid-Tied Inverters

Features:

- Max. efficiency 98.7%
- > 150% DC/AC ratio
- Supports export power control
- AFCI protection, proactively reduces fire risk
- 24-hour load consumption monitoring
- Adaptive weak grid
- IP66

Models:

S5-GR3P3K / S5-GR3P4K

S5-GR3P5K / S5-GR3P6K

S5-GR3P8K / S5-GR3P9K

S5-GR3P10K / S5-GR3P12K

S5-GR3P13K / S5-GR3P15K

S5-GR3P17K / S5-GR3P20K

360º View

DATASHEET

Models	3K	4K	5K	6K	8K	9K	10K	12K	13K	15K	17K	20K
Input DC												
Recommended max. PV power	4.5 kW	6 kW	7.5 kW	9 kW	12 kW	13.5 kW	15 kW	18 kW	19.5 kW	22.5 kW	25.5 kW	30 kW
Max. input voltage	1100 V											
Rated voltage	600 V											
Start-up voltage	180 V											
MPPT voltage range	160 - 1000 V											
Max. input current	16 A / 16 A							32 A / 32 A				
Max. short circuit current	20 A / 20 A							40 A / 40 A				
MPPT number / Max. input strings number	2 / 2							2 / 4				
Output AC												
Rated output power	3 kW	4 kW	5 kW	6 kW	8 kW	9 kW	10 kW	12 kW	13 kW	15 kW	17 kW	20 kW
Max. apparent output power	3.3 kVA	4.4 kVA	5.5 kVA	6.6 kVA	8.8 kVA	9.9 kVA	11 kVA	13.2 kVA	14.3 kVA	16.5 kVA	18.7 kVA	22 kVA
Max. output power	3.3 kW	4.4 kW	5.5 kW	6.6 kW	8.8 kW	9.9 kW	11 kW	13.2 kW	14.3 kW	16.5 kW	18.7 kW	22 kW
Rated grid voltage	3/N/PE, 220 V / 380 V, 230 V / 400 V											
Rated grid frequency	50 Hz / 60 Hz											
Rated grid output current	4.6 A / 4.3 A	6.1 A / 5.8 A	7.6 A / 7.2 A	9.1 A / 8.7 A	12.2 A / 11.5 A	13.7 A / 13.0 A	15.2 A / 14.4 A	18.2 A / 17.3 A	19.8 A / 18.8 A	22.8 A / 21.7 A	25.8 A / 24.6 A	30.4 A / 28.9 A
Max. output current	4.7 A	6.4 A	7.9 A	9.5 A	12.7 A	14.3 A	15.9 A	19.1 A	20.7 A	23.8 A	27 A	31.8 A
Power factor	> 0.99 (0.8 leading - 0.8 lagging)											
THDi	< 2%											
Efficiency												
Max. efficiency	98.3%				98.5%			98.6%			98.7%	
EU efficiency	97.7%				97.9%			98.0%			98.1%	
Protection												
DC reverse-polarity protection	Yes											
Short circuit protection	Yes											
Output over current protection	Yes											
Surge protection	Yes											
Grid monitoring	Yes											
Anti-islanding protection	Yes											
Temperature protection	Yes											
Multi peak scan	Yes											
Integrated AFCI 2.0	Optional											
Integrated DC switch	Yes											
General Data												
Dimensions (W × H × D)	310 × 563 × 219 mm											
Weight	16.5 kg		16.9 kg		17.9 kg			19.6 kg			20.8 kg	
Topology	Transformerless											
Self-consumption (night)	< 1 W											
Operating ambient temperature range	-25 ~ +60°C											
Relative humidity	0 - 100%											
Ingress protection	IP66											
Noise emission (typical)	< 30 dB(A)							< 60 dB(A)				
Cooling concept	Natural cooling							Intelligent fan-cooling				
Max. operation altitude	4000 m											
Grid connection standard	G99, VDE-AR-N 4105/VDE V 0124, EN 50549-1, VDE 0126/UTE C 15/VFR:2019, RD 1699/RD 244/UNE 206006/ UNE 206007-1, CEI 0-21, C10/11, NRS 097-2-1, EIFS 2018.2, IEC 62116, IEC 61727, IEC 60068, IEC 61683, EN 50530											
Safety / EMC standard	IEC/EN 62109-1/-2, IEC/EN 61000-6-1/-2/-3/-4											
Features												
DC connection	MC4 connector											
AC connection	Quick connection plug											
Display	LCD											
Communication	RS485, Optional: Wi-Fi, GPRS											

S5-GR3P(5-10)K-LV

Solis Three Phase Grid-Tied Inverters

Features:

- Max. efficiency 98.0%
- > 150% DC/AC ratio
- Supports export power control
- AFCI protection, proactively reduces fire risk
- 24-hour load consumption monitoring
- Adaptive weak grid
- IP66

Models:

S5-GR3P5K-LV

S5-GR3P6K-LV

S5-GR3P10K-LV

360º View

DATASHEET

Models	5K	6K	10K
Input DC			
Recommended max. PV power	7.5 kW	9 kW	15 kW
Max. input voltage	1100 V		
Rated voltage	330 V		
Start-up voltage	180 V		
MPPT voltage range	160 - 500 V		
Max. input current	16 A / 16 A		32 A / 32 A
Max. short circuit current	20 A / 20 A		40 A / 40 A
MPPT number / Max. input strings number	2 / 2		2 / 4
Output AC			
Rated output power	5 kW	6 kW	10 kW
Max. apparent output power	5.5 kVA	6.6 kVA	11 kVA
Max. output power	5.5 kW	6.6 kW	11 kW
Rated grid voltage	3/(N)/PE, 208 V / 220 V / 240 V		
Rated grid frequency	50 Hz / 60 Hz		
Rated grid output current	13.1 A	15.7 A	26.2 A
Max. output current	14.4 A	16.7 A	28.8 A
Power factor	> 0.99 (0.8 leading - 0.8 lagging)		
THDi	< 2%		
Efficiency			
Max. efficiency	98.0%		
EU efficiency	97.5%		
Protection			
DC reverse-polarity protection	Yes		
Short circuit protection	Yes		
Output over current protection	Yes		
Surge protection	Yes		
Grid monitoring	Yes		
Anti-islanding protection	Yes		
Temperature protection	Yes		
Multi peak scan	Yes		
Integrated AFCI 2.0	Optional		
Integrated DC switch	Yes		
General Data			
Dimensions (W × H × D)	310 × 563 × 219 mm		
Weight	17.6 kg		21.1 kg
Topology	Transformerless		
Self-consumption (night)	< 1 W		
Operating ambient temperature range	-25 ~ +60°C		
Relative humidity	0 - 100%		
Ingress protection	IP66		
Noise emission (typical)	< 30 dB(A)		< 60 dB(A)
Cooling concept	Natural cooling		Intelligent fan-cooling
Max. operation altitude	4000 m		
Grid connection standard	G99, VDE-AR-N 4105/VDE V 0124, EN 50549-1, VDE 0126/UTE C 15/VFR:2019, RD 1699/RD 244/UNE 206006/ UNE 206007-1, CEI 0-21, C10/11, NRS 097-2-1, EIFS 2018.2, IEC 62116, IEC 61727, IEC 60068, IEC 61683, EN 50530		
Safety / EMC standard	IEC/EN 62109-1/-2, IEC/EN 61000-6-1/-2/-3/-4		
Features			
DC connection	MC4 connector		
AC connection	Quick connection plug		
Display	LCD		
Communication	RS485, Optional: Wi-Fi, GPRS		

Residential Power Plant Case Study

Microgrid Project in Hebei Province

This microgrid project in Hebei province uses Solis-3P(12-25)K-5G and Solis-(25-50)K-5G inverters. Through the configuration of an energy storage system, the project adopts the mode of "Self-use, surplus electricity exoported & sold back to the grid". This has realized consumption of new green energy to the region and delivers a stable income of about 1.6 million yuan annually.

In addition, the system is monitored in real-time via the SolisCloud platform which offers intelligent digital functions, online system control,along with accurate operation and maintenance. This in turn makes power station management more eficient, convenient and cost effective.

This project demonstrates the technological progress and expansion of the solar industry, accelerating the development of clean, low-carbon energy.

Finland

6.7kW S5-GR3P(3-20)K

USA

16kW Solis-(2.5-6)K-4G-US

Australia

8.2kW Solis-1P(2.5-6)K-4G

UK

2.8kW S6-GR1P(2.5-6)K

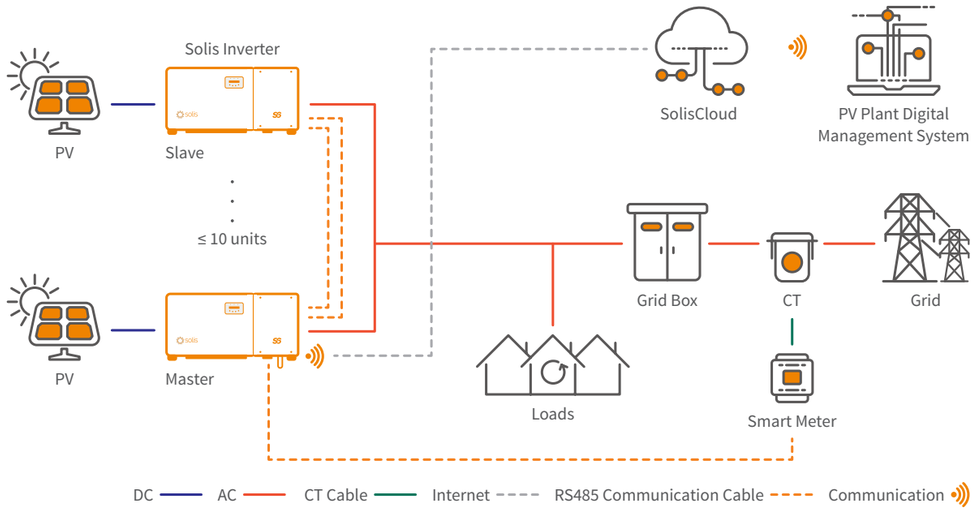
China

2.7MW

GCI-3P(12-25)K-5G

Commercial & Industrial Solar PV Solutions

Master-Slave Export Limitation Solution (without EPM)



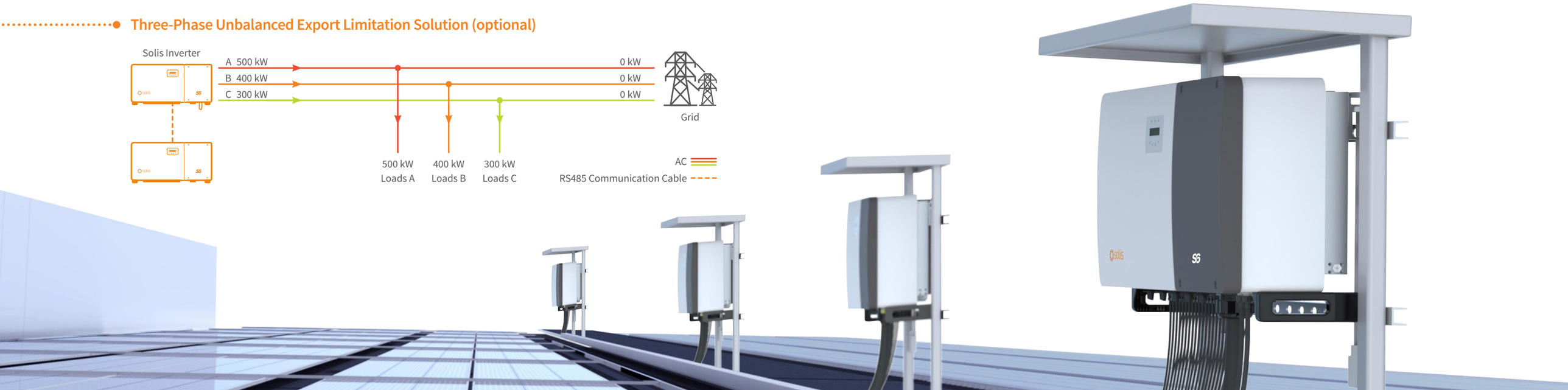
Three-Phase Unbalanced Export Limitation Solution (optional)

Solis industrial and commercial string inverter product line is rich, the power range covers 15kW - 200kW, no matter how large your design and requirements are, we can rely on our flexible products to provide you with the best industry green power solutions.

Solis provides the most extensive industrial and commercial string inverter products on the market, and the products are sold well in various countries and regions in the world. They perform well in various harsh and complex environments, and are very stable and reliable.
Solis' C&I products are compatible with modularity and flexibility in program design. From the perspective of inverter performance improvement, we provide an ideal solution for simplifying system planning and design, including optimizing software algorithms, optimizing hardware port compatibility, etc., to improve system efficiency and reduce system investment costs.
The power range of Solis' C&I products covers a wide range, with a single power up to 200kW. High-efficiency and high-power-density inverters can reduce installation and maintenance workloads and improve overall cost efficiency.
Solis' C&I solutions are supplemented by a series of advanced digital services based on SolisCloud, simplifying the application difficulty of intelligent systems, and providing you with more complete, high-quality and efficient cloud intelligent operation and maintenance solutions.

Models: S5-GC(25-50)K / S5-GC(15-23)K-LV
S6-GC3P(25-40)K03-ND / S6-GC3P(15-20)K03-LV-ND
S5-GC(50-60)K / S5-GC(25-36)K-LV
S6-GC3P(40-60)K-ND / S6-GC3P(23-36)K-LV-ND
S6-GC(80-125)K / S6-GC(50-75)K-LV
S6-GC3P(150-200)K07-ND / S6-GC3P(80-100)K07-LV-ND

Output: 15 kW -200 kW



S5-GC(25-50)K

Solis Three Phase Grid-Tied Inverters

Features:

- Max. efficiency 98.8%
- 3/4 MPPT design, suitable for multi-facing roof
- AFCI protection, proactively reduces fire risk
- Nighttime PID recovery function (optional)
- Intelligent string monitoring, smart I-V curve scan
- 24-hour load consumption monitoring
- IP66

Models:

S5-GC25K / S5-GC30K

S5-GC33K / S5-GC36K

S5-GC40K / S5-GC40K-HV

S5-GC50K-HV

360° View

DATASHEET

Models	25K	30K	33K	36K	40K	40K-HV	50K-HV
Input DC							
Recommended max. PV power	37.5 kW	45 kW	49.5 kW	54 kW	60 kW	60 kW	75 kW
Max. input voltage	1100 V						
Rated voltage	600 V						
Start-up voltage	180 V						
MPPT voltage range	200 - 1000 V						
Max. input current	32 A / 32 A / 32 A			4 × 32 A			
Max. short circuit current	40 A / 40 A / 40 A			4 × 40 A			
MPPT number / Max. input strings number	3 / 6			4 / 8			
Output AC							
Rated output power	25 kW	30 kW	33 kW	36 kW	40 kW	40 kW	50 kW
Max. apparent output power	27.5 kVA	33 kVA	36.3 kVA	39.6 kVA	44 kVA	44 kVA	55 kVA
Max. output power	27.5 kW	33 kW	36.3 kW	39.6 kW	44 kW	44 kW	55 kW
Rated grid voltage	3/N/PE, 220 V / 380 V, 230 V / 400 V					3/PE, 480 V	
Rated grid frequency	50 Hz / 60 Hz						
Rated grid output current	38.0 A / 36.1 A	45.6 A / 43.3 A	50.1 A / 47.6 A	54.7 A / 52.0 A	60.8 A / 57.7 A	48.1 A	60.1 A
Max. output current	41.8 A	50.2 A	55.1 A	60.2 A	66.9 A	53.0 A	66.2 A
Power factor	> 0.99 (0.8 leading - 0.8 lagging)						
THDi	< 3%						
Efficiency							
Max. efficiency	98.5%		98.6%	98.7%		98.8%	
EU efficiency	98.1%		98.2%	98.3%		98.4%	
Protection							
DC reverse-polarity protection	Yes						
Short circuit protection	Yes						
Output over current protection	Yes						
Surge protection	DC Type II / AC Type II						
Grid monitoring	Yes						
Anti-islanding protection	Yes						
Temperature protection	Yes						
Strings monitoring	Yes						
I/V Curve scanning	Yes						
Multi peak scan	Yes						
Integrated AFCI 2.0	Optional						
Integrated PID recovery	Optional						
Integrated DC switch	Yes						
General Data							
Dimensions (W × H × D)	647 × 629 × 252 mm						
Weight	38.2 kg			42.1 kg			
Topology	Transformerless						
Self-consumption (night)	< 1 W						
Operating ambient temperature range	-25 ~ +60°C						
Relative humidity	0 - 100%						
Ingress protection	IP66						
Noise emission (typical)	≤ 60 dB(A)						
Cooling concept	Intelligent fan-cooling						
Max. operation altitude	4000 m						
Grid connection standard	G99, VDE-AR-N 4105/VDE V 0124, EN 50549-1, VDE 0126/UTE C 15/VFR:2019, RD 1699/RD 244/UNE 206006/ UNE 206007-1, CEI 0-21, C10/11, NRS 097-2-1, EIFS 2018.2, IEC 62116, IEC 61727, IEC60068, IEC 61683, EN 50530						
Safety / EMC standard	IEC/EN 62109-1/-2, IEC/EN 61000-6-1/-2/-3/-4						
Features							
DC connection	MC4 connector						
AC connection	OT terminal						
Display	LCD						
Communication	RS485, Optional: Wi-Fi, GPRS						

S5-GC(15-23)K-LV

Solis Three Phase Grid-Tied Inverters

Features:

- Max. efficiency 97.8%
- 3 MPPT design, suitable for multi-facing roof
- AFCI protection, proactively reduces fire risk
- Nighttime PID recovery function (optional)
- Intelligent string monitoring, smart I-V curve scan
- 24-hour load consumption monitoring
- IP66

Models:

S5-GC15K-LV

S5-GC20K-LV

S5-GC23K-LV

360° View

DATASHEET

Models	15K	20K	23K
Input DC			
Recommended max. PV power	22.5 kW	30 kW	34.5 kW
Max. input voltage		1100 V	
Rated voltage		600 V	
Start-up voltage		180 V	
MPPT voltage range		200 - 1000 V	
Max. input current		32 A / 32 A / 32 A	
Max. short circuit current		40 A / 40 A / 40 A	
MPPT number / Max. input strings number		3 / 6	
Output AC			
Rated output power	15 kW	20 kW	23 kW
Max. apparent output power	16.5 kVA	22 kVA	25 kVA
Max. output power	16.5 kW	22 kW	25 kW
Rated grid voltage		3/PE, 220 V	
Rated grid frequency		50 Hz / 60 Hz	
Rated grid output current	39.4 A	52.5 A	60.4 A
Max. output current	43.3 A	57.7 A	65 A
Power factor		> 0.99 (0.8 leading - 0.8 lagging)	
THDi		< 3%	
Efficiency			
Max. efficiency		97.8%	
EU efficiency		97.3%	
Protection			
DC reverse-polarity protection		Yes	
Short circuit protection		Yes	
Output over current protection		Yes	
Surge protection		DC Type II / AC Type II	
Grid monitoring		Yes	
Anti-islanding protection		Yes	
Temperature protection		Yes	
Strings monitoring		Yes	
I/V Curve scanning		Yes	
Multi peak scan		Yes	
Integrated AFCI 2.0		Optional	
Integrated PID recovery		Optional	
Integrated DC switch		Yes	
General Data			
Dimensions (W × H × D)		647 × 629 × 252 mm	
Weight	38.2 kg		42.1 kg
Topology		Transformerless	
Self-consumption (night)		< 1 W	
Operating ambient temperature range		-25 ~ +60°C	
Relative humidity		0 - 100%	
Ingress protection		IP66	
Noise emission (typical)		≤ 60 dB(A)	
Cooling concept		Intelligent fan-cooling	
Max. operation altitude		4000 m	
Grid connection standard		G99, VDE-AR-N 4105/VDE V 0124, EN 50549-1, VDE 0126/UTE C 15/VFR:2019, RD 1699/RD 244/UNE 206006/ UNE 206007-1, CEI 0-21, C10/11, NRS 097-2-1, EIFS 2018.2, IEC 62116, IEC 61727, IEC60068, IEC 61683, EN 50530	
Safety / EMC standard		IEC/EN 62109-1/-2, IEC/EN 61000-6-1/-2/-3/-4	
Features			
DC connection		MC4 connector	
AC connection		OT terminal	
Display		LCD	
Communication		RS485, Optional: Wi-Fi, GPRS	

S6-GC3P(25-40)K03-ND

Solis Three Phase Grid-Tied Inverters

Features:

- String current up to 21A
- > 150% DC/AC ratio
- AFCI protection, proactively reduces fire risk
- Intelligent string monitoring, smart I-V curve scan
- 24-hour load consumption monitoring
- Dual independent RS485 ports, supporting communication with multiple devices

Models:

S6-GC3P25K03-NV-ND

S6-GC3P30K03-NV-ND

S6-GC3P33K03-NV-ND

S6-GC3P36K03-NV-ND

S6-GC3P40K03-HV-ND

DATASHEET

Models	25K03-NV	30K03-NV	33K03-NV	36K03-NV	40K03-HV
Input DC					
Recommended max. PV power	37.5 kW	45 kW	49.5 kW	54 kW	60 kW
Max. input voltage	1100 V				
Rated voltage	600 V				720 V
Start-up voltage	180 V				
MPPT voltage range	180 - 1000 V				
Max. input current	42 A / 42 A / 42 A				
Max. short circuit current	52.5 A / 52.5 A / 52.5 A				
MPPT number / Max. input strings number	3 / 6				
Output AC					
Rated output power	25 kW	30 kW	33 kW	36 kW	40 kW
Max. apparent output power	25 kVA	30 kVA	33 kVA	36 kVA	40 kVA
Max. output power	25 kW	30 kW	33 kW	36 kW	40 kW
Rated grid voltage	3/N/PE, 220 V / 380 V, 230 V / 400 V				3/PE, 480 V
Rated grid frequency	50 Hz / 60 Hz				
Rated grid output current	38.0 A / 36.1 A	45.6 A / 43.3 A	50.1 A / 47.6 A	54.7 A / 52.0 A	48.1 A
Max. output current	38.0 A / 36.1 A	45.6 A / 43.3 A	50.1 A / 47.6 A	54.7 A / 52.0 A	48.1 A
Power factor	> 0.99 (0.8 leading - 0.8 lagging)				
THDi	< 3%				
Efficiency					
Max. efficiency	98.5%				98.6%
EU efficiency	98.0%				98.1%
Protection					
DC reverse-polarity protection	Yes				
Short circuit protection	Yes				
Output over current protection	Yes				
Surge protection	Yes				
Grid monitoring	Yes				
Anti-islanding protection	Yes				
Temperature protection	Yes				
Strings monitoring	Yes				
I/V Curve scanning	Yes				
Multi peak scan	Yes				
Integrated AFCI 2.0	Optional				
Integrated DC switch	Yes				
General Data					
Dimensions (W × H × D)	355 × 625 × 250 mm				
Weight	25.3 kg	25.5 kg	26.5 kg		
Topology	Transformerless				
Self-consumption (night)	< 1 W				
Operating ambient temperature range	-25 ~ +60°C				
Relative humidity	0 - 100%				
Ingress protection	IP66				
Noise emission (typical)	≤ 55 dB(A)				
Cooling concept	Intelligent fan-cooling				
Max. operation altitude	4000 m				
Grid connection standard	G98 or G99, VDE-AR-N 4105/VDE V 0124, EN 50549-1, VDE 0126/UTE C 15/VFR:2019, RD 1699/RD 244/UNE 206006/ UNE 206007-1, CEI 0-21, C10/11, NRS 097-2-1, TOR, EIFS 2018.2, IEC 62116, IEC 61727, IEC60068, IEC 61683, EN 50530				
Safety / EMC standard	IEC/EN 62109-1/-2, IEC/EN 61000-6-1/-2/-3/-4				
Features					
DC connection	MC4 connector				
AC connection	OT terminal				
Display	LED indicator & Bluetooth + APP				
Communication	Standard: RS485×2; Optional: Wi-Fi, 4G, DRM				

S6-GC3P(15-20)K03-LV-ND

Solis Three Phase Grid-Tied Inverters

Features:

- String current up to 21A
- > 150% DC/AC ratio
- AFCI protection, proactively reduces fire risk
- Intelligent string monitoring, smart I-V curve scan
- 24-hour load consumption monitoring
- Dual independent RS485 ports, supporting communication with multiple devices

Models:

S6-GC3P15K03-LV-ND

S6-GC3P20K03-LV-ND

DATASHEET

Models	15K	20K
Input DC		
Recommended max. PV power	22.5 kW	30 kW
Max. input voltage	1100 V	
Rated voltage	360 V	
Start-up voltage	180 V	
MPPT voltage range	180 - 1000 V	
Max. input current	42 A / 42 A / 42 A	
Max. short circuit current	52.5 A / 52.5 A / 52.5 A	
MPPT number / Max. input strings number	3 / 6	
Output AC		
Rated output power	15 kW	20 kW
Max. apparent output power	15 kVA	20 kVA
Max. output power	15 kW	20 kW
Rated grid voltage	3/PE, 220 V / 230 V	
Rated grid frequency	50 Hz / 60 Hz	
Rated grid output current	39.4 A / 37.7 A	52.5 A / 50.2 A
Max. output current	39.4 A / 37.7 A	52.5 A / 50.2 A
Power factor	> 0.99 (0.8 leading - 0.8 lagging)	
THDi	< 3%	
Efficiency		
Max. efficiency	97.8%	
EU efficiency	97.3%	
Protection		
DC reverse-polarity protection	Yes	
Short circuit protection	Yes	
Output over current protection	Yes	
Surge protection	Yes	
Grid monitoring	Yes	
Anti-islanding protection	Yes	
Temperature protection	Yes	
Strings monitoring	Yes	
I/V Curve scanning	Yes	
Multi peak scan	Yes	
Integrated AFCI 2.0	Optional	
Integrated DC switch	Yes	
General Data		
Dimensions (W × H × D)	355 × 625 × 250 mm	
Weight	25.5 kg	26.5 kg
Topology	Transformerless	
Self-consumption (night)	< 1 W	
Operating ambient temperature range	-25 ~ +60°C	
Relative humidity	0 - 100%	
Ingress protection	IP66	
Noise emission (typical)	≤ 55 dB(A)	
Cooling concept	Intelligent fan-cooling	
Max. operation altitude	4000 m	
Grid connection standard	G98 or G99, VDE-AR-N 4105/VDE V 0124, EN 50549-1, VDE 0126/UTE C 15/VFR:2019, RD 1699/RD 244/UNE 206006/ UNE 206007-1, CEI 0-21, C10/11, NRS 097-2-1, TOR, EIFS 2018.2, IEC 62116, IEC 61727, IEC60068, IEC 61683, EN 50530	
Safety / EMC standard	IEC/EN 62109-1/-2, IEC/EN 61000-6-1/-2/-3/-4	
Features		
DC connection	MC4 connector	
AC connection	OT terminal	
Display	LED indicator & Bluetooth + APP	
Communication	Standard: RS485×2; Optional: Wi-Fi, 4G, DRM	

S5-GC(50-60)K

Solis Three Phase Grid-Tied Inverters

Features:

- 5/6 MPPT, max. efficiency 98.7%
- Nighttime PID recovery function (optional)
- AFCI protection, proactively reduces fire risk
- Intelligent string monitoring, smart I-V curve scan
- 24-hour load consumption monitoring
- IP66, C5 Anti-Corrosion level
- Night SVG function

Models:

S5-GC50K / S5-GC60K

360º View

DATASHEET

Models	50K	60K
Input DC		
Max. input voltage	1100 V	
Rated voltage	600 V	
Start-up voltage	195 V	
MPPT voltage range	180 - 1000 V	
Max. input current	5 × 32 A	6 × 32 A
Max. short circuit current	5 × 40 A	6 × 40 A
MPPT number / Max. input strings number	5 / 10	6 / 12
Output AC		
Rated output power	50 kW	60 kW
Max. apparent output power	55 kVA	66 kVA
Max. output power	55 kW	66 kW
Rated grid voltage	3/N/PE, 220 V / 380 V, 230 V / 400 V	
Rated grid frequency	50 Hz / 60 Hz	
Rated grid output current	76.0 A / 72.2 A	91.2 A / 86.6 A
Max. output current	83.6 A	100.3 A
Power factor	> 0.99 (0.8 leading - 0.8 lagging)	
THDi	< 3%	
Efficiency		
Max. efficiency	98.7%	
EU efficiency	98.3%	
Protection		
DC reverse-polarity protection	Yes	
Short circuit protection	Yes	
Output over current protection	Yes	
Surge protection	DC Type II / AC Type II	
Grid monitoring	Yes	
Anti-islanding protection	Yes	
Temperature protection	Yes	
Strings monitoring	Yes	
I/V Curve scanning	Yes	
Integrated AFCI 2.0	Optional	
Multi peak scan	Yes	
Integrated PID recovery	Optional ①	
Integrated DC switch	Yes	
General Data		
Dimensions (W × H × D)	691 × 578 × 338 mm	
Weight	53.7 kg	
Topology	Transformerless	
Self-consumption (night)	< 1 W	
Operating ambient temperature range	-25 ~ +60°C	
Relative humidity	0 - 100%	
Ingress protection	IP66	
Noise emission (typical)	< 55 dB(A)	
Cooling concept	Intelligent fan-cooling	
Max. operation altitude	4000 m	
Grid connection standard	G99, VDE-AR-N 4105/VDE V 0124, EN 50549-1, VDE 0126/UTE C 15/VFR:2019, RD 1699/RD 244/UNE 206006/ UNE 206007-1, CEI 0-21, C10/11, NRS 097-2-1, EIFS 2018.2, IEC 62116, IEC 61727, IEC60068, IEC 61683, EN 50530	
Safety / EMC standard	IEC 62109-1/-2, IEC62116 & IEC 61000-6-1/-2/-3/-4	
Features		
DC connection	MC4 connector	
AC connection	OT terminal (max. 70 mm²)	
Display	LCD	
Communication	RS485, USB, Optional: Wi-Fi, GPRS	

① Due to the similar functional logic, when the night time PID-Recovery function is integrated, the night time var compensation function can not be used. Also, the negative grounding option is not available for inverters with night time PID-Recovery function.

S5-GC(25-36)K-LV

Solis Three Phase Grid-Tied Inverters

Features:

- 4 MPPT, max. efficiency 98.4%
- Nighttime PID recovery function (optional)
- AFCI protection, proactively reduces fire risk
- Intelligent string monitoring, smart I-V curve scan
- 24-hour load consumption monitoring
- IP66, C5 Anti-Corrosion level
- Night SVG function

Models:

S5-GC25K-LV

S5-GC30K-LV

S5-GC36K-LV

360° View

DATASHEET

Models	25K	30K	36K
Input DC			
Max. input voltage		1100 V	
Rated voltage		360 V	
Start-up voltage		195 V	
MPPT voltage range		180 - 1000 V	
Max. input current		4 × 32 A	
Max. short circuit current		4 × 40 A	
MPPT number / Max. input strings number		4 / 8	
Output AC			
Rated output power	25 kW	30 kW	36 kW
Max. apparent output power	27.5 kVA	33 kVA	36 kVA
Max. output power	27.5 kW	33 kW	36 kW
Rated grid voltage		3/(N)/PE, 220 V	
Rated grid frequency		50 Hz / 60 Hz	
Rated grid output current	65.6 A	78.7 A	94.5 A
Max. output current	72.2 A	86.6 A	94.5 A
Power factor		> 0.99 (0.8 leading - 0.8 lagging)	
THDi		< 3%	
Efficiency			
Max. efficiency		98.4%	
EU efficiency		98.0%	
Protection			
DC reverse-polarity protection		Yes	
Short circuit protection		Yes	
Output over current protection		Yes	
Surge protection		DC Type II / AC Type II	
Grid monitoring		Yes	
Anti-islanding protection		Yes	
Temperature protection		Yes	
Strings monitoring		Yes	
I/V Curve scanning		Yes	
Multi peak scan		Yes	
Integrated AFCI 2.0		Optional	
Integrated PID recovery		Optional ①	
Integrated DC switch		Yes	
General Data			
Dimensions (W × H × D)		691 × 578 × 338 mm	
Weight		53.7 kg	
Topology		Transformerless	
Self-consumption (night)		< 1 W	
Operating ambient temperature range		-25 ~ +60°C	
Relative humidity		0 - 100%	
Ingress protection		IP66	
Noise emission (typical)		< 55 dB(A)	
Cooling concept		Intelligent fan-cooling	
Max. operation altitude		4000 m	
Grid connection standard		UL 1741, IEEE 1547, NBR 16149, NBR 16150, C10-11, REN 342	
Safety / EMC standard		IEC 62109-1/-2, IEC62116 & IEC 61000-6-1/-2/-3/-4	
Features			
DC connection		MC4 connector	
AC connection		OT terminal (max. 70 mm²)	
Display		LCD	
Communication		RS485, USB, Optional: Wi-Fi, GPRS	

① Due to the similar functional logic, when the night time PID-Recovery function is integrated, the night time var compensation function can not be used. Also, the negative grounding option is not available for inverters with night time PID-Recovery function.

S6-GC3P(40-60)K-ND

Solis Three Phase Grid-Tied Inverters

Features:

- 4/5 MPPT, max. efficiency 98.7%
- String current up to 21A
- > 150% DC/AC ratio
- Nighttime PID recovery function (optional)
- AFCI protection, proactively reduces fire risk
- Intelligent string monitoring, smart I-V curve scan
- Dual independent RS485 ports, supporting communication with multiple devices

Models:

S6-GC3P40K04-NV-ND

S6-GC3P50K04-NV-ND

S6-GC3P60K05-NV-ND

S6-GC3P50K04-HV-ND

S6-GC3P60K05-HV-ND

DATASHEET

Models	40K04-NV	50K04-NV	60K05-NV	50K04-HV	60K05-HV
Input DC					
Max. input voltage	1100 V				
Rated voltage	600 V			720 V	
Start-up voltage	180 V				
MPPT voltage range	180 - 1000 V				
Max. input current	4 × 42 A		5 × 42 A	4 × 42 A	5 × 42 A
Max. short circuit current	4 × 52.5 A		5 × 52.5 A	4 × 52.5 A	5 × 52.5 A
MPPT number / Max. input strings number	4 / 8		5 / 10	4 / 8	5 / 10
Output AC					
Rated output power	40 kW	50 kW	60 kW	50 kW	60 kW
Max. apparent output power	40 kVA	50 kVA	60 kVA	50 kVA	60 kVA
Max. output power	40 kW	50 kW	60 kW	50 kW	60 kW
Rated grid voltage	3/N/PE, 220 V / 380 V, 230 V / 400 V			3/PE, 480 V	
Rated grid frequency	50 Hz / 60 Hz				
Rated grid output current	60.8 A / 57.7 A	76.0 A / 72.2 A	91.2 A / 86.6 A	60.1 A	72.2 A
Max. output current	60.8 A / 57.7 A	76.0 A / 72.2 A	91.2 A / 86.6 A	60.1 A	72.2 A
Power factor	> 0.99 (0.8 leading - 0.8 lagging)				
THDi	< 3%				
Efficiency					
Max. efficiency	98.6%			98.7%	
EU efficiency	98.1%				
Protection					
DC reverse-polarity protection	Yes				
Short circuit protection	Yes				
Output over current protection	Yes				
Surge protection	DC Type II / AC Type II				
Grid monitoring	Yes				
Anti-islanding protection	Yes				
Temperature protection	Yes				
Strings monitoring	Yes				
I/V Curve scanning	Yes				
Multi peak scan	Yes				
Integrated AFCI 2.0	Optional				
Integrated PID recovery	Optional				
Integrated DC switch	Yes				
General Data					
Dimensions (W × H × D)	508 × 612 × 288 mm				
Weight	34.9 kg	35.8 kg	38.6 kg	34.4 kg	37.4 kg
Topology	Transformerless				
Self-consumption (night)	< 1 W				
Operating ambient temperature range	-25 ~ +60°C				
Relative humidity	0 - 100%				
Ingress protection	IP66				
Noise emission (typical)	≤ 55 dB(A)				
Cooling concept	Intelligent fan-cooling				
Max. operation altitude	4000 m				
Grid connection standard	G98 or G99, VDE-AR-N 4105/VDE V 0124, EN 50549-1, VDE 0126/UTE C 15/VFR:2019, RD 1699/RD 244/UNE 206006/ UNE 206007-1, CEI 0-21, C10/11, NRS 097-2-1, TOR, EIFS 2018.2, IEC 62116, IEC 61727, IEC60068, IEC 61683, EN 50530				
Safety / EMC standard	IEC/EN 62109-1/-2, IEC/EN 61000-6-1/-2/-3/-4				
Features					
DC connection	MC4 connector				
AC connection	OT terminal				
Display	LED indicator & Bluetooth + APP				
Communication	Standard: RS485×2; Optional: Wi-Fi, 4G, DRM				

S6-GC3P(23-36)K-LV-ND

Solis Three Phase Grid-Tied Inverters

Features:

- 3/4 MPPT, max. efficiency 97.8%
- String current up to 21A
- > 150% DC/AC ratio
- Nighttime PID recovery function (optional)
- AFCI protection, proactively reduces fire risk
- Intelligent string monitoring, smart I-V curve scan
- Dual independent RS485 ports, supporting communication with multiple devices

Models:

S6-GC3P23K03-LV-ND

S6-GC3P25K04-LV-ND

S6-GC3P30K04-LV-ND

S6-GC3P36K04-LV-ND

DATASHEET

Models	23K03	25K04	30K04	36K04
Input DC				
Max. input voltage	1100 V			
Rated voltage	400 V			
Start-up voltage	180 V			
MPPT voltage range	180 - 1000 V			
Max. input current	42 A / 42 A / 42 A	4 × 42 A		
Max. short circuit current	52.5 A / 52.5 A /52.5 A	4 × 52.5 A		
MPPT number / Max. input strings number	3 / 6	4 / 8		
Output AC				
Rated output power	23 kW	25 kW	30 kW	36 kW
Max. apparent output power	23 kVA	25 kVA	30 kVA	36 kVA
Max. output power	23 kW	25 kW	30 kW	36 kW
Rated grid voltage	3/PE, 220 V / 230 V			
Rated grid frequency	50 Hz / 60 Hz			
Rated grid output current	60.4 A / 57.7 A	65.6 A / 62.8 A	78.7 A / 75.3 A	94.5 A / 90.4 A
Max. output current	60.4 A / 57.7 A	65.6 A / 62.8 A	78.7 A / 75.3 A	94.5 A / 90.4 A
Power factor	> 0.99 (0.8 leading - 0.8 lagging)			
THDi	< 3%			
Efficiency				
Max. efficiency	97.8%			
EU efficiency	97.3%			
Protection				
DC reverse-polarity protection	Yes			
Short circuit protection	Yes			
Output over current protection	Yes			
Surge protection	DC Type II / AC Type II			
Grid monitoring	Yes			
Anti-islanding protection	Yes			
Temperature protection	Yes			
Strings monitoring	Yes			
I/V Curve scanning	Yes			
Multi peak scan	Yes			
Integrated AFCI 2.0	Optional			
Integrated PID recovery	Optional			
Integrated DC switch	Yes			
General Data				
Dimensions (W × H × D)	508 × 612 × 288 mm			
Weight	32.6 kg	35.9 kg		36.2 kg
Topology	Transformerless			
Self-consumption (night)	< 1 W			
Operating ambient temperature range	-25 ~ +60°C			
Relative humidity	0 - 100%			
Ingress protection	IP66			
Noise emission (typical)	≤ 55 dB(A)			
Cooling concept	Intelligent fan-cooling			
Max. operation altitude	4000 m			
Grid connection standard	G98 or G99, VDE-AR-N 4105/VDE V 0124, EN 50549-1, VDE 0126/UTE C 15/VFR:2019, RD 1699/RD 244/UNE 206006/ UNE 206007-1, CEI 0-21, C10/11, NRS 097-2-1, TOR, EIFS 2018.2, IEC 62116, IEC 61727, IEC60068, IEC 61683, EN 50530			
Safety / EMC standard	IEC/EN 62109-1/-2, IEC/EN 61000-6-1/-2/-3/-4			
Features				
DC connection	MC4 connector			
AC connection	OT terminal			
Display	LED indicator & Bluetooth + APP			
Communication	Standard: RS485×2; Optional: Wi-Fi, 4G, DRM			

S6-GC(80-125)K

Solis Three Phase Grid-Tied Inverters

Safety, Intelligent Prevention

- Integrated meteorological equipment, intelligent system inefficiency warning
- AI-based millisecond arc protection (AFCI)
- Real time PV grounding detection and protection
- Arc fault and RSD (Rapid Shutdown) co-operation for improved fire safety (optional)

Innovation, Never Stops

- Master-slave export power control solution, flexible and fast control, support 10 units in parallel
- Dual independent RS485 ports, perfect adaptation to third-party integration
- Supports single and multiple genset applications without the need for an external genset controller
- The industry's first master-slave export power control+ three-phase unbalanced output control, allocate each phase power on demand, and flexibly compatible with various power grids (optional)

Models:

S6-GC80K / S6-GC100K

S6-GC110K / S6-GC125K

S6-GC125K-HV

DATASHEET

Models	80K	100K	110K	125K	125K-HV
Input DC					
Max. input voltage	1100 V				
Rated voltage	600 V				720 V
Start-up voltage	180 V				
MPPT voltage range	160 - 1000 V				
Max. input current	4 × (42 A / 36 A)	5 × (42 A / 36 A)			
Max. current per DC input	4 × (42 A / 36 A)	5 × (42 A / 36 A)			
Max. short circuit current	8 × 50 A	10 × 50 A			
MPPT number / Max. input strings number	8 / 16	10 / 20			
Output AC					
Rated output power	80 kW	100 kW	110 kW	125 kW	125kW
Max. apparent output power	88 kVA	110 kVA	121 kVA	125 kVA	137.5 kVA
Max. output power	88 kW	110 kW	121 kW	125 kW	137.5 kW
Rated grid voltage	3/N/PE, 220 V / 380 V, 230 V / 400 V				3/PE, 480 V
Rated grid frequency	50 Hz / 60 Hz				
Rated grid output current	121.6 A / 115.5 A	152.0 A / 144.3 A	167.1 A / 158.8 A	189.9 A / 180.4 A	150.4 A
Max. output current	133.7 A	167.1 A	183.8 A	189.9 A	165.4 A
Power factor	> 0.99 (0.8 leading - 0.8 lagging)				
THDi	< 3%				
Efficiency					
Max. efficiency	98.7%				
EU efficiency	98.3%				
Protection					
DC reverse-polarity protection	Yes				
Short circuit protection	Yes				
Output over current protection	Yes				
Surge protection	DC Type II / AC Type II				
Grid monitoring	Yes				
Anti-islanding protection	Yes				
Temperature protection	Yes				
Strings monitoring	Yes				
I/V Curve scanning	Yes				
Night SVG function	Yes				
Integrated AFCI 2.0	Optional				
Integrated PID recovery	Optional				
Integrated DC switch	Yes				
Integrated AC switch	Optional				
Integrated EPM function (< 10 device)	Optional				
General Data					
Dimensions (W × H × D)	1014 × 567 × 345 mm				
Weight	93 kg	96 kg			
Topology	Transformerless				
Self-consumption (night)	< 2 W				
Operating ambient temperature range	-30 ~ +60°C				
Relative humidity	0 - 100%				
Ingress protection	IP66				
Cooling concept	Intelligent fan-cooling				
Max. operation altitude	4000 m				
Grid connection standard	G99, IEC61727, EN50549-1/2, VDE4110				
Safety / EMC standard	IEC/EN 62109-1/-2, IEC/EN 61000-6-2/-4				
Features					
DC connection	MC4 connector				
AC connection	OT terminal (max. 240 mm^2)				
Display	LCD				
Communication	RS485, Optional: Wi-Fi, GPRS, PLC				

S6-GC(50-75)K-LV

Solis Three Phase Grid-Tied Inverters

Safety, Intelligent Prevention

- Integrated meteorological equipment, intelligent system inefficiency warning
- AI-based millisecond arc protection (AFCI)
- Real time PV grounding detection and protection
- Arc fault and RSD (Rapid Shutdown) co-operation for improved fire safety (optional)

Innovation, Never Stops

- Master-slave export power control solution, flexible and fast control, support 10 units in parallel
- Dual independent RS485 ports, perfect adaptation to third-party integration
- Supports single and multiple genset applications without the need for an external genset controller
- The industry's first master-slave export power control+ three-phase unbalanced output control, allocate each phase power on demand, and flexibly compatible with various power grids (optional)

Models:

S6-GC50K-LV

S6-GC60K-LV

S6-GC75K-LV

DATASHEET

Models	50K	60K	75K
Input DC			
Max. input voltage	1100 V		
Rated voltage	450 V		
Start-up voltage	180 V		
MPPT voltage range	160 - 1000 V (Recommend 800V access)		
Max. input current	3 × (42 A / 36 A)	4 × (42 A / 36 A)	
Max. current per DC input	3 × (42 A / 36 A)	4 × (42 A / 36 A)	
Max. short circuit current	6 × 50 A	8 × 50 A	
MPPT number / Max. input strings number	6 / 12	8 / 16	
Output AC			
Rated output power	50 kW	60 kW	75 kW
Max. apparent output power	55 kVA	66 kVA	75 kVA
Max. output power	55 kW	66 kW	75 kW
Rated grid voltage	3/(N)/PE, 220 V / 230 V		
Rated grid frequency	50 Hz / 60 Hz		
Rated grid output current	131.2 A / 125.5 A	157.5 A / 150.6 A	196.8 A / 188.3 A
Max. output current	144.3 A	173.2 A	196.8 A
Power factor	> 0.99 (0.8 leading - 0.8 lagging)		
THDi	< 3%		
Efficiency			
Max. efficiency	98.5%		
EU efficiency	98.0%		
Protection			
DC reverse-polarity protection	Yes		
Short circuit protection	Yes		
Output over current protection	Yes		
Surge protection	DC Type II / AC Type II		
Grid monitoring	Yes		
Anti-islanding protection	Yes		
Temperature protection	Yes		
Strings monitoring	Yes		
I/V Curve scanning	Yes		
Night SVG function	Yes		
Integrated AFCI 2.0	Optional		
Integrated PID recovery	Optional		
Integrated DC switch	Yes		
Integrated AC switch	Optional		
General Data			
Dimensions (W × H × D)	1014 × 567 × 345 mm		
Weight	90 kg	93 kg	
Topology	Transformerless		
Self-consumption (night)	< 2 W		
Operating ambient temperature range	-30 ~ +60°C		
Relative humidity	0 - 100%		
Ingress protection	IP66		
Cooling concept	Intelligent fan-cooling		
Max. operation altitude	4000 m		
Grid connection standard	IEC 61727, IEC 62116, C10/11, VDE 4105		
Safety / EMC standard	IEC/EN 62109-1/-2, IEC/EN 61000-6-2/-4		
Features			
DC connection	MC4 connector		
AC connection	OT terminal (max. 240 mm^2)		
Display	LCD		
Communication	RS485, Optional: Wi-Fi, GPRS, PLC		

S6-GC3P(150-200)K07-ND

Solis Three Phase Grid-Tied Inverters

Safety, Intelligent Prevention

- Integrated meteorological equipment, intelligent system inefficiency warning
- AI-based millisecond arc protection (AFCI)
- Real time PV grounding detection and protection
- Arc fault and RSD (Rapid Shutdown) co-operation for improved fire safety (optional)
- Intelligent AC and DC terminal temperature sensing detection

Innovation, Never Stops

- Master-slave export power control solution, flexible and fast control, support 10 units in parallel
- Dual independent RS485 ports, perfect adaptation to third-party integration
- Supports single and multiple genset applications without the need for an external genset controller
- The industry's first master-slave export power control+ three-phase unbalanced output control, allocate each phase power on demand, and flexibly compatible with various power grids (optional)

Models:

S6-GC3P150K07-NV-ND

S6-GC3P200K07-HV-ND

DATASHEET

Models	150K07-NV	200K07-HV
Input DC		
Max. input voltage	1100 V	
Rated voltage	600 V	720 V
Start-up voltage	180 V	
MPPT voltage range	160 - 1000 V	
Max. input current	7 × 54 A	
Max. current per DC input	54 A	
Max. short circuit current	7 × 75 A	
MPPT number / Max. input strings number	7 / 21	
Output AC		
Rated output power	150 kW	200 kW@35°C
Max. apparent output power	165 kVA	200 kVA
Max. output power	165 kW	200 kW
Rated grid voltage	3/N/PE, 220 V / 380 V, 230 V / 400 V	3/PE, 480 V
Rated grid frequency	50 Hz / 60 Hz	
Rated grid output current	216.5 A / 227.9 A	240.6 A
Max. output current	250.6 A	240.6 A
Power factor	> 0.99 (0.8 leading - 0.8 lagging)	
THDi	< 3%	
Efficiency		
Max. efficiency	98.8%	
EU efficiency	98.3%	
Protection		
DC reverse-polarity protection	Yes	
Short circuit protection	Yes	
Output over current protection	Yes	
Surge protection	DC Type II / AC Type II	
Grid monitoring	Yes	
Anti-islanding protection	Yes	
Temperature protection	Yes	
Strings monitoring	Yes	
I/V Curve scanning	Yes	
Night SVG function	Yes	
Integrated AFCI 2.0	Optional	
Integrated PID recovery	Optional	
Integrated DC switch	Yes	
3-phase unbalanced output	Optional	
General Data		
Dimensions (W × H × D)	1035.5 × 869 × 396 mm	
Weight	105 kg	
Topology	Transformerless	
Self-consumption (night)	< 2 W	
Operating ambient temperature range	-30 ~ +60°C	
Relative humidity	0 - 100%	
Ingress protection	IP66	
Cooling concept	Intelligent fan-cooling	
Max. operation altitude	4000 m	
Grid connection standard	G99, IEC61727, EN50549-1/2, VDE4110	
Safety / EMC standard	IEC/EN 62109-1/-2, IEC60947-2, IEC/EN 61000-6-2/-4	
Features		
DC connection	MC4 connector	
AC connection	OT terminal (max. 400 mm^2)	
Display	LED indicator & Bluetooth + APP	
Communication	RS485, Optional: Wi-Fi, GPRS, PLC	

S6-GC3P(80-100)K07-LV-ND

Solis Three Phase Grid-Tied Inverters

Safety, Intelligent Prevention

- Integrated meteorological equipment, intelligent system inefficiency warning
- AI-based millisecond arc protection (AFCI)
- Real time PV grounding detection and protection
- Arc fault and RSD (Rapid Shutdown) co-operation for improved fire safety (optional)
- Intelligent AC and DC terminal temperature sensing detection

Innovation, Never Stops

- Master-slave export power control solution, flexible and fast control, support 10 units in parallel
- Dual independent RS485 ports, perfect adaptation to third-party integration
- Supports single and multiple genset applications without the need for an external genset controller
- The industry's first master-slave export power control+ three-phase unbalanced output control, allocate each phase power on demand, and flexibly compatible with various power grids (optional)

Models:

S6-GC3P80K07-LV-ND

S6-GC3P100K07-LV-ND

DATASHEET

Models	80K	100K
Input DC		
Max. input voltage	800 V	
Rated voltage	450 V	
Start-up voltage	180 V	
MPPT voltage range	160 - 800 V	
Max. input current	7 × 54 A	
Max. current per DC input	54 A	
Max. short circuit current	7 × 75 A	
MPPT number / Max. input strings number	7 / 21	
Output AC		
Rated output power	80 kW	100 kW ①
Max. apparent output power	88 kVA	100 kVA
Max. output power	88 kW	100 kW
Rated grid voltage	3/N/PE, 220 V / 230 V	
Rated grid frequency	50 Hz / 60 Hz	
Rated grid output current	209.9 A	251 A
Max. output current	230.9 A	251 A
Power factor	> 0.99 (0.8 leading - 0.8 lagging)	
THDi	< 3%	
Efficiency		
Max. efficiency	98.8%	
EU efficiency	98.3%	
Protection		
DC reverse-polarity protection	Yes	
Short circuit protection	Yes	
Output over current protection	Yes	
Surge protection	DC Type II / AC Type II	
Grid monitoring	Yes	
Anti-islanding protection	Yes	
Temperature protection	Yes	
Strings monitoring	Yes	
I/V Curve scanning	Yes	
Night SVG function	Yes	
Integrated AFCI 2.0	Optional	
Integrated PID recovery	Optional	
Integrated DC switch	Yes	
3-phase unbalanced output	Optional	
General Data		
Dimensions (W × H × D)	1035.5 × 869 × 396 mm	
Weight	105 kg	
Topology	Transformerless	
Self-consumption (night)	< 2 W	
Operating ambient temperature range	-30 ~ +60°C	
Relative humidity	0 - 100%	
Ingress protection	IP66	
Cooling concept	Intelligent fan-cooling	
Max. operation altitude	4000 m	
Grid connection standard	IEC 61727L, IEC 62116, C10/11, VDE 4105	
Safety / EMC standard	IEC/EN 62109-1/-2, IEC60947-2, IEC/EN 61000-6-2/-4	
Features		
DC connection	MC4 connector	
AC connection	OT terminal (max. 400 mm^2)	
Display	LED indicator & Bluetooth + APP	
Communication	RS485, Optional: Wi-Fi, GPRS, PLC	

① 95.6kW for 220V.

C&I Power Plant Case Study

Ninghai Power Plant

China

38MW

Solis-(215-255)K-EHV-5G

Ninghai Power Plant transitions away from traditional thermal power to integrate solar power generation overcoming technical challenges along the way.

Ninghai Power is dedicated to the innovation of greener power through science and technology and has become a leader in Agrisolar development. As a pioneer in its industry the company has has implemented a new energy park project which includes fishery-solar system, Agrisolar and floating solar systems, solar carport and

solar corridor as well as a more traditional solar rooftop. Over 8 different installation types have enabled more green energy to be installed in more areas - true "out of the box" thinking.

The solar plant now generates more than 300 billion kilowatts of green energy.

India

1.12MW **S5-GC(80-110)K**

Greece

100kW **S5-GC(100-110)K**

UK

2MW

Solis-(100-110)K-5G

Netherlands

168.35kW **Solis-(80-110)K-5G**

Philippines

270kW **Solis-(25-30)K-LV**

Utility Scale Solar PV Solutions

Solis has optimized and innovated around the entire process of utility solar PV solutions. Deeply integrated system design, digital management, and IoT technology effectively optimize the initial investment and future O&M costs of the power station increasing the power generation of the system and the rate of return on investment. Through the concept of "Efficient, safe, reliable, smart O&M, and system-friendly" we maximise the value for customers.

The 1500V high-power system solution can effectively reduce the number of equipment and cable consumption, reduce the initial investment cost, and facilitate installation and maintenance.
Solis utility PV solution has the characteristics of low LCOE. From the perspective of inverter performance improvement, it includes optimizing software algorithms and optimizing hardware port compatibility to improve system efficiency and reduce system investment costs.
Solis utility inverter has a large single power, up to 350kW. The high-efficiency and high-power-density inverter can reduce the workload of installation and maintenance, reduce costs and improve efficiency.
Solis utility PV solution is supplemented by a series of advanced digital services and intelligent monitoring equipment based on SolisCloud, simplifying the application difficulty of the intelligent system, and providing a more complete, high-quality and efficient cloud smart O&M solution.

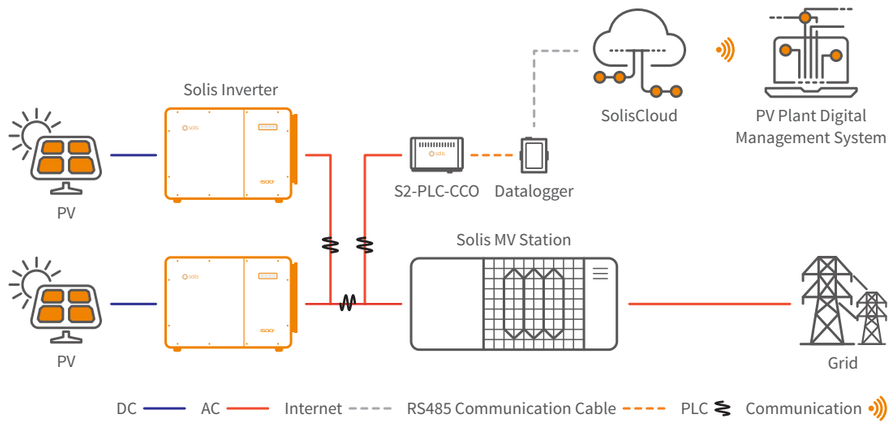
Models:

S6-GU3P350K06-EV-ND

Output:

350 kW

Utility Scale Solar PV Solution



S6-GU3P350K06-EV-ND

Solis Three Phase Grid-Tied Inverters

Efficient

- 30 inputs, > 150% DC/AC ratio
- Each MPPT maximum current 80A, compatible with 182 and 210 series bifacial modules
- Patented heat transfer technology, continuous output increase of 5% at high temperature

Safe

- IP66, C5-M Anti-Corrosion level
- Intelligent string break, remote release for DC switch, active safety
- Support intelligent AC/DC terminal temperature detection

Smart

- Intelligent string monitoring, smart I-V curve scan
- Each MPPT online insulation fault detection facilitates rapid fault identification
- Low temperature antifreeze, reverse dust removal, indoor dehumidification

Economic

- Inverter with 20ms fast reactive power response, can replace SVG
- Support 400mm^2 aluminum wire connection, saving AC cable cost
- Support PLC communication, saving communication cables and construction cost

Models:

S6-GU3P350K06-EV-ND

DATASHEET

Models	350K
Input DC	
Max. input voltage	1500 V
Rated voltage	1080 V
Start-up voltage	500 V
MPPT voltage range	480 - 1500 V
Max. input current	6 × 80 A
Max. short circuit current	6 × 125 A
MPPT number / Max. input strings number	6 / 30
Output AC	
Rated output power	350 kW
Max. apparent output power	350 kVA
Rated grid voltage	3/PE, 800 V
Grid voltage range	640 - 920 V
Rated grid frequency	50 Hz / 60 Hz
Max. output current	252.6 A
Power factor	> 0.99 (0.8 leading - 0.8 lagging)
THDi	< 3%
Efficiency	
Max. efficiency	99.0%
EU efficiency	98.7%
Protection	
DC reverse-polarity protection	Yes
Short circuit protection	Yes
Output over current protection	Yes
Surge protection	DC Type II / AC Type II
Grid monitoring	Yes
Anti-islanding protection	Yes
Temperature protection	Yes
Strings monitoring	Yes
I/V Curve scanning	Yes
Night time SVG function	Yes
Integrated PID recovery	Yes
Integrated DC switch	Yes
General Data	
Dimensions (W × H × D)	1098 × 813 × 378.5 mm
Weight	117 kg
Topology	Transformerless
Self-consumption (night)	< 3 W
Operating ambient temperature range	-30 ~ +60°C
Relative humidity	0 - 100%
Ingress protection	IP66
Cooling concept	Intelligent fan-cooling
Max. operation altitude	4000 m
Grid connection standard	EN50549, G99, AS4777.2, VDE0126, IEC61727, VDE4110, CEA 2019
Safety / EMC standard	IEC62109-1/-2, EN61000-6-2/-4
Features	
DC connection	Matching connector
AC connection	OT terminal (max. 400 mm^2)
Display	LED indicator & Bluetooth + APP
Communication	RS485, Optional: PLC

Solis-6300-MV

Solis MV Station

For 1500 V string inverter Solis 255K

Integrated delivery

- Mainstream 6.3MW subarray, widely used globally
- 20' HC standard container delivery, easy to transport

Reliable products

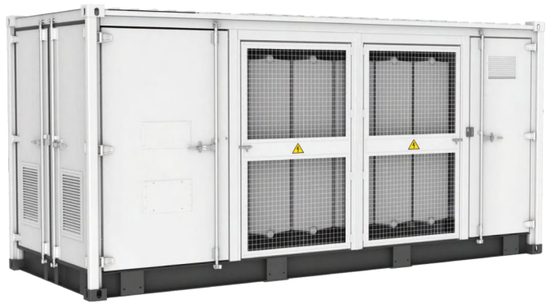
- LV panel, transformer and RMU to be placed independently
- Adopt international first-line brand equipment with reliable quality

Convenient installation

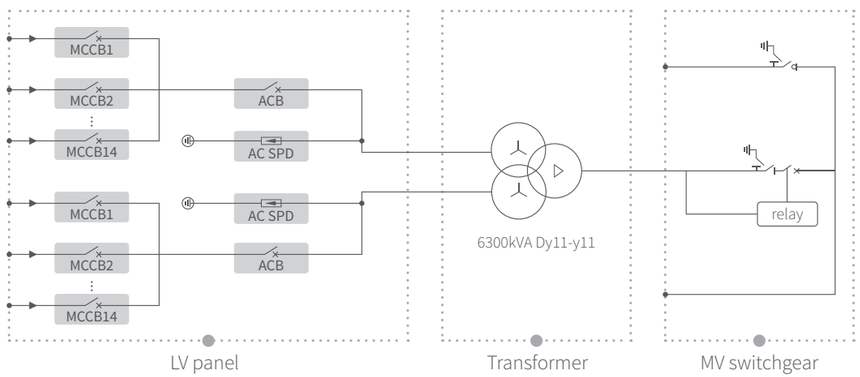
- A complete solution, from inverter to main step-up transformer
- When the container is lifted to the foundation, only LV and MV cables need to be connected

Easy O&M

- Full frontal maintenance design
- Modular design of MV equipment, easy to replace



Circuit diagram



DATASHEET

Models	Solis-6300-MV
LV panel	
MCCB specification	250 A / 800 Vac / 3P, 14 × 2 pcs
ACB specification	3200 A / 800 Vac / 3P, 1 × 2 pcs
Connection form with transformer	Copper busbar
Transformer	
Transformer type	Oil immersed
Rated output power	6300 kVA @ 40°C
Max. output power	6930 kVA @ 40°C 3h
LV / MV voltage	0.8 kV / 10 - 35 kV
Max. input current	2577 A × 2
Tapping on HV	±2 × 2.5%
Vector group	Dy11y11
Frequency	50 Hz / 60 Hz
Cooling type	ONAN
Impedance	8% (± 10%)
Oil type	Mineral oil (Optional: plant oil)
Winding material	Al / Al (Optional: Cu / Cu)
Insulation class	A
Connection form with MV switchgear	Cable
MV Switchgear	
Type of insulate	SF6 (Optional: SF6-Free)
Rated voltage	12 - 40.5 kV
Rated current	630 A
Internal arcing fault	20 kA / 1 s
Qty of feeder	3 feeders
Protection	
LV surge protection	AC type I + II
AC input protection	Circuit breaker
Transformer protection	Oil-temperature, oil-level, oil-pressure
Fire protection	Smoke detection, emergency lighting
General Data	
Dimensions (W × H × D)	6058 × 2896 × 2438 mm
Approximate weight	21 T
Operating ambient temperature range	-25 ~ +60°C
Max. operation altitude	2000 m
Auxiliary power supply	5 kVA / 230 V (Optional: max. 50 kVA)
UPS	1 kVA 30 min (Optional: max. 2 kVA 2h)
Degree of protection	IP54
Anti-corrosion Class	C4-H (Optional: C5-M)
Allowable relative humidity range	0 - 95%
Communication	RS485, Ethernet, Optical fiber
Compliance	IEC 60076, IEC 62271, IEC61439

Solis-9100-MV

Solis MV Station

For 1500 V string inverter Solis 350K

Integrated delivery

- Mainstream 9.1MW subarray, widely used globally
- 20' HC standard container delivery, easy to transport

Reliable products

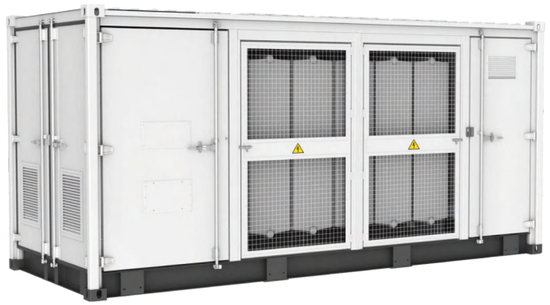
- LV panel, transformer and RMU to be placed independently
- Adopt international first-line brand equipment with reliable quality

Convenient installation

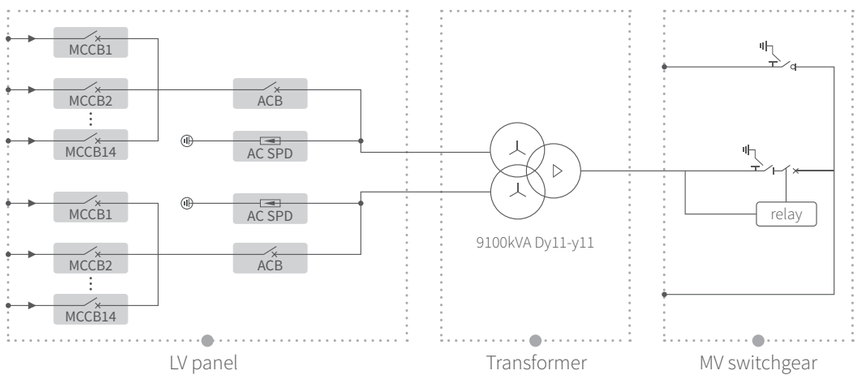
- A complete solution, from inverter to main step-up transformer
- When the container is lifted to the foundation, only LV and MV cables need to be connected

Easy O&M

- Full frontal maintenance design
- Modular design of MV equipment, easy to replace



Circuit diagram



DATASHEET

Models	Solis-9100-MV
LV panel	
MCCB specification	400 A / 800 Vac / 3P, 14 × 2 pcs
ACB specification	4000 A / 800 Vac / 3P, 1 × 2 pcs
Connection form with transformer	Copper busbar
Transformer	
Transformer type	Oil immersed
Rated output power	9100 kVA @ 40°C
Max. output power	9800 kVA @ 30°C
LV / MV voltage	0.8 kV / 10 - 35 kV
Max. input current	3536 A × 2
Tapping on HV	±2 × 2.5%
Vector group	Dy11y11
Frequency	50 Hz / 60 Hz
Cooling type	ONAN
Impedance	9.5% (±10%)
Oil type	Mineral oil (Optional: plant oil)
Winding material	Al / Al (Optional: Cu / Cu)
Insulation class	A
Connection form with MV switchgear	Cable
MV Switchgear	
Type of insulate	SF6 (Optional: SF6-Free)
Rated voltage	12 - 40.5 kV
Rated current	630 A
Internal arcing fault	20 kA / 1 s
Qty of feeder	3 feeders
Protection	
LV surge protection	AC type I + II
AC input protection	Circuit breaker
Transformer protection	Oil-temperature, oil-level, oil-pressure
Fire protection	Smoke detection, emergency lighting
General Data	
Dimensions (W × H × D)	6058 × 2896 × 2438 mm
Approximate weight	23.5 T
Operating ambient temperature range	-25 ~ +60°C
Max. operation altitude	2000 m
Auxiliary power supply	5 kVA / 230 V (Optional: max. 50 kVA)
UPS	1 kVA 30 min (Optional: max. 2 kVA 2h)
Degree of protection	IP54
Anti-corrosion Class	C4-H (Optional: C5-M)
Allowable relative humidity range	0 - 95%
Communication	RS485, Ethernet, Optical fiber
Compliance	IEC 60076, IEC 62271, IEC61439

Utility-scale Plant Case Study

Mexico
20MW Solis-20K-HV

Poland
10MW Solis-125K-EHV-5G

China
1GW
Solis-(215-255)K-EHV-5G

India
2MW Solis-(100-110)K

China
300MW Solis-(215-255)K-EHV-5G

Tidal-Flat 300MW Utility Scale Solar PV Plant

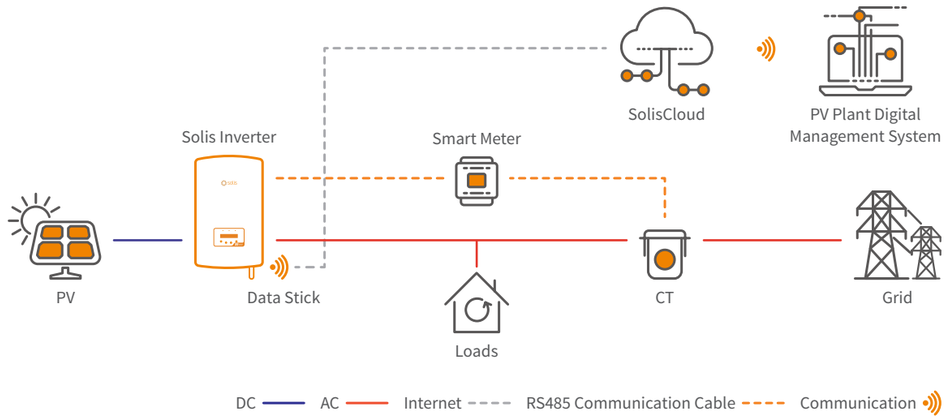
After the project is put into operation, the generating capacity is estimated to be 400,000,000 kWh/ year and delivers a reduction of 350, 000 tons of CO_2, 12,000 tons of SO_2, and 110,000 tons of Carbon dust. Solis commercial scale string inverters boast an abundance of technological features which can adapt to a variety of environments. We look forward to seeing more applications utilizing Solis inverters. We are committed to our mission - Developing Technology to Power the World with Clean Energy.

Export Power Management Solutions

In some countries, local regulations limit the amount of PV power that can be exported to the grid or allow no export. Solis offers two export limitation solutions for single and multiple inverters system.

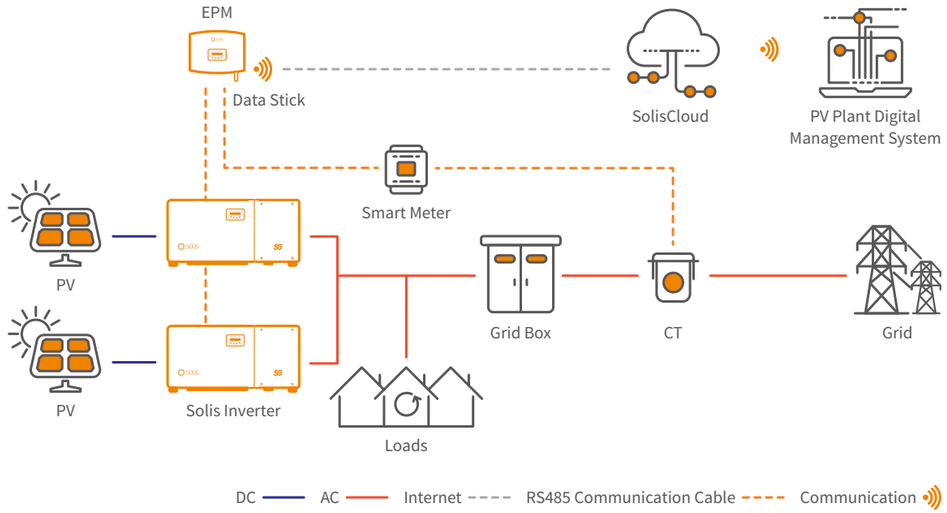
Export Power Management Solutions - Single-inverter System

In a single-inverter system, the export limitation is integrated into the inverter firmware. Use a meter or a CT to measure the output of the system, then to adjust PV power production.



Export Power Management Solution - Multi-inverter System

In a multi-inverter system, the export limitation is integrated into the EPM (Export Power Manager) firmware. The EPM will monitor and control the backflow power from the inverter to the grid thus providing export power control of inverters.



Solis-EPM-5G

Solis Export Power Manager

Smart & strong

- Simultaneous control of 20 X Solis inverters

Saving & high precision

- Simultaneously monitor the operating data of the 20 X Solis inverter, saving the cost of the monitoring system
- The control accuracy is up to 1%, which improves the system's spontaneous use rate

Friendly & compatible

- Supports simultaneous access of Solis inverters with different powers
- Monitor power generation and load consumption at all times

Models:

Solis-EPM1-5G

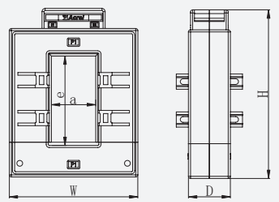
Solis-EPM3-5G-PRO

360° View

DATASHEET

Models	Solis-EPM1-5G	Solis-EPM3-5G-PRO
Input AC		
Rated voltage	1/N/PE, 230 V	1/N/PE, 230 V; 3/(N)/PE, 400 V; 3/PE, 480 V
Input voltage range	100 ~ 300 V (L-N)	100 ~ 300 V (L-N); 175 ~ 519 V (L-L)
Input frequency range	45 ~ 65 Hz	
Communication		
Inverter communication	Modbus	
Communication with inverter	RS485 (Wired)	
Max. communication inverter numbers	20	20 (Recommended)
Monitoring	WiFi / 4G / LAN Stick (Optional)	
General Data		
Operating ambient temperature range	-25 ~ +60°C	
Relative humidity	5% ~ 95%	
Max. operation altitude	2000 m	
Ingress protection	IP65	
Pollution degree	PD2 (Inside), PD3 (Outside)	
Overvoltage category	III	
Self-consumption	< 6 W	
Dimensions (W × H × D)	364 × 276 × 114 mm	
Weight	2.7 kg (without CT, Meter)	
AC connection	Quick connection terminal	
Display	LCD	
Smart meter	No	Split phase: AGF-AE-D ① Three phase: ADL3000-E-B ②
CT connection	Plug terminal	
CT specification	Single phase: Standard (100 / 5 A or 300 / 5 A)	Split phase: Standard (200 / 40 mA) Three phase: Optional (Secondary current is 5 A)
Power control accuracy	1%Pn	
Features		
Failsafe function	Yes	
Remote upgrade	Yes	

CT specification ②



Specification	Dimensions (mm)			Hole size (mm)		Ratio
	W	H	D	a	e	
CT-30×20-100 A	90	114	40	22	32	100:5 A
CT-60×40-300 A	114	140	36	42	62	300:5 A
CT-80×40-600 A	122	162	40	42	82	600:5 A
CT-80×40-1000 A	122	162	40	42	82	1000:5 A
CT-160×80-2000 A	184	254	52	82	162	2000:5 A
CT-160×80-3000 A	184	254	52	82	162	3000:5 A

① For AGF-AE-D, 2 CTs(200/40mA) will be provided by default.
② For ADL3000-E-B, CTs should be ordered separately.
③ Inverters may need a communication adapter to connect the EPM, please consult a sales representative before placing an order.

SolisCloud: Intelligent Solar Energy System Monitoring

The SolisCloud intelligent monitoring system includes hardware and software products and is a comprehensive energy management solution. Hardware products, including data stick, data box, EPM and PLC, etc; transmit to SolisCloud online energy management platform. Real-time monitoring, visualized management and remote O & M of residential, C&I and utility scale solar PV plants.

S2-WL-ST

S2-WL-ST-4 Pin

S2-WL-ST-USB

S5-WiFi-ST

S5-WiFi-ST-4Pin

S5-WiFi-ST-USB

S1-W4G-ST

S1-W4G-ST-4 Pin

S1-W4G-ST-USB

S3-GPRS-ST

S3-GPRS-ST

S2-RF-LINK

S2-RF-ST-4Pin

S2-RF-ST-USB

S2-RF-Gateway

S3-Logger

S3-Logger

MB-S4-W4

MB-S4-W4

S2-PLC-CCO

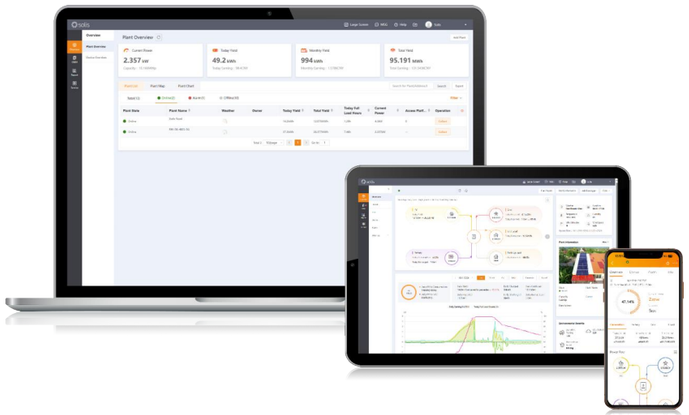
S2-PLC-CCO

SolisCloud

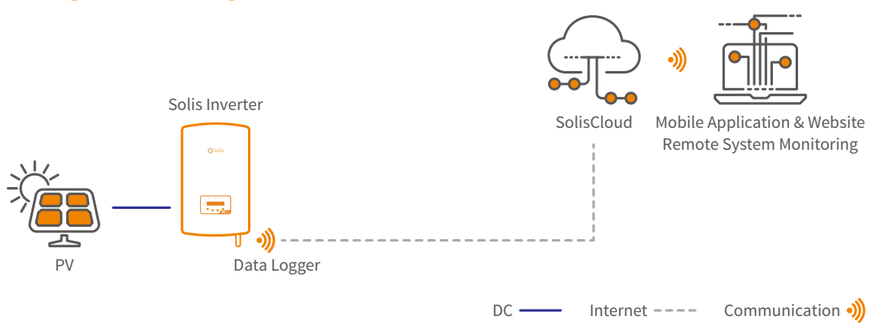
Remote and Intelligent Control at Your Fingertips

SolisCloud is the new generation of intelligent PV system monitoring. This new monitoring platform will empower you like never before. You will have full control of your system whenever and wherever you are. Remotely manage, troubleshoot, measure performance or even shut down your PV system for ultimate control.

Simplify your operations and maintenance with the ability to visualize all your installations with real-time, actionable data. The SolisCloud intelligent alarm system gives resolution recommendations and the ability to troubleshoot system faults. Understand the health of all of your systems with in-depth analytics, live battery and inverter performance flow data and remote IV curve scanning. Complete control coupled with actionable data helps you to ensure systems are always on and performing as expected.



Intelligent Monitoring Solution - SolisCloud



Remote Control & Capability

- Remotely update firmware or troubleshoot, potentially saving a site truck roll.
- Remote shut off increases safety if the system is having a critical error.
- Control battery reserve for inclement weather or planned power outage , set time of use (TOU) charge and discharge to offset rates, as well as export power control.

Multiple Site Management

- Manage multiple types of systems across commercial, residential and utility scale plants.
- Enable teams with unique access permissions.

Streamlined Operations & Maintenance

- System managers are notified of potential issues and resolution measures to limit downtime.
- Intelligent and granular string-level monitoring to maximize performance.

Software-enabled Shade Mitigation

- Our inverter's software intelligently combats shade situations without the use of hardware. This enables the identification of the highest performing module in a string to ensure maximum output.

Accessories available:

S2-WL-ST	S2-RF-LINK
S5-WiFi-ST	S3-Logger
S1-W4G-ST	MB-S4-W4
S3-GPRS-ST	S2-PLC-CCO

S2-WL-ST

Solis Data Loggers

Use RS485 communication method to connect the inverters, up to 10 inverters can be connected at the same time. Data communication with the monitoring system through wireless WiFi network or LAN, which can realize remote control and monitoring. The network transmits intuitive data, which is convenient for customers to monitor anytime and anywhere.

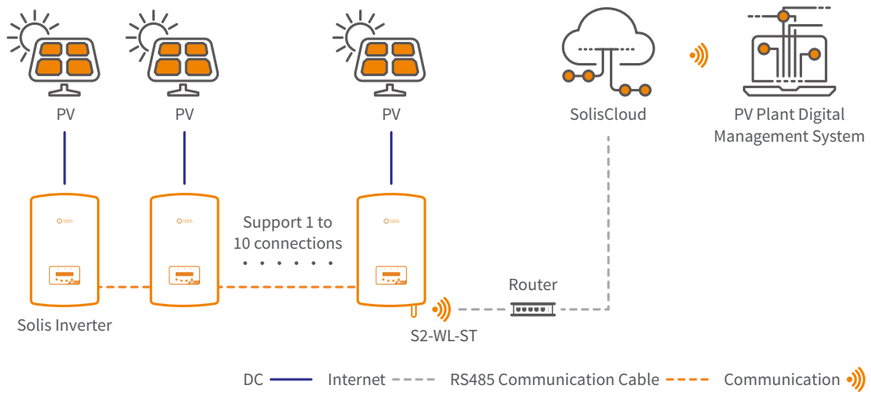
Features:

- Support WiFi and LAN communication
- Status indicator, easy to display working status
- RESET button, one key to send data, convenient debugging
- Plug and play, quick installation
- Fault alarm, real-time monitoring
- Support Bluetooth nearby connection and debugging

S2-WL-ST (4 Pin)

S2-WL-ST (USB)

Intelligent Monitoring Solution - S2-WL-ST



DATASHEET

Models	S2-WL-ST (4 Pin)	S2-WL-ST (USB)
Communication		
Supported device type	Solis inverter	
Number of connected inverters ①	≤ 10	
Data collection intervals	5 minutes	
Status indicator	3 LED Indicator Lights	
Communication interface	External 4-Pin Port	External USB Port
Ethernet communication	Number of routes × 1, 10 / 100 Mbps adaptive, communication distance ≤ 100 m	
Wireless communication	802.11b/g/n, 2.412-2.484GHz ②	
Max. output power	802.11b: 20dBm / 802.11g: 18dBm / 802.11n: 15dBm	
Near end communication	BLE4.2	
Configuration method	APP / WEB	
Electrical		
Operating voltage	DC 5 V (+ / -5%)	
Typical power consumption	2 W	
Environment		
Operating temperature	-30 ~ +65°C	
Operating humidity	5% - 95%, Relative humidity, non-condensing	
Storage temperature	-40 ~ +70°C	
Storage humidity	< 40%	
Max. operating altitude	4000 m	
Ingress protection	IP65	
Mechanical		
Dimensions (L × W × H)	145 × 50 × 41 mm	130 × 50 × 41 mm
Installation method	Externally Insert + Twist Lock	Externally Insert + Tab Lock
Weight	100 g	90 g
Others		
Certification	CE, FCC	

① Inverters must first be hand-in-hand connected by RS485. ② 5 GHz Wi-Fi networks are not supported.

S5-WiFi-ST

Solis Data Loggers

Up to 10 inverters can be connected to 1 data logger. The logger connects with the local Wi-Fi network and transmits data wirelessly to SolisCloud. SolisCloud, the Solis monitoring platform, allows for remote system monitoring and control. The data is clear and detailed, making it easy to monitor and troubleshoot from anywhere anytime.

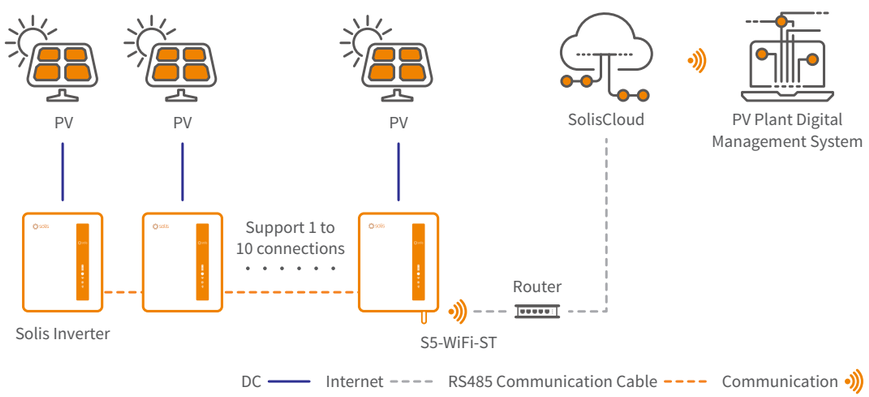
Features:

- Support dual-band router with 5GHz and 2.4GHz
- Fault alarm, real-time monitoring
- Plug and play, quick installation
- Status indicator, easy to display working status
- Support Bluetooth nearby connection and debugging
- RESET button, one key to send data, convenient debugging

S5-WiFi-ST-4Pin

S5-WiFi-ST-USB

Intelligent Monitoring Solution - S5-WiFi-ST



DATASHEET

Models	S5-WiFi-ST-4Pin	S5-WiFi-ST-USB
Communication		
Supported device type	Solis inverter	
Number of connected inverters ①	≤ 10	
Data collection intervals	5 minutes	
Status indicator	3 LED Indicator Lights	
Communication interface	External 4-Pin Port	External USB Port
Wireless communication	802.11a/b/g/n, 2.412-2.484GHz / 5.150-5.350GHz / 5.725-5.850GHz	
Max. output power	802.11a: 15.5dBm; 802.11b: 18dBm; 802.11g: 16.5dBm; 802.11n: 16dBm/14.5dBm	
Near end communication	BLE5.0	
Configuration method	APP / WEB	
Electrical		
Operating voltage	DC 5 V (+ / -5%)	
Typical power consumption	2 W	
Environment		
Operating temperature	-30 ~ +65°C	
Operating humidity	5% - 95%, Relative humidity, non-condensing	
Storage temperature	-40 ~ +70°C	
Storage humidity	< 40%	
Max. operating altitude	4000 m	
Ingress protection	IP65	
Mechanical		
Dimensions (L × W × H)	128 × 50 × 34 mm	113 × 50 × 34 mm
Installation method	Externally Insert + Twist Lock	Externally Insert + Tab Lock
Weight	80 g	65 g
Others		
Certification	CE, FCC	

① Inverters must first be hand-in-hand connected by RS485.

S1-W4G-ST

Solis Data Loggers

Use RS485 communication method to connect the inverters, up to 10 inverters can be connected at the same time. Data communication with the monitoring system through wireless WiFi network or 4G, which can realize remote control and monitoring. The network transmits intuitive data, which is convenient for customers to monitor anytime and anywhere.

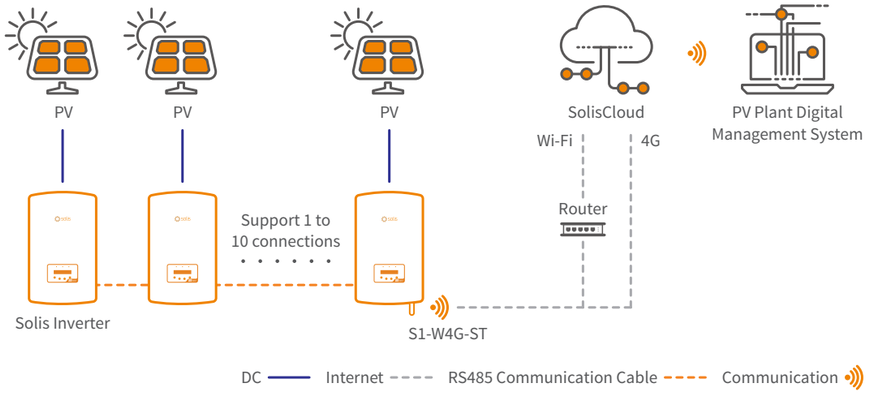
Features:

- Support WiFi and 4G communication
- Fault alarm, real-time monitoring
- Plug and play, quick installation
- Status indicator, easy to display working status
- Support Bluetooth nearby connection and debugging
- RESET button, one key to send data, convenient debugging

S1-W4G-ST (4 Pin)

S1-W4G-ST (USB)

Intelligent Monitoring Solution - S1-W4G-ST



DATASHEET

Models	S1-W4G-ST (4 Pin)	S1-W4G-ST (USB)
Communication		
Supported device type	Solis inverter	
Number of connected inverters ①	≤ 10	
Data collection intervals	5 minutes	
Status indicator	3 LED Indicator Lights	
Communication interface	External 4-Pin Port	External USB Port
Wireless communication	**Wi-Fi:** 802.11b/g/n, 2.412-2.484GHz ②; **Cellular network:** 4G/3G/2G, LTE-FDD: B1/B2/B3/B4/B5/B7/B8/B12/B13/B18/B19/B20/B25/B26/B28, LTE-TDD: B38/B39/B40/B41, UMTS: B1/B2/B4/B5/B6/B8/B19, GSM: B2/B3/B5/B8	
Max. output power	**Wi-Fi:** 802.11b: 20dBm / 802.11g: 18dBm / 802.11n: 15dBm; **Cellular network:** LTE&WCDMA bands: 23dBm, GSM850/EGSM900: 33dBm, DCS1800/PCS1900: 30dBm, DCS1800/PCS1900(8-PSK): 26dBm, GSM850/EGSM900(8-PSK): 27dBm	
Near end communication	BLE4.2	
Configuration method	APP / WEB	
Electrical		
Operating voltage	DC 5 V (+ / -5%)	
Typical power consumption	3 W	
Environment		
Operating temperature	-30 ~ +65°C	
Operating humidity	5% - 95%, Relative humidity, non-condensing	
Storage temperature	-40 ~ +70°C	
Storage humidity	< 40%	
Max. operating altitude	4000 m	
Ingress protection	IP65	
Mechanical		
Dimensions (L × W × H)	128 × 50 × 34 mm	113 × 50 × 34 mm
Installation method	Externally Insert + Twist Lock	Externally Insert + Tab Lock
Weight	80 g	65 g
Others		
Certification	CE, FCC	

① Inverters must first be hand-in-hand connected by RS485. ② 5 GHz Wi-Fi networks are not supported.

S3-GPRS-ST

Solis Data Loggers

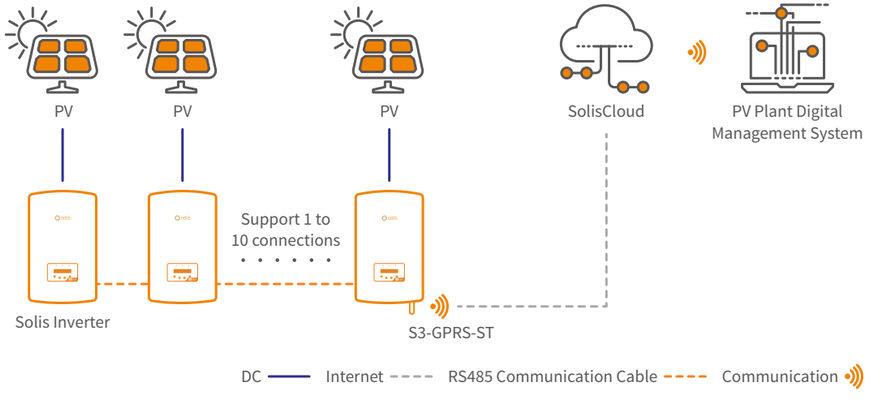
Use RS485 communication method to connect the inverter, and data connection through GPRS, which can realize remote control and monitoring. The network transmits intuitive data, which is convenient for customers to monitor at any time and place.

Features:

- Fault alarm, real-time monitoring
- Status indicator, easy to display working status
- Plug and play, convenient and fast
- RESET button, one key to send data, convenient debugging

S3-GPRS-ST

Intelligent Monitoring Solution - S3-GPRS-ST



DATASHEET

Models	S3-GPRS-ST
Communication	
Supported device type	Solis inverter
Number of connected inverters ①	≤ 10
Data collection intervals	5 minutes
Status indicator	3 LED Indicator Lights
Communication interface	External 4-Pin Port
Wireless communication	2G: 850 / 900 / 1800 / 1900 MHz
Max. output power	SM850/EGSM900: 33dBm; DCS1800/PCS1900: 30dBm
Configuration method	APP / WEB
Electrical	
Operating voltage	DC 5 V (+ / -5%)
Typical power consumption	3 W
Environment	
Operating temperature	-30 ~ +65°C
Operating humidity	5% - 95%, Relative humidity, non-condensing
Storage temperature	-40 ~ +70°C
Storage humidity	< 40%
Max. operating altitude	4000 m
Ingress protection	IP65
Mechanical	
Dimensions (L × W × H)	133 × 44 × 44 mm
Installation method	Externally Insert + Twist Lock
Weight	85 g
Others	
Certification	CE

① Inverters must first be hand-in-hand connected by RS485.

S2-RF-LINK

Solis Data Loggers

Up to 10 inverters can be connected to S2-RF-LINK. Insert the data logger directly into the inverter port , the gateway uses wired ethernet to connect to the home router, and transmits data to SolisCloud. SolisCloud, the Solis monitoring platform, allows for remote system monitoring and control. The data is clear and detailed, making it easy to monitor and troubleshoot from anywhere anytime.

Features:

- Extensive and stable RF communication
- Fault alarm, real-time monitoring
- Plug and play, quick installation
- Status indicator, easy to display working status
- Support Bluetooth nearby connection and debugging
- RESET button, one key to send data, convenient debugging

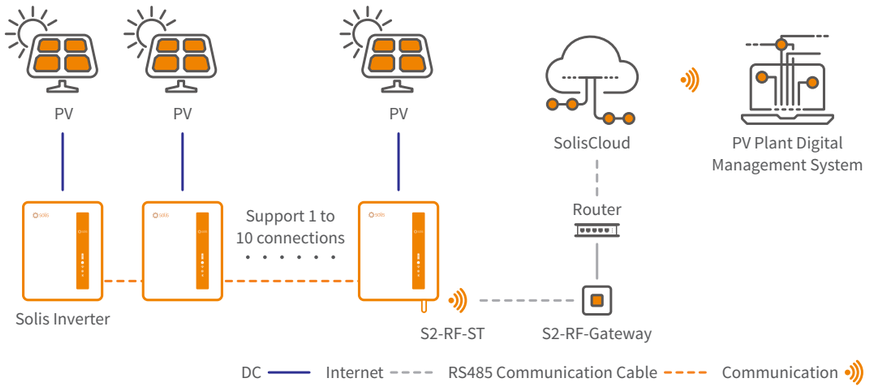
S2-RF-ST-4Pin

S2-RF-Gateway

S2-RF-ST-USB

S2-RF-Gateway

Intelligent Monitoring Solution - S2-RF-LINK



DATASHEET

Models	S2-RF-ST		S2-RF-Gateway
Communication			
Supported device type	Solis inverter		
Number of connected inverters ①	≤ 10		
Data collection intervals	5 minutes		
Status indicator	3 LED Indicator Lights		
Communication interface	External 4-Pin Port	External USB Port	/
Ethernet communication	RS485		Adaptive 10 / 100 Mbps
Wireless communication	915 MHz / 868 MHz		/
Near end communication	BLE4.2		
Configuration method	APP/WEB		
Effective communication distance	200 (in free-field conditions)		
Electrical			
Operating voltage	DC 5 V (+ / -5%)		
Operating power consumption	≤ 5 W		
Environment			
Operating ambient temperature range	-25 ~ +65°C		
Operating humidity	5% - 95%, relative humidity, Non-condensing		
Storage temperature	-45 ~ +90°C		
Storage humidity	< 40%		
Max. operation altitude	4000 m		
Protection degree	IP65		IP21
Mechanical			
Dimensions (L × W × H)	128 × 50 × 34 mm (4Pin)	115 × 50 × 34 mm (USB)	90 × 90 × 23 mm
Installation method	Externally Insert + Twist Lock (4Pin)	Externally Insert + Tab Lock (USB)	/
Weight	70 g (4Pin)	55 g (USB)	85 g
Others			
Certification	CE, RoHs, Reach		

① Inverters must first be hand-in-hand connected by RS485.

S3-Logger

Solis Data Loggers

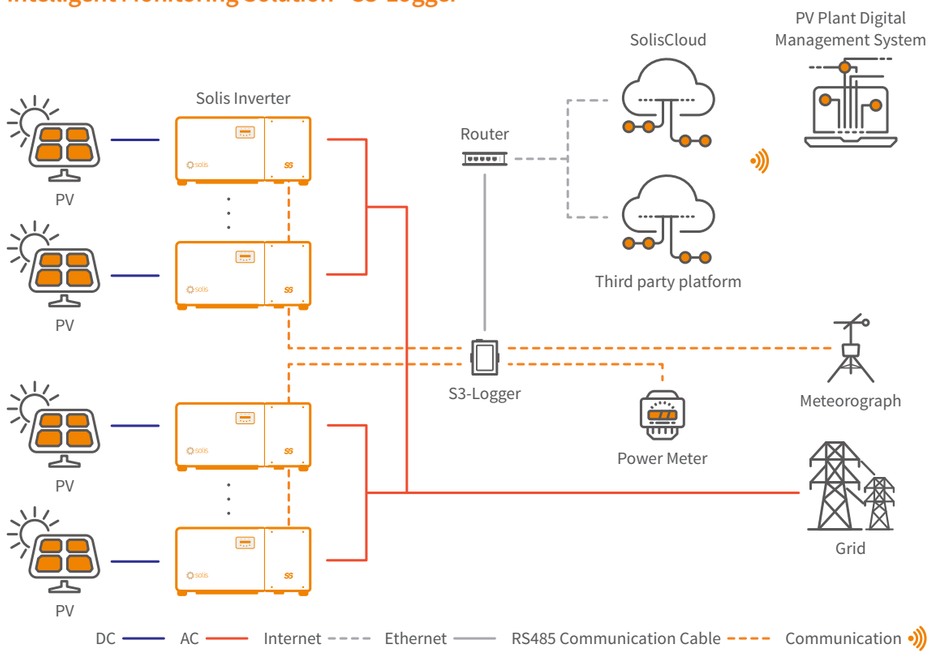
S3-Logger is a data acquisition and protocol conversion device applied to PV equipment in PV power plants, which can support access of meters, weather stations and other equipment.

Features:

- Support data connection to local monitoring system
- Support a variety of communication protocols
- One-key address allocation and EPM function
- Inverter remote upgrade
- Support electricity meters, weather stations and other equipment access
- FTP data transfer

S3-Logger

Intelligent Monitoring Solution - S3-Logger



DATASHEET

Models	S3-Logger	S3-Logger-EPM
Communication		
Supported device type	Solis inverter	
Max. manageable device ①	60, Each RS485 PORT≤15	
Status indicator	LED × 2, Power, Run	
RS485	COM × 4, 1200 ~ 115200 bps, communication distance ≤ 1000 m	
Ethernet communication	LAN × 1, 10 / 100 Mbps adaptive, communication distance ≤ 100 m	
Zero power output	/	Yes
Communication Protocol		
RS485	Modbus-RTU, IEC60870-5-103, DLT645	
Ethernet	Modbus-TCP, IEC60870-5-104	
Electrical		
AC power supply	100 ~ 240 V, 50 Hz / 60 Hz	
DC power supply	9 ~ 36 V	
Power consumption	5 W	
Environment		
Operating temperature	-40 ~ +80°C	
Storage temperature	-40 ~ +80°C	
Relative humidity	≤ 85%, Non-condensing	
Max. operating altitude	4000 m	
Mechanical		
Dimensions (L × W × H)	89 × 121 × 27 mm	
Protection degree	IP20	
Installation method	Rail Mounting, Desktop installation	
Others		
Certification	CE, RoHS	

① Inverters must first be hand-in-hand connected by RS485.

Matching Instructions

Type	Manufacturer	Model		Connection method	Special note
Meteorograph	Jinzhou Sunshine	PC-4	PC-4GF	RS485 connects to the P3 port on S3-Logger	1. In addition to the above device models, the newly matched models will continue to be updated; 2. If you need to match new meteorological or meter devices, please provide manuals, specifications, communication protocols and other documents; 3. The match of the new equipment, the development time is about 2 weeks, and the final delivery of the new firmware will be upgraded on site.
	Rainwise	PVmet-75	PVmet-200		
	SevenSolar	3S-IS V7			
	Ingenieurburo	Si-RS485TC-2T			
	FIMER	VSN800			
	Kopya SOLİS-VİSİONSEN	VSS-5	VSS-6		
	MAP	VSS-9	VSS-10		
	BARANIDESIGN	Easy MODBUS Starter Kit			
	Hunan Rika Electronic	RK220-01			
Meter	Acrel	DTSD1352	ADL3000-E-B	RS485 connects to the P4 port on S3-Logger	
	Janitza	UMG-96RM	UMG-512		
		UMG604			
	Mikro	RX380			
	MEATROL	EM231			
	Schneider	PM5100	iEM3000		
		iEM3255	EM6400		
	Iskra	MC774			

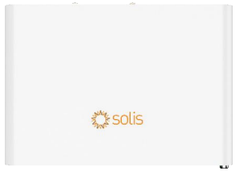
MB-S4-W4

Solis Data Loggers

The MB-S4-W4 is designed for commercial and industrial (C&I) PV systems, enabling efficient data acquisition, protocol conversion, and power control. It helps maximise system performance through intelligent operation and maintenance.

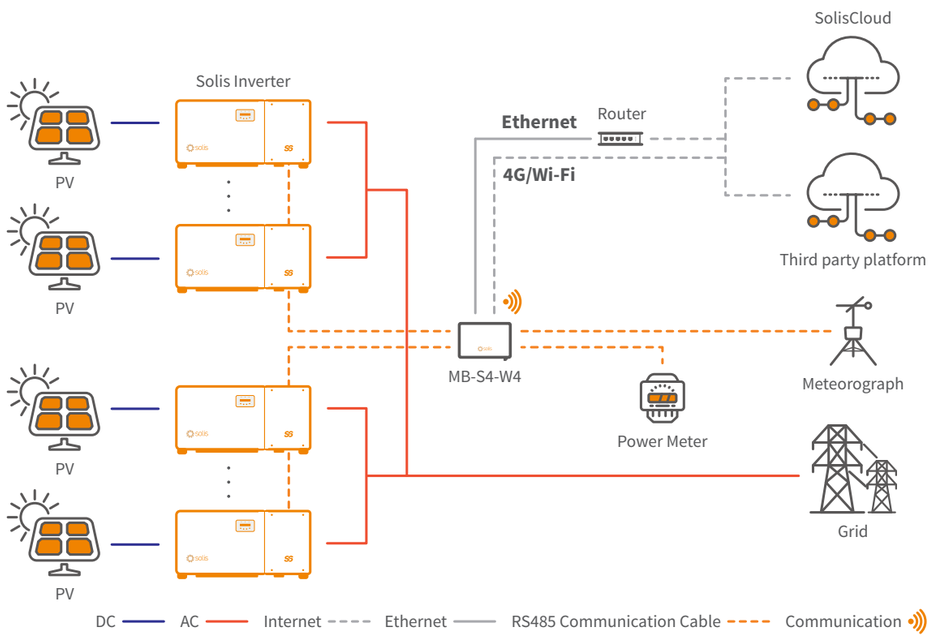
Features:

- Monitors up to 80 PV inverters
- Supports remote upgrade and maintenance
- Compatible with various export power limitation scenarios
- Enables multi-master plant data transfer
- Built-in web server for monitoring and configuration, no app required
- One-click address allocation for fast commissioning
- Automatic dual power source switching



MB-S4-W4

Intelligent Monitoring Solution - MB-S4-W4



DATASHEET

Models	MB-S4-W4
Communication	
Max. manageable device	80, Each RS485 port ≤ 20
Status indicator	LED × 4
WEB	Embedded Web
RS485	COM × 4, communication distance ≤ 1000 m
Ethernet communication	LAN × 2, 10 / 100 Mbps adaptive, communication distance ≤ 100 m
Wireless communication	**Wi-Fi:** 802.11 b/g/n (2.4G); 802.11a/n (5G); **Cellular network:** 4G / 3G / 2G
Digital / Analog	DI × 4, DO × 2, AI × 4
Communication Protocol	
RS485	Modbus-RTU
Ethernet	Modbus-TCP, IEC60870-5-104
Electrical	
Power Adapter	AC input: 100 ~ 240 V, 50 Hz / 60 Hz; DC output: 12 V, 4 A
DC input	input1: 12 V , 1 A; input2: 24 V, 0.8 A
Power consumption	≤12 W
Environment	
Operating temperature range	-40 ~ +60°C
Storage temperature range	-40 ~ +70°C
Relative humidity	5% - 95% (Non-condensing)
Max. operating altitude	4000 m
Mechanical	
Dimensions (W × H × D)	225 × 156 × 44 mm
Weight	1.25 kg
Ingress protection	IP20
Installation method	Wall mount or desktop installation
Others	
Certification	CE, RoHS

Models of Meter and Meteorograph supported by MB-S4-W4

Type	Vendor	Model	Connection method	Export Limitation
Meter	Acrel	ADL3000-E-B	RS485	Supported
	Acrel	DTSD1352		Supported
	CHINT	DTSU666		-
	EASTRON	SDM630MCT		-
	Janitza	UMG96RM		-
Meteorograph	Ginlong	PC-4GF		-
	Jinzhou Sunshine	PC-4GF		-

Note:
1. The newly matched device models will be continuously updated to the above table.
2. If you need to match a new weather meter or electricity meter device, please contact our customer service center and provide materials such as the device's user manual, specification sheet, and communication protocol.

S2-PLC-CCO

Solis PLC Central Controller

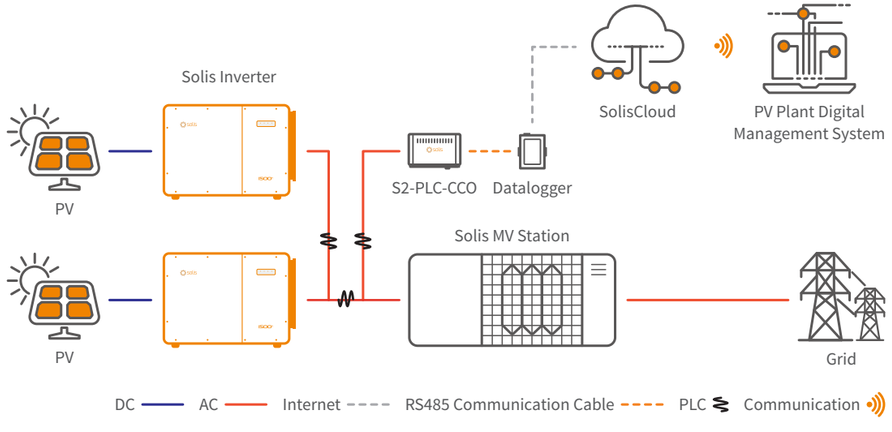
S2-PLC-CCO (CCO: Central Controller) is applied in PV systems to achieve power line communication. Power Line Communication is transmission of data over the AC Wires of the system.

Features:

- No need to lay communication cables, reducing construction costs and maintenance costs
- Strong anti-interference ability
- Support multi-terminal networking
- Stable network connection, real-time data transmission

S2-PLC-CCO

Intelligent Monitoring Solution - S2-PLC-CCO



DATASHEET

Models	S2-PLC-CCO
Communication	
Supported device type	Solis inverter
Number of connected inverters	≤ 80
Status indicator	4 LED Indicator Lights
Frequency band	2 - 12 MHz
Communication interface	4pin / RJ45 / RS485
Debugging interface	Bluetooth
Baud rate	9600 / 19200 / 57600 / 115200
Electrical	
Input voltage (Power adapter)	12 VDC
Max. input current (Power adapter)	2 A
AC port input line voltage	50 - 920 V, 50 Hz / 60 Hz
Operating power consumption	< 5 W
Environment	
Operating ambient temperature range	-40 ~ +70°C
Operating humidity	5% - 95%, relative humidity, Non-condensing
Storage temperature	-45 ~ +90°C
Storage humidity	5% - 95%, relative humidity, Non-condensing
Max. operation altitude	4000 m
Protection degree	IP 20
Mechanical	
Dimensions (L × W × H)	255 × 165 × 45 mm
Installation method	Hanging ear mounting, rail mounting
Weight	750 g

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