

Global string inverter manufacturer



Quality Experience Reliability



15 years

Since 2005

1000+

Global Employees

200+

Technicians

No.1

Ginlong is the first inverter manufacturer to complete PVEL's (Formerly part of DNV-GL) 3rd Party Inverter Reliability Testing.



COMPANY PROFILE

Established in 2005, Ginlong Technologies is one of most experienced and largest manufacturers of solar inverters.

Ginlong's cost-effective solutions for residential, commercial, and utility-scale users deliver value at every level of the solar supply chain, engaging both homeowners and businesses, as well as power producers and renewable energy investors across the globe.

Presented under the Solis brand, the company's solar inverter product line uses innovative string technology to deliver first-class reliability, validated under the most stringent international certifications.

Combining a global supply chain with world-class R&D and manufacturing capabilities, Ginlong optimizes its Solis inverters for each regional market, servicing and supporting its customers with its team of local experts.

Proven bankability has attracted support from world leading financial institutions, ensuring solid long-term returns on investment. Working with stakeholders to accelerate the worlds journey towards a more sustainable future.

99.1%

Efficiency

15 GW+

Global Installation

100+

Countries with Solis Installations

No.3

Solis Ranked Third Among Asian Brands by BloombergNEF's Inverter Bankability.

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Company Milestones

2005	Ginlong Technologies established in Ningbo, China
2006	Second inverter certified to UK G83 certification
2009	First Asian inverter to achieve USA UL1741 certification
2009	First string inverter manufacturer to pass DNV-GL's PVEL reliability tests
2010	Second Asian inverter certified to AS4777/AS 3100
2011	Ginlong hosted IEC61400 second annual meeting
2015	Ginlong inverter installed on the famed Eiffel Tower in Paris
2015	Achieved top 12 inverter sales ranking in Europe
2016	Listed by Asia PV innovation
2016	Awarded Best Distribution Inverter Brand by PVBL
2016	Certified to ISO 9001:2015 Standard
2016	Certified to ISO 14001:2015 Standard
2015 & 2016	Earned third place ranking in China PV string inverter brand value
2017	Certified to OHSAS 18001:2007 Standard
2017	Three-phase string inverters ranked 4th in global market shares (GTM)
2018	Single-phase string inverters ranked 2nd in global market shares (GTM)
2017 & 2018	Granted prestigious APVIA Technology Achievement Award
2016, 2017 & 2018	Energy storage hybrid inverters ranked 3rd in Chinese market
2015, 2016, 2017, 2018 & 2019	Earned first place ranking in UK distribution PV inverter market
2016, 2017, 2018 & 2019	Awarded Top Brand PV inverters by EuPD Research
2019	Ginlong (Solis) listed as a Public Company
2019	Ginlong (Solis) Ranked Third among Asian Brands by BloombergNEF Bankability
2020	Ginlong Solis won PVBL 2019 Annual Top Global PV Brand Award



Vertically-Integrated Manufacturing



Ginlong's vertically-integrated 5GW+ manufacturing allows end-to-end control through every step of production, from component sourcing to final QC. We manage every aspect of manufacturing with state-of-the-art automation, fastidious inspections and rigorous testing, ensuring industry-leading quality. Our in-house SMT circuit board production is unique in the industry, guaranteeing quality and streamlining product innovation in response to customer needs.

Best-in-Class Partners

Capacitors, Inductors



Connectors, Switching Devices



Materials, IC Categories



Power Devices, Sensors



Global Service Network



Service Offices

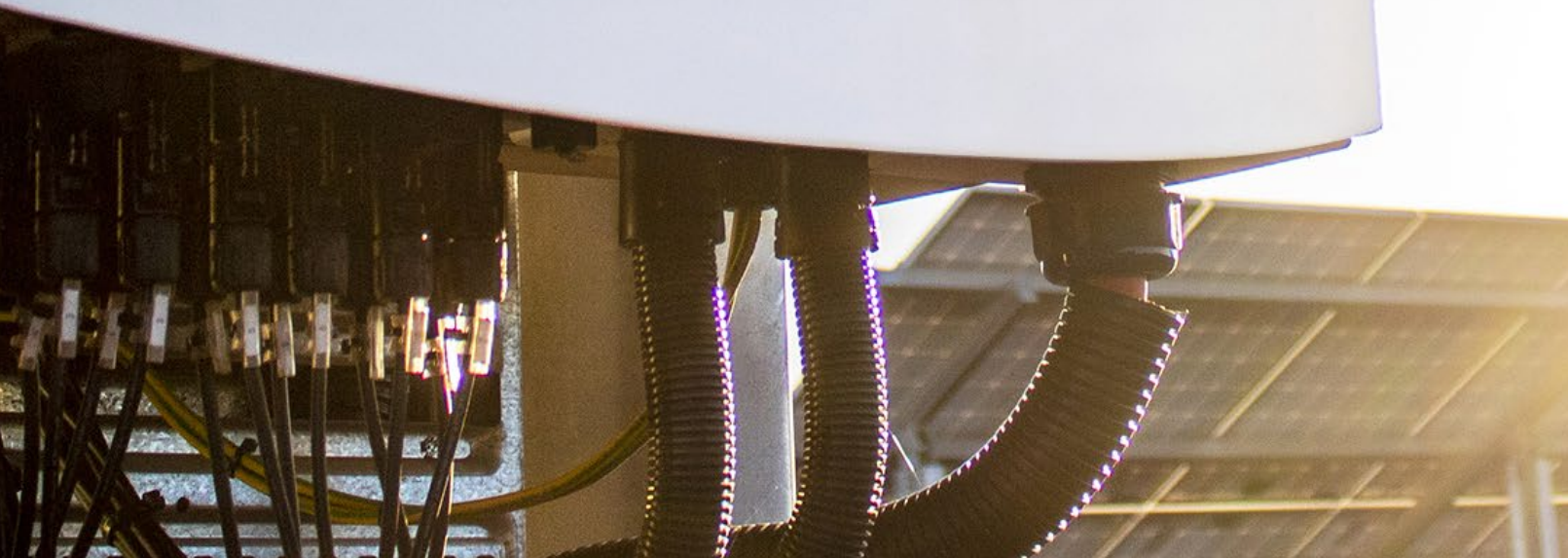
- U.S.A
- Australia
- China
- South Africa
- UK
- Netherlands
- Mexico
- Spain
- India
- Romania
- Brazil

Expert Local Customer Service

- Unmatched experience across a global service network
 - Reliable service technicians on the phone and in the field
 - Global technical support available
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Solis-mini-(700-3600)-4G

Solis Mini Series Inverters



360 degree

Features:

- ▶ Max. efficiency 97.5%
- ▶ Super high frequency switching technology
- ▶ Wide voltage range and low startup voltage
- ▶ Precise MPPT algorithm
- ▶ Intergrated Export Power Manager (EPM)
- ▶ Compact and lightweight
- ▶ Friendly and adaptable connection to the grid



Model:

Solis-mini-700-4G	Solis-mini-1000-4G
Solis-mini-1500-4G	Solis-mini-2000-4G
Solis-mini-2500-4G	Solis-mini-3000-4G
Solis-mini-3600-4G	

Datasheet

Model Name	Solis-mini-700-4G	Solis-mini-1000-4G	Solis-mini-1500-4G	Solis-mini-2000-4G	Solis-mini-2500-4G	Solis-mini-3000-4G	Solis-mini-3600-4G
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Input DC

Recommended max. PV power	0.9kW	1.2kW	1.8kW	2.3kW	3kW	3.5kW	4kW
Max. input voltage	600V						
Rated voltage	200V			330V			
Start-up voltage	60V			90V			
MPPT voltage range	50-500V			80-500V			
Max. input current	11A						19A
Max. short circuit current	17.2A						30A
MPPT number/Max. input strings number	1/1						1/2

Output AC

Rated output power	0.7kW	1kW	1.5kW	2kW	2.5kW	3kW	3.6kW
Max. apparent output power	0.8kVA	1.1kVA	1.7kVA	2.2kVA	2.8kVA	3.3kVA	3.6kVA
Max. output power	0.8kW	1.1kW	1.7kW	2.2kW	2.8kW	3.3kW	3.6kW
Rated grid voltage	1/N/PE, 220/230V						
Rated grid frequency	50/60Hz						
Rated grid output current	3.2A/3.0A	4.5A/4.3A	6.8A/6.5A	9.1A/8.7A	11.4A/10.9A	13.6A/13A	16A
Max. output current	4.4A	5.2A	8.1A	10.5A	13.3A	15.7A	16A
Power Factor	>0.99 (0.8 leading - 0.8 lagging)						
THDi	<3%						

Efficiency

Max. efficiency	97.2%			97.5%			
EU efficiency	96.5%			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						
Integrated DC switch	Optional						

General Data

Dimensions (W*H*D)	310*373*160 mm						
Weight	7.4kg				7.7kg		
Topology	Transformerless						
Self consumption	<1W (night)						
Operating ambient temperature range	-25 ~ +60°C						
Relative humidity	0-100%						
Ingress protection	IP65						
Cooling concept	Natural convection						
Max. operation altitude	4000m						
Grid connection standard	VDE-AR-N 4105, VDE V 0124, VDE V 0126-1-1, UTE C15-712-1, NRS 097-1-2, G98, G99, EN 50549-1/-2, RD 1699, UNE 206006, UNE 206007-1, IEC 61727						
Safety/EMC standard	IEC 62109-1/-2, IEC 62116, 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						

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

Solis Single Phase Inverters



360 degree

Features:

- ▶ Max. efficiency 98.1%
- ▶ Super high frequency switching technology
- ▶ Wide voltage range and low startup voltage
- ▶ 2 MPPT design with precise MPPT algorithm
- ▶ Intergrated Export Power Manager (EPM)
- ▶ Compact and lightweight
- ▶ Friendly and adaptable connection to the grid



Model:

- | | |
|-----------------|---------------|
| Solis-1P2.5K-4G | Solis-1P3K-4G |
| Solis-1P3.6K-4G | Solis-1P4K-4G |
| Solis-1P4.6K-4G | Solis-1P5K-4G |
| Solis-1P6K-4G | |

Datasheet

Model Name	Solis-1P2.5K-4G	Solis-1P3K-4G	Solis-1P3.6K-4G	Solis-1P4K-4G	Solis-1P4.6K-4G	Solis-1P5K-4G	Solis-1P6K-4G
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Input DC

Recommended max. PV power	3kW	3.5kW	4.2kW	4.6kW	5.3kW	5.8kW	6.6kW
Max. input voltage	550V	600V					
Rated voltage	250V	330V					
Start-up voltage	60V	120V					
MPPT voltage range	50-450V	90-520V					
Max. input current	11A/11A						
Max. short circuit current	17.2A/17.2A						
MPPT number/Max. input strings number	2/2						

Output AC

Rated output power	2.5kW	3kW	3.6kW	4kW	4.6kW	5kW	6kW
Max. apparent output power	2.8kVA	3.3kVA	4kVA	4.4kVA	5kVA	5kVA	6kVA
Max. output power	2.8kW	3.3kW	4kW	4.4kW	5kW	5kW	6kW
Rated grid voltage	1/N/PE, 220/230V						
Rated grid frequency	50/60Hz						
Rated grid output current	11.4A/10.9A	13.6A/13.0A	16.0A/15.7A	18.2A/17.4A	20.9A/20.0A	22.7A/21.7A	27.3A
Max. output current	13.3A	15.7A	16.0A	21.0A	23.8A	25.0A	27.3A
Power Factor	>0.99 (0.8 leading - 0.8 lagging)						
THDi	<3%						

Efficiency

Max. efficiency	97.8%			98.1%			
EU efficiency	97.1%			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						
Integrated DC switch	Optional						

General Data

Dimensions (W*H*D)	310*543*160 mm						
Weight	11.5kg						
Topology	Transformerless						
Self consumption	<1W (night)						
Operating ambient temperature range	-25 ~ +60°C						
Relative humidity	0-100%						
Ingress protection	IP65						
Cooling concept	Natural convection						
Max. operation altitude	4000m						
Grid connection standard	VDE-AR-N 4105, VDE V 0124, VDE V 0126-1-1, UTE C15-712-1, NRS 097-1-2, G98, G99, EN 50549-1/-2, RD 1699, UNE 206006, UNE 206007-1, IEC 61727						
Safety/EMC standard	IEC 62109-1/-2, IEC 62116, EN 61000-6-2/-3						

Features

DC connection	MC4 connector						
AC connection	Quick connection plug						
Display	LCD						
Communication	RS485, Optional: Wi-Fi, GPRS						

Solis-1P(7-8)K-5G

Solis Single Phase Inverters



360 degree

Features:

- ▶ Max. efficiency 98.1%
- ▶ Wide voltage range and low startup voltage
- ▶ 2 MPPT design with precise MPPT algorithm
- ▶ Intergrated Export Power Manager (EPM)
- ▶ Compact and lightweight
- ▶ Friendly and adaptable connection to the grid



Model:

Solis-1P7K-5G

Solis-1P8K-5G

Datasheet

Model Name	Solis-1P7K-5G	Solis-1P8K-5G
Input DC		
Recommended max. PV power	9.1kW	10.4kW
Max. input voltage	600V	
Rated voltage	330V	
Start-up voltage	120V	
MPPT voltage range	90-520V	
Max. input current	12.5A/25A	
Max. short circuit current	19.5A/39A	
MPPT number/Max. input strings number	2/3	
Output AC		
Rated output power	7kW	8kW
Max. apparent output power	7.7kVA	8kVA
Max. output power	7.7kW	8kW
Rated grid voltage	1/N/PE, 220/230V	
Rated grid frequency	50/60Hz	
Rated grid output current	30.4A	34.8A
Max. output current	33.5A	34.8A
Power Factor	>0.99 (0.8 leading - 0.8 lagging)	
THDi	<3%	
Efficiency		
Max. efficiency	98.1%	
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	
Integrated DC switch	Optional	
General Data		
Dimensions (W*H*D)	310*543*180 mm	
Weight	13.3kg	
Topology	Transformerless	
Self consumption	<1W (night)	
Operating ambient temperature range	-25 ~ +60°C	
Relative humidity	0-100%	
Ingress protection	IP65	
Cooling concept	Natural convection	
Max. operation altitude	4000m	
Grid connection standard	VDE-AR-N 4105, VDE V 0124, VDE V 0126-1-1, UTE C15-712-1, NRS 097-1-2, G98, G99, EN 50549-1/-2, RD 1699, UNE 206006, UNE 206007-1, IEC 61727	
Safety/EMC standard	IEC 62109-1/-2, IEC 62116, 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	

Solis-3P(5-10)K-4G-LV

Solis Three Phase Inverters



360 degree

Features:

- ▶ Max. efficiency 98%
- ▶ Wide voltage range and low startup voltage
- ▶ 2 MPPT design with precise MPPT algorithm
- ▶ THDi<1.5%, low harmonic distortion against grid
- ▶ Multiple protections levels
- ▶ Intergrated Export Power Manager (EPM)



Model:

220V: Solis-3P5K-4G-LV Solis-3P6K-4G-LV
 Solis-3P10K-4G-LV

Datasheet

Model Name	Solis-3P5K-4G-LV	Solis-3P6K-4G-LV	Solis-3P10K-4G-LV
Input DC			
Recommended max. PV power	6kW	7.2kW	12kW
Max. input voltage	1000V		
Rated voltage	330V		
Start-up voltage	180V		
MPPT voltage range	160-500V		
Max. input current	11A/11A		22A/22A
Max. short circuit current	17.2A/17.2A		34.3A/34.3A
MPPT number/Max. input strings number	2/2		2/4
Output AC			
Rated output power	5kW	6kW	10kW
Max. apparent output power	5.5kVA	6.6kVA	11kVA
Max. output power	5.5kW	6.6kW	11kW
Rated grid voltage	3/PE, 208/220/240V		
Rated grid frequency	50/60Hz		
Rated grid output current	13.1A	15.7A	26.2A
Max. output current	14.4A	16.7A	28.8A
Power Factor	>0.99 (0.8 leading - 0.8 lagging)		
THDi	<1.5%		
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		
Integrated DC switch	Optional		
General Data			
Dimensions (W*H*D)	310*563*219 mm		
Weight	18kg	19.8kg	
Topology	Transformerless		
Self consumption	<1W (night)		
Operating ambient temperature range	-25 ~ +60°C		
Relative humidity	0-100%		
Ingress protection	IP65		
Cooling concept	Natural convection	Intelligent redundant fan-cooling	
Max. operation altitude	4000m		
Grid connection standard	VDE-AR-N 4105, VDE V 0124, VDE V 0126-1-1, EN 50549-1/-2, RD 1699, UL1741, UL1741SA, IEE 1547		
Safety/EMC standard	IEC 62109-1/-2, IEC 62116, 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		

Solis-3P(3-20)K-4G

Solis Three Phase Inverters



360 degree

Features:

- ▶ Max. efficiency 98.7%
- ▶ Wide voltage range and low startup voltage
- ▶ 2 MPPT design with precise MPPT algorithm
- ▶ THDi<1.5%, low harmonic distortion against grid
- ▶ Multiple protections levels
- ▶ Intergrated Export Power Manager (EPM)



Model:

- | | | |
|----------------|----------------|----------------|
| Solis-3P3K-4G | Solis-3P4K-4G | Solis-3P5K-4G |
| Solis-3P6K-4G | Solis-3P8K-4G | Solis-3P9K-4G |
| Solis-3P10K-4G | Solis-3P12K-4G | Solis-3P15K-4G |
| Solis-3P17K-4G | Solis-3P20K-4G | |

Datasheet

Model Name	Solis-3P3K-4G	Solis-3P4K-4G	Solis-3P5K-4G	Solis-3P6K-4G	Solis-3P8K-4G	Solis-3P9K-4G	Solis-3P10K-4G	Solis-3P12K-4G	Solis-3P15K-4G	Solis-3P17K-4G	Solis-3P20K-4G
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Input DC

Recommended max. PV power	3.6kW	4.8kW	6kW	7.2kW	9.6kW	10.8kW	12kW	14.5kW	18kW	20.4kW	24kW
Max. input voltage	1000V										
Rated voltage	600V										
Start-up voltage	180V										
MPPT voltage range	160-850V										
Max. input current	11A/11A						22A/22A				
Max. short circuit current	17.2A/17.2A						34.3A/34.3A				
MPPT number/Max. input strings number	2/2						2/4				

Output AC

Rated output power	3kW	4kW	5kW	6kW	8kW	9kW	10kW	12kW	15kW	17kW	20kW
Max. apparent output power	3.3kVA	4.4kVA	5.5kVA	6.6kVA	8.8kVA	9.9kVA	11kVA	13.2kVA	16.5kVA	18.7kVA	22kVA
Max. output power	3.3kW	4.4kW	5.5kW	6.6kW	8.8kW	9.9kW	11kW	13.2kW	16.5kW	18.7kW	22kW
Rated grid voltage	3/N/PE, 220/380V, 230/400V										
Rated grid frequency	50/60Hz										
Rated grid output current	4.6A/4.3A	6.1A/5.8A	7.6A/7.2A	9.1A/8.7A	12.2A/11.5A	13.7A/13.0A	15.2A/14.4A	18.2A/17.3A	22.8A/21.7A	25.8A/24.6A	30.4A/28.9A
Max. output current	4.7A	6.4A	7.9A	9.5A	12.7A	14.3A	15.9A	19.1A	23.8A	27A	31.8A
Power Factor	>0.99 (0.8 leading - 0.8 lagging)										
THDi	<1.5%										

Efficiency

Max. efficiency	98.3%						98.7%				
EU efficiency	97.8%						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										
Integrated AFCI (DC arc-fault circuit protection)	Yes										
Integrated DC switch	Optional										

General Data

Dimensions (W*H*D)	310*563*219 mm										
Weight	17.3kg				18kg			18.9kg		19.8kg	
Topology	Transformerless										
Self consumption	<1W (night)										
Operating ambient temperature range	-25 ~ +60°C										
Relative humidity	0-100%										
Ingress protection	IP65										
Cooling concept	Natural convection							Intelligent redundant fan-cooling			
Max. operation altitude	4000m										
Grid connection standard	VDE-AR-N 4105, VDE V 0124, VDE V 0126-1-1, UTE C15-712-1, NRS 097-1-2, G98, G99, EN 50549-1/-2, RD 1699, UNE 206006, UNE 206007-1, IEC 61727										
Safety/EMC standard	IEC 62109-1/-2, IEC 62116, 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										

Solis-(15-20)K-LV-5G

Solis Three Phase Inverters



Features:

- ▶ Max. efficiency 98.8%
- ▶ Wide voltage range and low startup voltage
- ▶ 3 MPPT design with precise MPPT algorithm
- ▶ THDi<3%, low harmonic distortion against grid
- ▶ Anti-resonance, supporting over 6MW paralleled in one transformer
- ▶ Perfect commercial site monitoring solution
- ▶ 130% DC overload ratio, 13A input for each PV string
- ▶ Strings intelligent monitoring, Smart I-V curve scan
- ▶ Fuse free design to avoid fire hazard
- ▶ Type II surge arrester for both DC and AC
- ▶ Natural convection, Fan-less design, longer lifespan
- ▶ Leakage current repression technology
- ▶ Volt-watt work mode integrated
- ▶ DC input reverse alarm
- ▶ Intergrated Export Power Manager (EPM)



Model:

220V: Solis-15K-LV-5G Solis-20K-LV-5G

Datasheet

Model Name	Solis-15K-LV-5G	Solis-20K-LV-5G
Input DC		
Recommended max. PV power	19.5kW	26kW
Max. input voltage	1100V	
Rated voltage	600V	
Start-up voltage	180V	
MPPT voltage range	200-1000V	
Max. input current	26A/26A/26A	
Max. short circuit current	40A/40A/40A	
MPPT number/Max. input strings number	3/6	
Output AC		
Rated output power	15kW	20kW
Max. apparent output power	16.5kVA	22kVA
Max. output power	16.5kW	22kW
Rated grid voltage	3/PE, 220V	
Rated grid frequency	50/60Hz	
Rated grid output current	39.4A	52.5A
Max. output current	43.3A	57.7A
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	
Anti-PID function	Optional	
Integrated DC switch	Optional	
General Data		
Dimensions (W*H*D)	647*629*252 mm	
Weight	45kg	
Topology	Transformerless	
Self consumption	<1W (night)	
Operating ambient temperature range	-25 ~ +60°C	
Relative humidity	0-100%	
Ingress protection	IP65	
Cooling concept	Natural convection	
Max. operation altitude	4000m	
Grid connection standard	IEC 61727, IEC 62116, C10/11, VDE 4105, IEEE 1547	
Safety/EMC standard	IEC 62109-1/-2, IEC62116, EN 61000-6-1/-2/-3/-4, IEC 61000-3-11/12, UL 1741	
Features		
DC connection	MC4 connector	
AC connection	OT terminal	
Display	LCD	
Communication	RS485, Optional: Wi-Fi, GPRS	

Solis-(25-30)K-LV

Solis Three Phase Inverters



360 degree

Features:

- ▶ Max. efficiency 97%
- ▶ Wide voltage range and low startup voltage
- ▶ 2 MPPT input, each rated current is 28.5A, compatible with high power module
- ▶ THDi<3%, low harmonic distortion against grid
- ▶ Anti-resonance, supporting over 6MW paralleled in one transformer
- ▶ Perfect commercial site monitoring solution
- ▶ Intelligent redundant fan-cooling



Model:

220V: Solis-25K-LV Solis-30K-LV

Datasheet

Model Name	Solis-25K-LV	Solis-30K-LV
Input DC		
Recommended max. PV power	30kW	36kW
Max. input voltage	1100V	
Rated voltage	600V	
Start-up voltage	200V	
MPPT voltage range	200-850V	
Max. input current	28.5A/28.5A	
Max. short circuit current	44.5A/44.5A	
MPPT number/Max. input strings number	2/6	
Output AC		
Rated output power	25kW	30kW
Max. apparent output power	25kVA	30kVA
Max. output power	25kW	30kW
Rated grid voltage	3/N/PE, 220/380 V, 230/400V	
Rated grid frequency	50/60Hz	
Rated grid output current	65.6A	78.8A
Max. output current	65.6A	78.8A
Power Factor	>0.99 (0.8 leading - 0.8 lagging)	
THDi	<3%	
Efficiency		
Max. efficiency	97.0%	
EU efficiency	96.5%	
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	
Integrated DC switch	Optional	
General Data		
Dimensions (W*H*D)	630*700*357 mm	
Weight	63kg	
Topology	Transformerless	
Self consumption	<1W (night)	
Operating ambient temperature range	-25 ~ +60°C	
Relative humidity	0-100%	
Ingress protection	IP65	
Cooling concept	Intelligent redundant fan-cooling	
Max. operation altitude	4000m	
Grid connection standard	EN50438, G59/3, AS4777, VDE0126-1-1, IEC 61727	
Safety/EMC standard	IEC62109-1/-2, AS3100, EN61000-6-1, EN61000-6-3	
Features		
DC connection	MC4 connector	
AC connection	OT terminal	
Display	LCD	
Communication	RS485, Optional: Wi-Fi, GPRS	

Solis-(25-40)K-5G, Solis-(40-50)K-HV-5G

Solis Three Phase Inverters



360 degree

Features:

- ▶ Max. efficiency 98.8%
- ▶ Wide voltage range and low startup voltage
- ▶ 3/4 MPPT design with precise MPPT algorithm
- ▶ THDi<3%, low harmonic distortion against grid
- ▶ Anti-resonance, supporting over 6MW paralleled in one transformer
- ▶ Perfect commercial site monitoring solution
- ▶ 130% DC overload ratio, 13A input for each PV string
- ▶ Strings intelligent monitoring, Smart I-V curve scan
- ▶ Fuse free design to avoid fire hazard
- ▶ Type II surge arrester for both DC and AC
- ▶ Natural convection, Fan-less design, longer lifespan
- ▶ Leakage current repression technology
- ▶ Volt-watt work mode integrated
- ▶ DC input reverse alarm
- ▶ Intergrated Export Power Manager (EPM)



Model:

- | | | |
|--------------|-----------------|-----------------|
| 400V: | Solis-25K-5G | Solis-30K-5G |
| | Solis-33K-5G | Solis-36K-5G |
| | Solis-40K-5G | |
| 480V: | Solis-40K-HV-5G | Solis-50K-HV-5G |

Datasheet

Model Name	Solis-25K-5G	Solis-30K-5G	Solis-33K-5G	Solis-36K-5G	Solis-40K-5G	Solis-40K-HV-5G	Solis-50K-HV-5G
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Input DC

Recommended max. PV power	33kW	39kW	43kW	47kW	52kW	52kW	65kW
Max. input voltage	1100V						
Rated voltage	600V						
Start-up voltage	180V						
MPPT voltage range	200-1000V						
Max. input current	26A/26A/26A			4*26A			
Max. short circuit current	40A/40A/40A			4*40A			
MPPT number/Max. input strings number	3/6			4/8			

Output AC

Rated output power	25kW	30kW	33kW	36kW	40kW	40kW	50kW
Max. apparent output power	27.5kVA	33kVA	36.3kVA	39.6kVA	44kVA	44kVA	55kVA
Max. output power	27.5kW	33kW	36.3kW	39.6kW	44kW	44kW	55kW
Rated grid voltage	3/N/PE, 220/380V, 230/400V					3/PE, 480V	
Rated grid frequency	50/60Hz						
Rated grid output current	38.0A/36.1A	45.6A/43.3A	50.1A/47.6A	54.7A/52.0A	60.8A/57.7A	48.1A	60.1A
Max. output current	41.8A	50.2A	55.1A	60.2A	66.9A	53.0A	66.2A
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						
Anti-PID function	Optional						
Integrated AFCI (DC arc-fault circuit protection)	Yes						
Integrated DC switch	Optional						

General Data

Dimensions (W*H*D)	647*629*252 mm						
Weight	45kg						
Topology	Transformerless						
Self consumption	<1W (night)						
Operating ambient temperature range	-25 ~ +60°C						
Relative humidity	0-100%						
Ingress protection	IP65						
Cooling concept	Natural convection						
Max. operation altitude	4000m						
Grid connection standard	VDE-AR-N 4105, VDE V 0124, VDE V 0126-1-1, UTE C15-712-1, NRS 097-1-2, G98, G99, EN 50549-1/-2, IEC61727, DEWA						
Safety/EMC standard	IEC 62109-1/-2, IEC 62116, EN 61000-6-1/-2/-3/-4						

Features

DC connection	MC4 connector						
AC connection	OT terminal						
Display	LCD						
Communication	RS485, Optional: Wi-Fi, GPRS						

Solis-50K, Solis-60K-4G

Solis Three Phase Inverters



360 degree

Features:

- ▶ Max. efficiency 99%
- ▶ Wide voltage range and low startup voltage
- ▶ 4 MPPT input, each rated current is 28.5A, compatible with high power module
- ▶ THDi<3%, low harmonic distortion against grid
- ▶ Anti-resonance, supporting over 6MW paralleled in one transformer
- ▶ Perfect commercial site monitoring solution
- ▶ Intelligent redundant fan-cooling



Model:

400V: Solis-50K Solis-60K-4G

Datasheet

Model Name	Solis-50K	Solis-60K-4G
Input DC		
Recommended max. PV power	60kW	72kW
Max. input voltage	1100V	
Rated voltage	600V	
Start-up voltage	200V	
MPPT voltage range	200-1000V	
Max. input current	4*28.5A	
Max. short circuit current	4*44.5A	
MPPT number/Max. input strings number	4/12	
Output AC		
Rated output power	50kW	60kW
Max. apparent output power	55kVA	66kVA
Max. output power	55kW	66kW
Rated grid voltage	3/N/PE, 220/380V, 230/400V	
Rated grid frequency	50/60Hz	
Rated grid output current	72.2A/76A	86.6A/91.2A
Max. output current	83.3A	100A
Power Factor	>0.99 (0.8 leading - 0.8 lagging)	
THDi	<3%	
Efficiency		
Max. efficiency	98.8%	99.0%
EU efficiency	98.4%	98.5%
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	
Strings monitoring	Yes	
Anti-PID function	Optional	
Integrated AFCI (DC arc-fault circuit protection)	Optional	
Integrated DC switch	Optional	
General Data		
Dimensions (W*H*D)	630*700*357 mm	
Weight	63kg	
Topology	Transformerless	
Self consumption	<1W (night)	
Operating ambient temperature range	-25 ~ +60°C	
Relative humidity	0-100%	
Ingress protection	IP65	
Cooling concept	Intelligent redundant fan-cooling	
Max. operation altitude	4000m	
Grid connection standard	VDE-AR-N 4105, VDE V 0124, VDE V 0126-1-1, UTE C15-712-1, NRS 097-1-2, G98, G99, EN 50549-1/-2, RD 1699, UNE 206006, UNE 206007-1, IEC 61727, DEWA	
Safety/EMC standard	IEC 62109-1/-2, IEC 62116, EN 61000-6-2/-4	
Features		
DC connection	MC4 connector	
AC connection	OT terminal	
Display	LCD	
Communication	RS485, Optional: Wi-Fi, GPRS	

Solis-80K-5G, Solis-100K-HV-5G, Solis-110K-BHV-5G

Solis Three Phase Inverters



Model:

400V: Solis-80K-5G **480V:** Solis-100K-HV-5G **540V:** Solis-110K-BHV-5G



360 degree



Efficient

- ▶ 9/10 MPPTs, max. efficiency 99%
- ▶ > 150% DC/AC ratio
- ▶ Compatible with bifacial modules



Safe

- ▶ IP66
- ▶ Built-in PID recovery for better module performance (optional)
- ▶ Globally recognised branded componentry for longer life



Smart

- ▶ Night SVG function
- ▶ Intelligent string monitoring. Smart I-V curve scan
- ▶ Remote firmware upgrade with simple operation



Economic

- ▶ Power line communication (PLC) (optional)
- ▶ Support "Y" type connection in DC side
- ▶ Supports aluminium wire access to reduce cost

Datasheet

Model Name	Solis-80K-5G	Solis-100K-HV-5G	Solis-110K-BHV-5G
Input DC			
Max. input voltage	1100V		
Rated voltage	600V	720V	
Start-up voltage	195V		
MPPT voltage range	180-1000V		
Max. input current	9*26A	10*26A	
Max. short circuit current	9*40A	10*40A	
MPPT number/Max. input strings number	9/18	10/20	
Output AC			
Rated output power	80kW	100kW	110kW
Max. apparent output power	88kVA	110kVA	121kVA
Max. output power	88kW	110kW	121kW
Rated grid voltage	3/N/PE, 220/380V, 230/400V	3/PE, 480V	3/PE, 540V
Rated grid frequency	50/60Hz		
Rated grid output current	121.6A	120.3A	117.6A
Max. output current	133.7A	132.3A	129.4A
Power Factor	>0.99 (0.8 leading - 0.8 lagging)		
THDi	<3%		
Efficiency			
Max. efficiency	98.7%	99.0%	
EU efficiency	98.3%	98.5%	
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		
Strings monitoring	Yes		
I/V Curve scanning	Yes		
Anti-PID function	Optional		
Integrated AFCI (DC arc-fault circuit protection)	Yes		
Integrated DC switch	Yes		
Integrated AC switch	Optional		
General Data			
Dimensions (W*H*D)	1050*567*314.5 mm (with AC switch)		
Weight	82kg		
Topology	Transformerless		
Self consumption	<2W (night)		
Operating ambient temperature range	-25 ~ +60°C		
Relative humidity	0-100%		
Ingress protection	IP66		
Cooling concept	Intelligent redundant fan-cooling		
Max. operation altitude	4000m		
Grid connection standard	VDE-AR-N 4105, VDE V 0124, VDE V 0126-1-1, UTE C15-712-1, NRS 097-1-2, G98, G99, EN 50549-1/-2, RD 1699, UNE 206006, UNE 206007-1, IEC 61727, DEWA		
Safety/EMC standard	IEC 62109-1/-2, IEC 62116, EN 61000-6-2/-4		
Features			
DC connection	MC4 connector		
AC connection	OT terminal (max. 185 mm ²)		
Display	LCD		
Communication	RS485, Optional: Wi-Fi, GPRS, PLC		

Solis-(100-110)K-5G, Solis-125K-HV-5G

Solis Three Phase Inverters



Model:

400V: Solis-100K-5G
Solis-110K-5G

480V: Solis-125K-HV-5G



360 degree

Efficient

- ▶ 10 MPPTs, max. efficiency 99%
- ▶ > 150% DC/AC ratio
- ▶ High power tracking density 90MPPT/MW
- ▶ Compatible with bifacial modules

Safe

- ▶ AFCI protection, proactively reduces fire risk
- ▶ Built-in PID recovery for better module performance (optional)
- ▶ Type I SPD for AC (optional)
- ▶ Overvoltage load reduction and leakage current suppression technology, low failure rate
- ▶ Globally recognised branded componentry for longer life

Smart

- ▶ Night SVG function
- ▶ Intelligent string monitoring. Smart I-V curve scan
- ▶ Remote firmware upgrade with simple operation

Economic

- ▶ Power line communication (PLC) (optional)
- ▶ Support "Y" type connection in DC side
- ▶ Supports aluminium wire access to reduce cost

Datasheet

Model Name	Solis-100K-5G	Solis-110K-5G	Solis-125K-HV-5G
Input DC			
Max. input voltage		1100V	
Rated voltage	600V		720V
Start-up voltage		195V	
MPPT voltage range		180-1000V	
Max. input current		10*26A	
Max. short circuit current		10*40A	
MPPT number/Max. input strings number		10/20	
Output AC			
Rated output power	100kW	110kW	125kW
Max. apparent output power	110kVA	121kVA	137.5kVA
Max. output power	110kW	121kW	137.5kW
Rated grid voltage	3/N/PE, 220/380V, 230/400V		3/PE, 480V
Rated grid frequency	50/60Hz		
Rated grid output current	152.0A	167.1A	150.4A
Max. output current	167.1A	183.8A	165.4A
Power Factor	>0.99 (0.8 leading - 0.8 lagging)		
THDi	<3%		
Efficiency			
Max. efficiency	98.7%		99.0%
EU efficiency	98.3%		98.5%
Protection			
DC reverse-polarity protection		Yes	
Short circuit protection		Yes	
Output over current protection		Yes	
Surge protection	DC Type II / AC Type II (AC Type I optional)		
Grid monitoring		Yes	
Anti-islanding protection		Yes	
Strings monitoring		Yes	
I/V Curve scanning		Yes	
Anti-PID function		Optional	
Integrated AFCI (DC arc-fault circuit protection)		Yes	
Integrated DC switch		Yes	
Integrated AC switch		Optional	
General Data			
Dimensions (W*H*D)	1065*567*344.5 mm		
Weight	84kg		
Topology	Transformerless		
Self consumption	<2W (night)		
Operating ambient temperature range	-25 ~ +60°C		
Relative humidity	0-100%		
Ingress protection	IP66		
Cooling concept	Intelligent redundant fan-cooling		
Max. operation altitude	4000m		
Grid connection standard	VDE-AR-N 4105, VDE V 0124, VDE V 0126-1-1, UTE C15-712-1, NRS 097-1-2, G98, G99, EN 50549-1/-2, RD 1699, UNE 206006, UNE 206007-1, IEC 61727, DEWA		
Safety/EMC standard	IEC 62109-1/-2, IEC 62116, EN 61000-6-2/-4		
Features			
DC connection	MC4 connector		
AC connection	OT terminal (max. 185 mm ²)		
Display	LCD		
Communication	RS485, Optional: Wi-Fi, GPRS, PLC		

Solis-125K-EHV-5G

Solis Three Phase Inverters



Model:

600V: Solis-125K-EHV-5G



Efficient

- ▶ Max. efficiency 99.1%
- ▶ > 150% DC/AC ratio
- ▶ Compatible with bifacial modules



Smart

- ▶ Strong reactive power compensation
- ▶ Multiple communication modes applicable to various scenarios
- ▶ Remote firmware upgrade with simple operation



Safe

- ▶ Built-in PID recovery for better module performance (optional)
- ▶ Equipped with AC/DC switch, safe and convenient maintenance
- ▶ Globally recognised branded componentry for longer life



Economic

- ▶ Max. DC input voltage: 1500V
- ▶ Supports aluminium wire access to reduce cost

Datasheet

Model Name	Solis-125K-EHV-5G
Input DC	
Max. input voltage	1500V
Rated voltage	950V
Start-up voltage	900V
MPPT voltage range	860-1450V
Max. input current	150A
Max. short circuit current	300A
MPPT number/Max. input strings number	1/20
Output AC	
Rated output power	125kW
Max. apparent output power	125kVA
Max. output power	125kW
Rated grid voltage	3/PE, 600V
Rated grid frequency	50/60Hz
Rated grid output current	120.3A
Max. output current	120.3A
Power Factor	>0.99 (0.8 leading - 0.8 lagging)
THDi	<3%
Efficiency	
Max. efficiency	99.1%
CEC efficiency	98.6%
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 DC switch	Yes
Integrated AC switch	Yes
General Data	
Dimensions (W*H*D)	1178*713.5*315 mm
Weight	84kg
Topology	Transformerless
Self consumption (night)	<3W (without anti-PID)
Operating ambient temperature range	-25 ~ +60°C
Relative humidity	0-100%
Ingress protection	IP65
Cooling concept	Intelligent redundant fan-cooling
Max. operation altitude	4000m
Grid connection standard	G98, G99, EN 50549-1/-2, IEC 61727
Safety/EMC standard	IEC 62109-1/-2, IEC 62116, EN 61000-6-2/-4
Features	
DC connection	MC4 connector
AC connection	OT terminal (max. 185 mm ²)
Display	LCD
Communication	RS485, Optional: Ethernet, Wi-Fi, GPRS

Solis-255K-EHV-5G, Solis-(208-255)K-EHV

Solis Three Phase Inverters



Model:

800V: Solis-255K-EHV-5G Solis-208K-EHV Solis-255K-EHV



360 degree

Efficient

- ▶ 9/12/14 MPPTs, max. efficiency 99%
- ▶ 200% DC/AC ratio
- ▶ High power tracking density 60MPPT/MW
- ▶ Compatible with bifacial modules

Safe

- ▶ IP66
- ▶ Built-in PID recovery for better module performance
- ▶ Fuse free design, safe and maintenance free
- ▶ Globally recognised branded componentry for longer life

Smart

- ▶ Night SVG function
- ▶ Intelligent string monitoring. Smart I-V curve scan
- ▶ Remote firmware upgrade with simple operation

Economic

- ▶ Power line communication (PLC) (optional)
- ▶ DC side supports two sinks and one access
- ▶ Supports aluminium wire access to reduce cost
- ▶ Reserve DC energy storage access

Datasheet

Model Name	Solis-255K-EHV-5G	Solis-208K-EHV	Solis-255K-EHV
Input DC			
Max. input voltage	1500V		
Rated voltage	1080V		
Start-up voltage	600V		
MPPT voltage range	580-1500V		
Max. input current	14*26A	9*30A	12*30A
Max. short circuit current	14*40A	9*50A	12*50A
MPPT number/Max. input strings number	14/28	9/18	12/24
Output AC			
Rated output power	255kVA@30°C / 235kVA@40°C / 220kVA@50°C	208kVA@30°C / 200kVA@40°C / 192kVA@50°C	255kVA@30°C / 235kVA@40°C / 220kVA@50°C
Rated grid voltage	3/PE, 800V		
Grid voltage range	640-920V		
Rated grid frequency	50/60Hz		
Max. output current	184.0A	150.1A	184.0A
Power Factor	>0.99 (0.8 leading - 0.8 lagging)		
THDi	<3%		
Efficiency			
Max. efficiency	99.0%		
EU efficiency	98.7%	98.8%	
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		
Anti-PID function	Yes		
Integrated DC switch	Yes		
General Data			
Dimensions (W*H*D)	1125*770*384 mm		
Weight	113kg		
Topology	Transformerless		
Self consumption	<2W (night)		
Operating ambient temperature range	-25 ~ +60°C		
Relative humidity	0-100%		
Ingress protection	IP66		
Cooling concept	Intelligent redundant fan-cooling		
Max. operation altitude	4000m		
Grid connection standard	EN50549, G99, AS4777.2, VDE0126-1-1, IEC 61727, VDE4105, CEA 2019		
Safety/EMC standard	IEC62109-1/-2, EN61000-6-2/-4		
Features			
DC connection	MC4 connector		
AC connection	OT terminal (max. 300 mm ²)		
Display	LCD		
Communication	RS485, Optional: PLC		

Solis-6300-MV

Solis PV Station

»» For **1500 V** string inverter Solis 255K and Solis 255K Pro



Integrated delivery

- ▶ Mainstream 6.3MW subarray, widely used global
- ▶ 20 foot standard container delivery, easy to transport

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

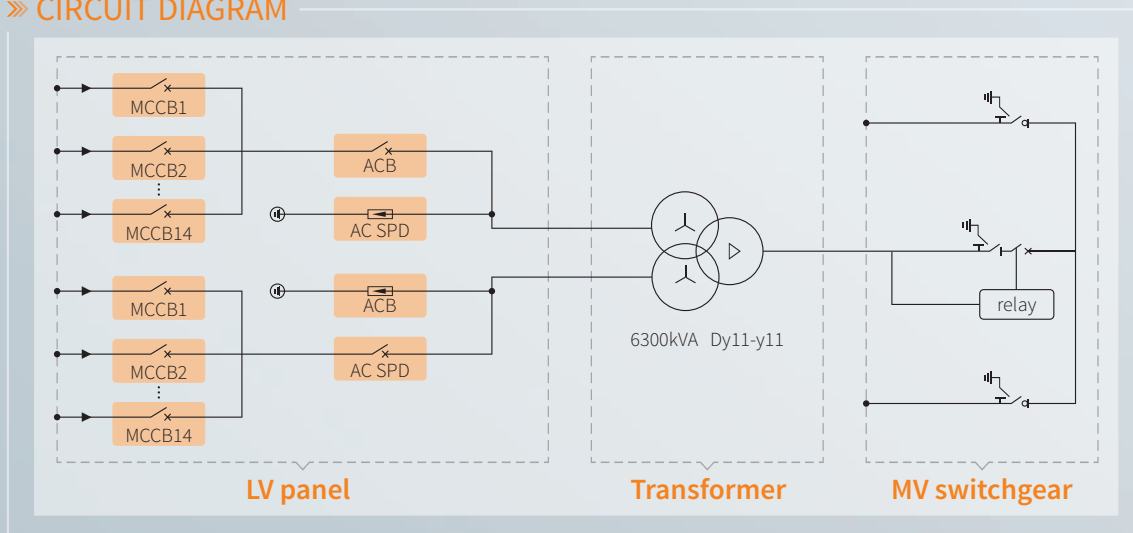
Reliable products

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

Easy O&M

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

»» CIRCUIT DIAGRAM



Datasheet

Model Name	Solis-6300-MV
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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 / 20-35 kV
Maximum input current	2577 A *2
Tapping on HV	±2*2.5%
Vector group	Dy11y11
Frequency	50 Hz / 60 Hz
cooling type	ONAN
Impedance	7%
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
Rate voltage	24-36 kV
Rate 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	24 T
Operating temperature range	-25 ~ +60°C
Operating altitude	1000 m (standard)
Auxiliary power supply	5 kVA/230V (Optional: max. 40kVA)
UPS	1 kVA 30 min (Optional: max. 2kVA 2h)
Degree of protection	IP54
Allowable relative humidity range	0-95%
Comunication	RS485, Ethernet, Optical fiber
Compliance	IEC 60076, IEC 62271, IEC61439

RAI-3K-48ES-5G

Solis Energy Storage Inverters



360 degree

Features:

- ▶ Uninterrupted power supply, 20ms reaction
- ▶ Compatible with both lead-acid battery and li-ion battery
- ▶ Compatible with any existing grid-tied PV system, option to upgrade
- ▶ Off-grid backup function
- ▶ EPS function
- ▶ Intelligent EMS function
- ▶ Intelligent debugging APP which support one-click inverter configuration
- ▶ CAN, RS485 (Optional)
- ▶ Various work mode for different application scenario
- ▶ Natural cooling without external fan



Model:

RAI-3K-48ES-5G

Datasheet

Model Name	RAI-3K-48ES-5G
Output AC (Grid side)	
Rated output power	3000W
Max. apparent output power	1.5*Prated, 10s;1.2*Prated, 30s
Operation phase	1/N/PE
Rated grid voltage	230V
Rated grid frequency	50/60Hz
Rated grid output current	13A
Power Factor	>0.99 (0.8 leading - 0.8 lagging)
THDi	<3%
Battery	
Battery type	Li-ion/Lead-acid
Battery voltage range	40-60V
Battery capacity	50-2000Ah
Max. charging power	3000W
Max. charge/discharge current	60A/60A
Communication	CAN
Output AC (Back-up)	
Rated output power	3000W (Requires battery voltage higher than 55V)
Max. apparent output power	4500VA
Back-up switch time	<20ms
Rated output voltage	1/N/PE, 220/230V
Rated frequency	50/60Hz
Rated output current	13A
THDv	<3% (linear load)
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)	403*525*170 mm
Weight	15kg
Topology	High frequency isolation
Operating ambient temperature range	-25 ~ +60°C
Ingress protection	IP65
Cooling concept	Natural convection
Max. operation altitude	2000m
Grid connection standard	VDE-AR-N 4105, VDE V 0124, VDE V 0126-1-1, UTE C15-712-1, NRS 097-1-2, G98, EN 50549-1/-2, RD 1699, UNE 206006, UNE 206007-1, CEI 0-21
Safety/EMC standard	IEC 62477-1/-2, EN 61000-6-1/-2/-3/-4
Features	
DC connection	MC4 connector
AC connection	Screw clamp terminal (max. 6 mm ²)
Display	LCD
Communication	RS485, CAN, Optional: Wi-Fi, GPRS

RHI-(3-6)K-48ES-5G

Solis Energy Storage Inverters



360 degree

Features:

- ▶ Uninterrupted power supply, 20ms reaction
- ▶ 5kW backup power to support more important loads
- ▶ With shifting and peak shaving capabilities friendly to grid
- ▶ Multiple working modes to make maximize self-consumption, increase benefit
- ▶ Higher charge-discharge efficiency, improving the economic benefits
- ▶ Compatible with lithium & lead-acid batteries, increased more choice in different markets
- ▶ Fanless design, long lifespan
- ▶ Intelligent BMS function, improving battery's reliability
- ▶ With high-frequency isolation technology, making system safer and long lifespan
- ▶ 24-hour fully intelligent energy management, Real-time grasp of PV plant status
- ▶ Remotely control & upgrade function, making digital power plant maintenance at your fingertips



Model:

RHI-3K-48ES-5G
RHI-4.6K-48ES-5G
RHI-6K-48ES-5G

RHI-3.6K-48ES-5G
RHI-5K-48ES-5G

Datasheet

Model Name	RHI-3K-48ES-5G	RHI-3.6K-48ES-5G	RHI-4.6K-48ES-5G	RHI-5K-48ES-5G	RHI-6K-48ES-5G
Input DC (PV side)					
Max. input power	7kW	7kW	8kW	8kW	8kW
Max. input voltage			600V		
Rated voltage			330V		
Start-up voltage			120V		
MPPT voltage range			90-520V		
Max. input current			11A/11A		
Max. short circuit current			17.2A/17.2A		
MPPT number/Max. input strings number			2/2		
Battery					
Battery type			Li-ion/Lead-acid		
Battery voltage range			42 - 58V		
Battery capacity			50 - 2000Ah		
Max. charging power	3kW		5kW		
Max. charge/discharge current	62.5A/62.5A		100A/100A		
Communication			CAN/RS485		
Output AC (Back-up)					
Rated output power	3kW		5kW		
Max. apparent output power	4kVA		6kVA		
Back-up switch time			<20ms		
Rated output voltage			1/N/PE, 220/230V		
Rated frequency			50/60Hz		
Rated output current	13A		22A		
THDv			2% (linear load)		
Output AC (Grid side)					
Rated output power	3kW	3.6kW	4.6kW	5kW	6kW
Max. apparent output power	3.3kVA	4kVA	4.6kVA	5.5kVA	6kVA
Rated grid voltage	1/N/PE, 220/230V				
Rated grid frequency	50/60Hz				
Rated grid output current	13A	15.7A	20.9A	21.7A	26.1A
Max. output current	15.7A	17.3A	23A	23.9A	26.1A
Power Factor	>0.99 (0.8 leading - 0.8 lagging)				
THDi	<2%				
Efficiency					
Max. efficiency	>97.5%				
EU efficiency	>96.8%				
Protection					
Ground fault monitoring			Yes		
Integrated AFCI (DC arc-fault circuit protection)			Optional		
DC reverse-polarity protection			Yes		
Protection class/Over voltage category			I/II		
General Data					
Dimensions (W*H*D)	333*505*249 mm				
Weight	17kg				
Topology	High frequency isolation (for battery)				
Operating ambient temperature range	-25 ~ +60°C				
Ingress protecton/ Pollution degree	IP65/PD3				
Cooling concept	Natural convection				
Max. operation altitude	2000m				
Grid connection standard	EN50438, G98, G99, AS4777.2:2015, VDE0126-1-1, IEC 61727, VDE N4105, CEI 0-21,CE				
Safety/EMC standard	IEC62040-1, IEC62109-1/-2, AS3100, NB/T 32004, EN61000-6-2, EN61000-6-3				
Features					
DC connection	MC4 connector				
AC connection	Quick connection plug				
Display	7.0"LCD color screen display				
Communication	RS485, Optional: Wi-Fi, GPRS				

RHI-3P(5-10)K-HVES-5G

Solis Energy Storage Inverters



360 degree

Features:

- ▶ Max. efficiency 98.4%
- ▶ 2 MPPT and 4 DC input; Max 26A DC input current
- ▶ three operating modes (self-consumption; time-of-use; off-grid back-up) & programmable energy management
- ▶ Power supply can be switched automatically and switching time within 40ms
- ▶ Ensures AC backup for up to 10kW of continuous power and 16kVA of peak power
- ▶ Time of use shifting and peak shaving capabilities to grid
- ▶ Solis supply optional arc fault circuit interrupter (AFCI) function
- ▶ Intelligent EMS function
- ▶ Support three-phase imbalance
- ▶ 24-hour fully intelligent energy management system for monitor production and consumption
- ▶ Remotely control and upgrade any selected inverter



Model:

- | | |
|------------------|-------------------|
| RHI-3P5K-HVES-5G | RHI-3P6K-HVES-5G |
| RHI-3P8K-HVES-5G | RHI-3P10K-HVES-5G |

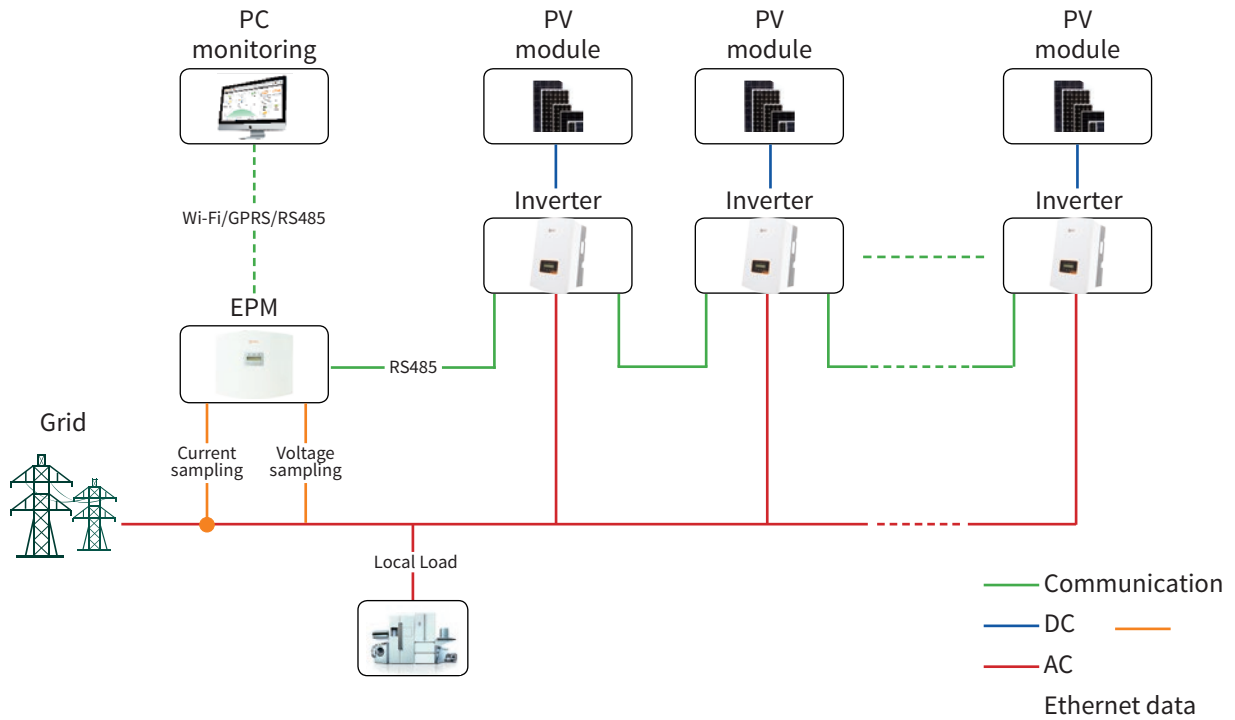
Datasheet

Model Name	RHI-3P5K-HVES-5G	RHI-3P6K-HVES-5G	RHI-3P8K-HVES-5G	RHI-3P10K-HVES-5G
Input DC (PV side)				
Max. input power	8kW	9.6kW	12.8kW	16kW
Max. input voltage	1000V			
Rated voltage	600V			
Start-up voltage	160V			
MPPT voltage range	200-850V			
Max. input current	13A/13A		26A/13A	26A/26A
Max. short circuit current	19.5A/19.5A		39A/19.5A	39A/39A
MPPT number/Max. input strings number	2/2		2/3	2/4
Battery				
Battery type	Li-ion			
Communication interface	CAN/RS485			
Battery voltage range	160-600V			
Max. charge/discharge power	5kW	6kW	8kW	10kW
Max. charge/discharge current	25A			
Output AC (Grid side)				
Rated output power	5kW	6kW	8kW	10kW
Max. apparent output power	5kVA	6kVA	8kVA	10kVA
Rated grid voltage	3/N/PE, 380/400V			
Rated grid frequency	50/60Hz			
Rated grid output current	7.6A/7.2A	9.1A/8.7A	12.2A/11.5A	15.2A/14.4A
Max. output current	8.4A	10A	13.4A	16.7A
Power Factor	>0.99 (0.8 leading - 0.8 lagging)			
THDi	<2%			
Output AC (Back-up)				
Rated output power	5kW	6kW	8kW	10kW
Max. apparent output power	5kVA	6kVA	8kVA	10kVA
Peak apparent output power	10kVA, 60 sec	12kVA, 60 sec	16kVA, 60 sec	16kVA, 60 sec
Back-up switch time	< 40ms			
Rated output voltage	3/N/PE, 380/400V			
Rated frequency	50/60Hz			
Rated output current	7.6A/7.2A	9.1A/8.7A	12.2A/11.5A	15.2A/14.4A
Max. output current	8.4A	10A	13.4A	16.7A
THDi	<2%			
Efficiency				
Max. efficiency	98.4%			
EU efficiency	97.7%			
MPPT efficiency	99.9%			
Battery charge/discharge efficiency	97.5%			
Protection				
Anti-islanding protection	Yes			
Output over current protection	Yes			
Output short protection	Yes			
DC switch	Yes			
DC reverse-polarity protection	Yes			
PV over voltage protection	Yes			
Battery reverse protection	Yes			
General Data				
Dimensions (W*H*D)	535*455*181 mm			
Weight	25.1kg			
Topology	Transformerless			
Self consumption	<7W (night)			
Operating ambient temperature range	-25 ~ +60°C			
Relative humidity	0-100%			
Ingress protection	IP65			
Cooling concept	Natural convection			
Max. operation altitude	4000m			
Grid connection standard	VDE-AR-N 4105, VDE V 0124, VDE V 0126-1-1, UTE C15-712-1, NRS 097-1-2, G98, G99, EN 50549-1/-2, RD 1699, UNE 206006, UNE 206007-1, CEI 0-21			
Safety/EMC standard	IEC 62109-1/-2, EN 61000-6-2/-3			
Features				
DC connection	MC4 connector			
AC connection	Quick connection plug			
Display	LCD			
Communication	RS485, Optional: Wi-Fi, GPRS			

Accessories

Solis Export Power Manager

Solis Export Power Manager



Smart & strong

- Simultaneous control of 80 X Solis inverters
- Realizing reactive compensation of the system, which ensure the power factor of the system is up to standard

Saving & high precision

- Simultaneously monitor the operating data of the 80 X Solis inverter, saving the cost of the monitoring system
- The control accuracy is up to 3%, 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



Datasheet

Model Name	Solis-EPM1-5G	Solis-EPM3-5G	Solis-EPM3-5G-PLUS
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Input AC

Rated voltage	230V, 1/N/PE	400V, 3/N/PE or 3/PE	400V, 3/N/PE
Input voltage range	L to N: 100~277V		L to L: 320~480V
Input frequency range	45~65Hz		
Input current	5A		

Communication

Inverter communication	Modbus RS485		
Communication interface	RS485*2		RS485*2, LAN*1
Maximum communication inverter numbers	10	10	80 (1)
Maximum communication distance	1000 m		
Monitoring	Wi-Fi stick or GPRS stick for single inverter connection Wi-Fi box or GPRS box for 2~10 inverters connection		Wi-Fi box (Built in)

General Data

Ambient temperature	-25 ~ +60°C		
Relative humidity	5%~95%		
Ingress protection	IP65		
Self consumption	<5W		<15W
Dimensions (W*H*D)	364*276*114 mm		488*446*149 mm
Weight	2.1kg		5.4kg
AC connection	Quick connection terminal		
CT connection	Plug terminal		
Display	LCD		

Features

Failsafe function	Yes		
Remote upgraded	Yes		
CT specification	Optional (1 for single phase, 3 for Three phase)		
Control time	5 s		
Power Accuracy	3%		

CT specification

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

Note: 1. The installation capacity of the inverter connected to the grid does not exceed 2MW.

Accessories

Solis Data Logging Device

Ginlong Monitoring System



RF-stick



RF-Kit

Simple and easy

- Plug and play, easy to operate

Stable

- Stable network connection, real-time data transmission

Smart

- No Wi-Fi configuration required, RF intelligent connection

Efficient

- Remote monitoring, allowing real-time monitoring of mobile APP and Web side

Datasheet

Device name	Solis-Link: RF-stick	Solis-Link: RF-Kit
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Wireless parameters

Working Frequency	869.525 MHz	
Demodulation	FSK	
Data Rate	9.6 kbps	
Transmitting Power	+20 dBm	
Transmitting Frequency Offset	20 KHz	
Transmission Channel Bandwidth	<8 KHz	
Receiving Channel Bandwidth	200 KHz	
Sensitivity	-113 dBm@DR=10 kbps&FDEV=10 kHz	
Antenna Options	External RF antenna: rod antenna	Embedded RF Antenna:Bracket Antenna

Hardware parameters

Data Interface	RS 485	Adaptive 10 / 100 Mbps
Working Voltage	DC 5 V ~ DC 12 V	DC 5.0 V (+/-5%)
Max. Working Voltage	15 V	12 V
Working Power	1.5 W	1.5 W
Indicator Light	System running status--RUN Light	System running status--RUN
	Inverter Connection Status--COM Light	Server Connection Status---SER
	RF Connection Status--RF Light	RF Connection Status--RF
Data Storage	8 MBYTE FLASH	
Working Temperature	-30 ~ +70°C	
Working Humidity	< 90% (No Condensation)	
Storage Temperature	-45 ~ +90°C	
Storage Humidity	< 40%	
External Interface	Aeronautical Head 4 PIN Interface (Anti reverse)	Micro USB Interface & RJ45 Mesh Port

Software parameters

Number of connected inverters	1	/
Serial Communication Rate	5 mins, 1-15 mins adjustable	/
	9600 bps, (1200 - 57600 bps adjustable)	/
Data Transmission Interval	AT+Instruction Set	/
Configuration	RF Gateway Command	/
	RF Gateway Control	/
Firmware Upgrade	Local Port Upgrade	/
Others	Real-time Control, Data Resuming	/
Configuration	/	Local Static Web Page
	/	Remote Server
Firmware Upgrade	/	Remote Upgrade
	/	Local Static Web Page
Link Requirement	/	CAT5 shielded network cable length <50 m
Network Switching Layer	/	≤ 4

General Data

Dimension(L*W*H)	47*41*160 mm	90*23*90 mm
Weight(g)	130 g	80 g
Protection class	IP 65	IP 21

Standard

Certification	CE	CE
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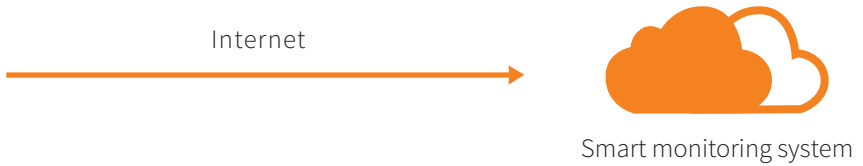
Accessories

Solis Data Logging Stick

Ginlong Monitoring System



Data Logging Stick



Data Logging Stick
Wi-Fi



Data Logging Stick
LAN



Data Logging Stick
GPRS

Data Logging Stick: Wi-Fi

- Quick installation and easy operation enabling local and remote monitoring
- Mobile APP installation for Android and IOS
- Flexible outdoor rated Wi-Fi connection

Data Logging Stick: LAN

- Quick installation and easy operation
- Plug and play functionality
- Stable and reliable LAN connection

Data Logging Stick: GPRS

- Quick installation and easy operation
- Connecting inverters with 'plug and play' function
- Easy visualization of data and other information via mobile device
- GPRS communication enabling mobile monitoring anytime anywhere

Datasheet

Model Name	DLS-W(Wi-Fi)	DLS-L(LAN)	DLS-G(GPRS)
Max. number of inverters	1		
Inverter communication	4pin		
Remote communication	Wi-Fi (802.11 b/g/n)	Ethernet 10/100Mbps	GPRS Class 12
Communication rate	9600 bps (adjustable:1200-57600 bps)		
Frequency	2.412GHz-2.484GHz	/	850/900/1800/1900 MHz
Wi-Fi communication range	100m in outdoor open area without obstruction	/	/
LAN communication range	/	50m (CAT-5e Shielded Twisted Pair)	/
Wi-Fi transmitting power	802.11b: +20dBm (Max) 802.11g: +18dBm (Max) 802.11n: +15dBm (Max) Configurable by users	/	/
Wi-Fi receiving sensitivity	802.11b: -89dBm 802.11g: -81dBm 802.11n: -71dBm	/	/
GPRS Mobile Station	/	/	ClassC
Compatible with the GSM Phase 2/2 +	/	/	Class 4 (2W@850/900MHz) Class 1 (1W@1800/1900MHz)
External antenna	I-PEX antenna	/	I-PEX antenna
Data collection intervals	5 minutes (adjustable: 1-20 minutes)		
Data interface	RS485		
Preferences setting	Web Server		
Firmware updates	Wireless	Ethernet	Wireless
Data access	Wi-Fi point-to-point/Remote server	Remote server	
Data storage	8MBYTE FLASH		

Electrical

Input voltage	DC 5V	DC 5V (+/-5%)	DC 5V (+/-5%)
Working current	200mA-300mA	110mA-200mA	160mA-500mA
Static power consumption	/	/	<2W
Max. instantaneous power consumption	/	/	<8W

Environmental

Operating temperature	-10 ~ +85°C	-10 ~ +85°C	-10 ~ +85°C
Operating humidity	10%-90% Relative humidity, no condensa		
Storage temperature	-40 ~ +125°C	-40 ~ +125°C	-40 ~ +125°C
Storage humidity	<40%		
Protection class	IP65		

General Data

Dimensions (L*W*H)	118*43*43 mm	105*43*43 mm	118*43*43 mm
Weight	56g		

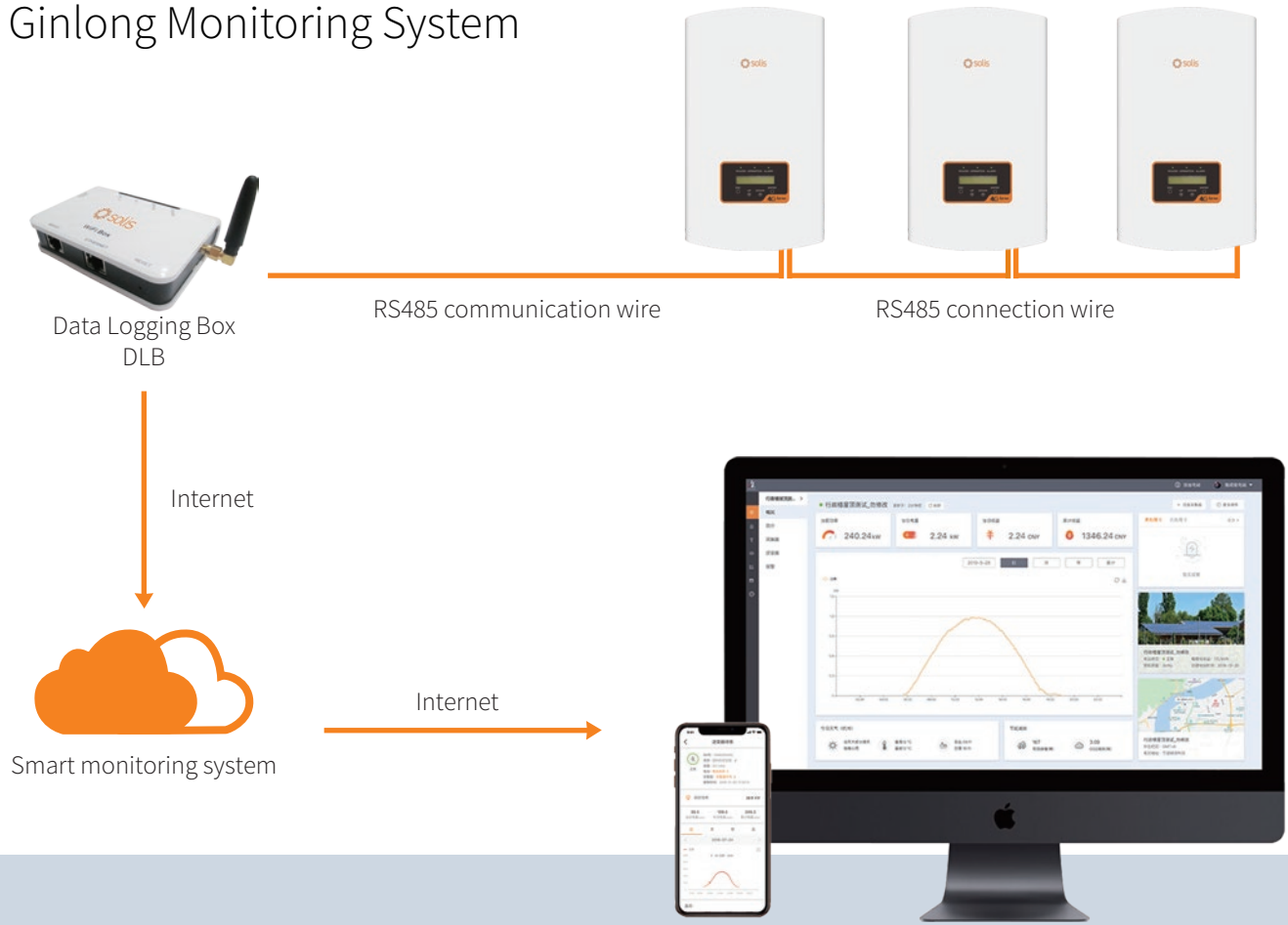
Other

Certificates	FCC, CE		
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Accessories

Solis Data Logging Box

Ginlong Monitoring System



Data Logging Box DLB

Data Logging Box: Wi-Fi

- Quick installation and easy operation
- Monitor your system and data anytime via Wi-Fi
- Easy visualization of data and other information via Internet
- Comprehensive analysis in the event of a fault

Data Logging Box: GPRS

- Quick installation and easy operation
- GPRS communication supporting remote monitoring
- Multi-functional protections keeping your system from faults
- Keeping users informed of status and data via mobile device

Datasheet

Model Name	DLB-W(Wi-Fi)	DLB-G(GPRS)
Max. number of inverters	10	
Inverter communication	RS485	
Remote communication	Wi-Fi (802.11 b/g/n)	GPRS
Max. communication range	<1km	
Communication rate	9600bps (adjustable:1200-57600 bps)	
Wi-Fi frequency	2.4GHz	850/900/1800/1900 MHz
Wi-Fi communication range	300m in outdoor open area without obstruction	/
Wi-Fi transmitting power	802.11b/g/n: +20dBm/+18dBm/15dBm (Max)	Class 4 (2W) / Class 1 (1W)
Data collection intervals	5 minutes (adjustable:1-20 minutes)	
Preferences setting	Web server/Serial AT instruction	Serial AT instruction
Firmware updates	Serial/Wireless	
Data access	Serial/Wi-Fi point-to-point/Remote server	Serial/Remote server
Status display	4 LEDs	

Electrical

Input voltage	DC 5V	
Static power consumption	<1.6W	<2W
Max. instantaneous power consumption	<2.5W	<8W

Environmental

Operating temperature	-10 ~ +65°C	
Operating humidity	10%-90% Relative humidity, no condensa	
Storage temperature	-40 ~ +65°C	
Storage humidity	<40%	
Protection class	IP21	

General Data

Dimensions (L*W*H)	110*86*26 mm	
Weight	108g	102g

Other

Certificates	FCC, CE, RoHS	
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Case study







ABP Ipswich, UK 1MW



District 9, Ho Chi Minh City, Vietnam 10kW



JTC Solar Farm, Singapore 5MW



Lumax Industries Ltd, India 750kW



Georgia-Boviet Woodland, U.S.A 1.6MW



Urussanga city Santa Catarina, Brazil 200kW



DEPSA, Mexico 3.4MW



United States Postal Service (USPS) LA P&DC Facility, U.S.A 13MW



New Wigan Bus Station, UK 25kW



Igrejinha, Brazil 6kW



Grundfos Rooftop, UK 123.4kW



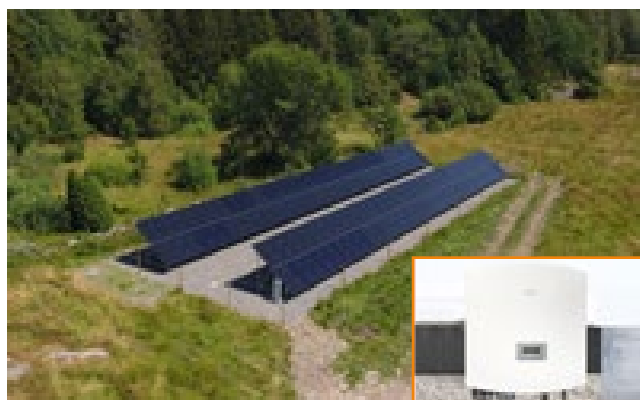
Adel Vokes Road, Australia 65.85kW



Monash, Australia 1MW



Teheran, Iran 50kW



Västra Götaland, Sweden 43.31kW



RSWM, India 3.6MW



Valinhos, Brazil 5kW



Brazil 2kW



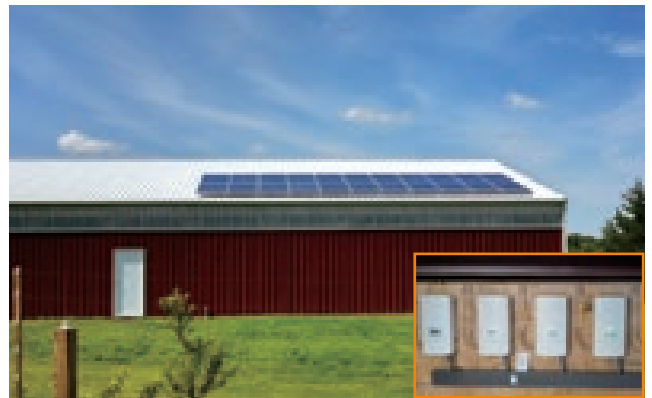
Jamaica 20kW



Costa Rica 47kW



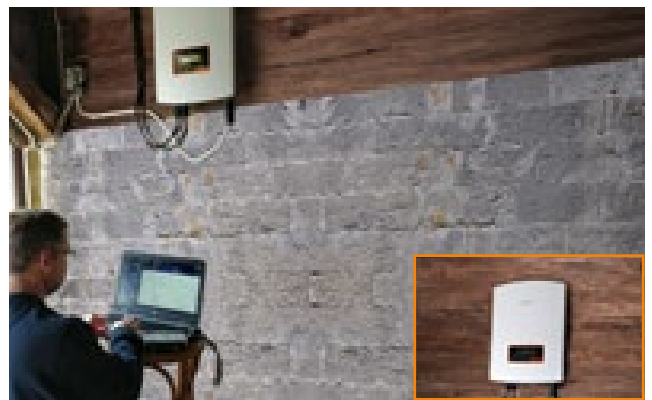
Joaquim Tavola, Portugal 15kW



Kansas, U.S.A 25kW



California, U.S.A 15kW



Sweden 6kW

Installed On the Eiffel Tower



Shanghai Volkswagen Photovoltaic solar carport, China 55MW



Case study



Zhejiang Changer, China 13MW



Zhejiang HZW 470kW



Zhejiang HONGXING 380kW



Zhejiang PINGHU Bus Station 472kW



Zhejiang CJYIN 1.02MW



Shenzhen Jiangnan Times Building 600kW



Shandong Rong Xiang 4.2MW



Shandong Guangxin Food 6.06MW



Tyco Electric, Panan Jinhua Zhejiang 1.5MW



Zhejiang-GAOTERUI 260kW



Zhejiang- Wanli Food 800kW



Ninghai AB hall, modern home plaza 1.53MW



Shandong YUELONG 3.5MW



Zhejiang Anboke 2MW



Changzhou Vaillant 2MW



Zhejiang SORJ 3.9MW



Hainan JiuLongGlass 1.7MW



Hebei Zhangjiakou poverty alleviation PV Plant 5.1MW



Liaoning Yingkou Jiuzhai PV plant 20MW



Shanxi Lvliang ZhongYang poverty alleviation PV Plant 10.3MW



Hebei Qinghuangdao poverty alleviation PV Plant 9.7MW



Shandong Leling poverty alleviation PV Plant 50kW



Shanxi Xiyang poverty alleviation PV Plant 7.2MW



Qinghai HuzhuBanyan poverty alleviation PV Plant 2MW



Hebei Qinghuangdao poverty alleviation PV Plant 5MW



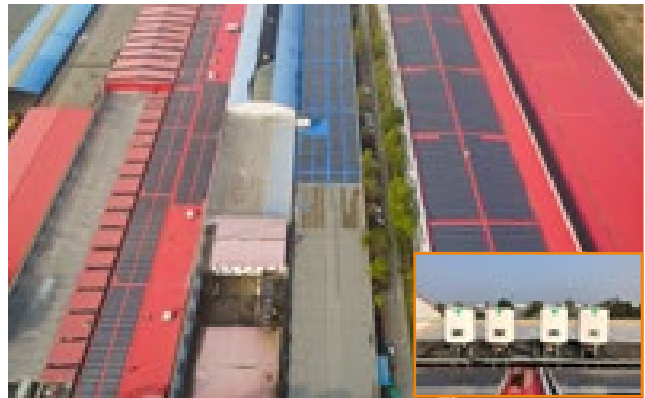
Jilin Heishui Fengman poverty alleviation PV Plant 5MW



Beijing Shunzhen Green Harbor's Plant 5.5MW



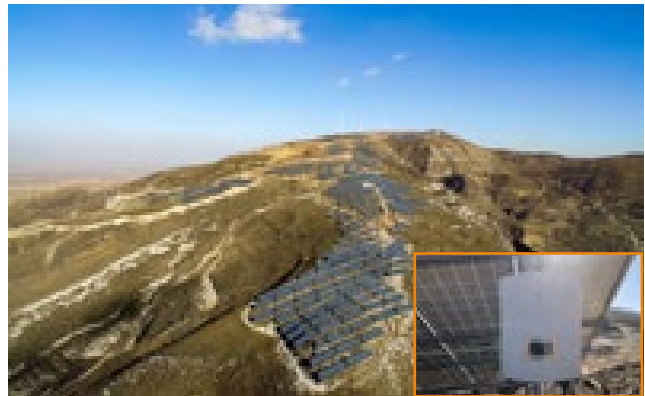
Jiangxi Ganzhou Hengjiang poverty alleviation PV Plant 8.45MW



Shandong Weifang Linqupoverty alleviation PV Plant 20MW



Hebei Baoding Fuping poverty alleviation PV Plant 6.6MW



Shanxi Xinzhou NingWu poverty alleviation PV Plant 18.11MW



Shanxi Xinzhou FanShi poverty alleviation PV Plant 8MW



Shanxi Yizhou Jingle poverty alleviation PV Plant 36.3MW







Hebei Zhangbei Agricultural-photovoltaic hybrid PV plant 50MW



Shanxi Guangling PV plant 1.47MW



Huaneng Yimin surface mine PV plant 20MW



Jiangxi Ganzhou PV Plant 3.5MW



Inner Mongolia Khobqi Desert 20MW



Zhejiang Hangbu Agricultural-photovoltaic hybrid PV plant 30MW



Hubei Guanyin Agricultural-photovoltaic hybrid PV plant 20MW



Quzhou Qinghu Agricultural-photovoltaic hybrid PV plant 20MW



Zhejiang Jinyun Beitai 21MW



Zhejiang Zhuxi 25MW



Zhejiang Dajie Agricultural-photovoltaic hybrid PV plant 3MW



Zhejiang Longyou Agricultural-photovoltaic hybrid PV plant 25MW



Inner Mongolia Khobqi Desert 336kW



Liaoning Gaizhou Jiuzhai PV plant 20MW



Zhejiang Jiangshan Xintang Reservoir 836kW



Liaoning Jiuzhai Gaizhou PV plant 20MW



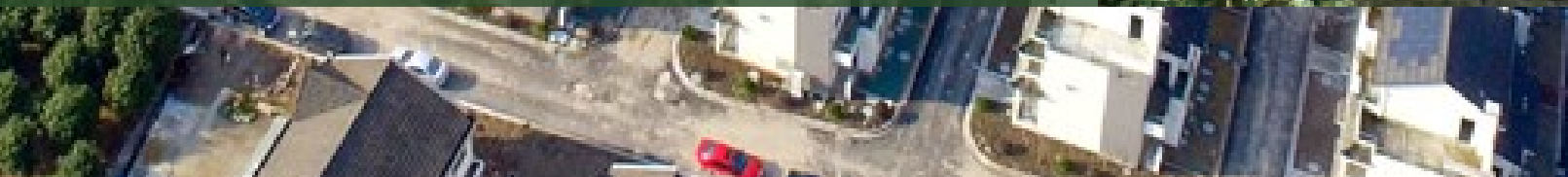
Shanxi Lvliang ZhongYang Jiajingtiancheng PV rooftop 450kW



Heilongjiang PV plant



The largest photovoltaic building integration village in Zhejiang Province, China 300kW





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