

Stock Code:300763.SZ



Global string inverter manufacturer



Ginlong Technologies Co., Ltd.

Quality Experience Reliability



Solis Manufacturing and R&D Base in 2021

15 years

Founded in 2005

11 years

US since 2009

1 years

Went public in 2019



Top-of-range Lifespan Projection in String Inverter Category as Validated by DNV·GL.



COMPANY PROFILE

Established in 2005, Solis (Stock Code: 300763.SZ) 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.

20 GW+

Capacity (2021 Q2)

\$294M

Total Assets

1500+

Global Employees

200+

Engineers



**Wood
Mackenzie**

Single-phase string inverters ranked 2nd in global market shares.

Three-phase string inverters ranked 4th in global market shares.

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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
2010	Second Asian inverter certified to AS4777/AS 3100
2011	Ginlong hosted IEC61400 second annual meeting
2015	Ginlong inverter installed on the 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 & 2020	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



Vertical-integrated Manufacturing for Quality and Reliability



We manage every aspect of manufacturing with state-of-the-art automation, fastidious inspections and rigorous testing, ensuring industry-leading quality and reliability. Our in-house Surface mount technology circuit board production is unique in the industry, guaranteeing quality and streamlining product innovation in response to customer needs.

Best-in-Class Component Partners

Capacitors, Inductors



Connectors, Switching Devices



Materials, IC Categories



Power Devices, Sensors



Global Sales and Service Infrastructure



Service Offices

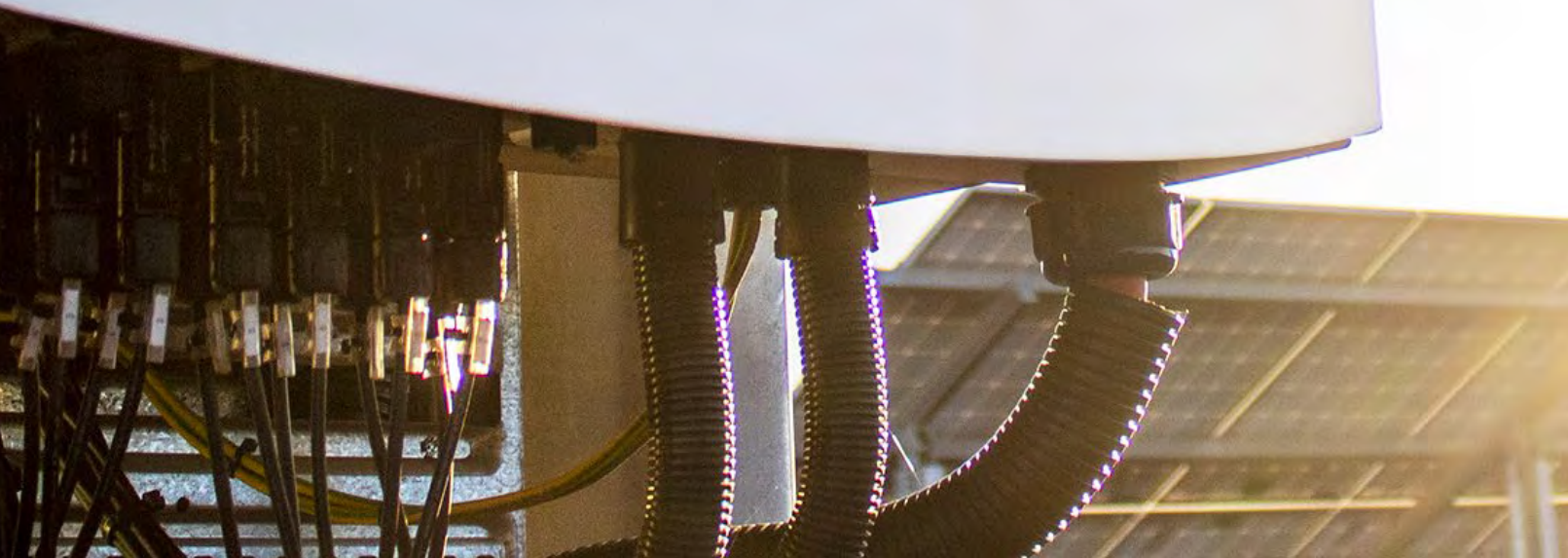
- U.S.A
- China
- South Africa
- Spain
- Mexico
- Vietnam
- Australia
- UK
- Korea
- Netherlands
- India
- Germany
- Romania
- Sweden
- Brazil
- Turkey
- Myanmar

Expert Local Customer Service

- Unmatched experience across a global network
- Reliable local services
- Global technical support available



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Solis-1P(3.6-5)K-4G-US

Solis Single Phase US Inverters



Features:

- ▶ Max. efficiency 98.1% (CEC efficiency 97.3%)
- ▶ CA Rule 21 compliant and UL 1741 SA Certified
- ▶ Sunspec communication protocol with optional cellular and Wi-Fi interface
- ▶ Built-in Sunspec certified module level rapid shutdown transmitter
- ▶ Optional built-in revenue grade meter, ANSI C12.20-2010 compliance
- ▶ Fast and dynamic MPPTs and industry-leading DC voltage range
- ▶ Integrated Arc Fault Circuit Interrupt (AFCI)
- ▶ 10 years standard warranty with extension options

Model:

Solis-1P3.6K-4G-US
Solis-1P5K-4G-US



Ordering: Solis-1P(3.6-5)K-4G-US-AFCI

- **SPRT** (SunSpec MLRSD Transmitter)
- **RGM-SPRT** (Revenue Grade Meter and Transmitter)
- **RSS** (Tigo MLRSD Transmitter)
- **RGM-RSS** (Revenue Grade Meter and Tigo MLRSD Transmitter)

Datasheet

Model Name	Solis-1P3.6K-4G-US	Solis-1P5K-4G-US
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Input DC

Recommended max. PV power	4 kW	6 kW
Max. input voltage	600 V	
Rated voltage	330 V	
Start-up voltage	120 V	
MPPT voltage range	90-520 V	
Max. input current	11 A / 11 A	
Max. short circuit current	17.2 A / 17.2 A	
MPPT number/Max. input strings number	2/2	

Output AC

Rated output power	3.6 kW	5 kW
Max. apparent output power	3.6 kVA	5 kVA
Max. output power	3.6 kW	5 kW
Rated grid voltage	1Φ/PE, 240 V / 208 V	
Rated grid frequency	60 Hz	
Max. output current for 240V grid	15.0 A	20.8 A
Max. output current for 208V grid	17.3 A	24.0 A
Power Factor	>0.99 (0.8 leading - 0.8 lagging)	
THDi	<3%	

Efficiency

Max. efficiency	97.8%	98.1%
CEC efficiency	97.1%	97.3%

Protection

DC reverse-polarity protection	Yes
Ground fault monitoring	Yes
Anti-islanding protection	Yes
Integrated AFCI (DC arc-fault circuit protection)	Yes
Integrated DC switch	Yes
Rapid shutdown	Built-In Certified Sunspec or Tigo Transmitter
Compliant MLRSD Products	TS4-A-F/2F, RSD-PFK, APSmart RSD-S-PLC

General Data

Dimensions (W*H*D)	13.9*31.9*6.5 in (353*810*165 mm)
Weight	33.1 lbs (15 kgs)
Topology	Transformerless
Self consumption (night)	<1 W
Relative humidity	0-100%
Operating ambient temperature range	-13°F to 140°F (-25°C to 60°C)
Storage environment	-13°F to 176°F (-25°C to 80°C)
Ingress protection	TYPE 4X
Cooling concept	Natural convection
Max. operation altitude	13,120 ft (4000 m)
Compliance	UL 1741, IEEE 1547, UL 1699B, UL 1998, FCC, UL 1741SA, California Rule 21, SRD-UL1741

Features

DC connection	1 knockout for 3/4" conduit at bottom, side and back, Screw clamp terminal
AC connection	1 knockout for 3/4" conduit at bottom, side and back, OT terminal
Display	LCD
Communication	RS485, Optional: Cellular, Wi-Fi

Solis-1P(6-10)K-4G-US

Solis Single Phase US Inverters



Features:

- ▶ Max. efficiency 97.8% (CEC efficiency 97.5%)
- ▶ CA Rule 21 compliant and UL 1741 SA Certified
- ▶ protocol with optional cellular and Wi-Fi interface
- ▶ Built-in Sunspec certified module level rapid shutdown transmitter
- ▶ Optional Built-in Revenue Grade Meter, ANSI C12.20-2010 compliance
- ▶ Industry-leading 3 and 4 MPPT designs
- ▶ Integrated Arc Fault Circuit Interrupt (AFCI)
- ▶ 10 years standard warranty with extension options

Model:

- Solis-1P6K-4G-US
- Solis-1P7.6K-4G-US
- Solis-1P9K-4G-US
- Solis-1P10K-4G-US



Ordering: Solis-1P(6-10)K-4G-US-AFCI

- **SPRT** (SunSpec MLRSD Transmitter)
- **RGM-SPRT** (Revenue Grade Meter and Transmitter)
- **RSS** (Tigo MLRSD Transmitter)
- **RGM-RSS** (Revenue Grade Meter and Tigo MLRSD Transmitter)

Datasheet

Model Name	Solis-1P6K-4G-US	Solis-1P7.6K-4G-US	Solis-1P9K-4G-US	Solis-1P10K-4G-US
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Input DC

Recommended max. PV power	7.2 kW	9.1 kW	10.8 kW	11.5 kW
Max. input voltage	600 V			
Rated voltage	330 V			
Start-up voltage	120 V			
MPPT voltage range	100 - 500 V			
Max. input current	10 A / 10 A / 10 A		4*10 A	
Max. short circuit current	15.6 A / 15.6 A / 15.6 A		4*15.6 A	
MPPT number/Max. input strings number	3/3		4/4	

Output AC

Rated output power	6 kW	7.6 kW	9 kW	10 kW
Max. apparent output power	6 kVA	7.6 kVA	9 kVA	10 kVA
Max. output power	6 kW	7.6 kW	9 kW	10 kW
Rated grid voltage	1Φ/PE, 240 V / 208 V			
Rated grid frequency	60 Hz			
Max. output current for 240 V grid	25 A	31.7 A	37.5 A	41.7 A
Max. output current for 208 V grid	28.8 A	36.5 A	43.3 A	43.3 A
Power Factor	>0.99 (0.8 leading - 0.8 lagging)			
THDi	<3%			

Efficiency

Max. efficiency	97.8%
CEC efficiency	97.5%

Protection

DC reverse-polarity protection	Yes
Ground fault monitoring	Yes
Anti-islanding protection	Yes
Integrated AFCI (DC arc-fault circuit protection)	Yes
Integrated DC switch	Yes
Rapid shutdown	Built-In Certified Sunspec or Tigo Transmitter
Compliant MLRSD Products	TS4-A-F/2F, RSD-PFK, APSmart RSD-S-PLC

General Data

Dimensions (W*H*D)	13.1*28.8*9.8 in (333*732*249 mm)
Weight	45.2 lbs (20.5 kgs) / 45.6 lbs (20.7 kgs)
Topology	Transformerless
Self consumption (night)	<1 W
Relative humidity	0-100%
Operating ambient temperature range	-13°F to 140°F (-25°C to 60°C)
Storage environment	-13°F to 176°F (-25°C to 80°C)
Ingress protection	TYPE 4X
Cooling concept	Natural convection
Max. operation altitude	13,120 ft (4000 m)
Compliance	UL 1741, IEEE 1547, UL 1699B, UL 1998, FCC, UL 1741SA, California Rule 21, SRD-UL1741

Features

DC connection	2 knockout for 1"conduit at bottom, 4 knockout for 3/4"conduit at side and back, Screw clamp terminal
AC connection	2 knockout for 1"conduit at bottom, 4 knockout for 3/4"conduit at side and back, OT terminal
Display	LCD
Communication	RS485, Optional: Cellular, Wi-Fi

Solis-(25-40)K-US

Solis Three Phase US Inverters



Features:

- ▶ Max. efficiency 98.6% (CEC efficiency 98.3%) with ultra-low start-up voltage
- ▶ Compact and lightweight design inside a corrosion-resistant NEMA 4X enclosure
- ▶ Designed for all commercial, industrial, and utility-scale applications
- ▶ Transformer-less three phase design with 480 Vac output
- ▶ Wide voltage range and low startup voltage
- ▶ Industry-leading 4 MPPT designs with fast (<5 sec) MPPT response times
- ▶ Integrated Arc Fault Circuit Interrupt (AFCI) option
- ▶ RS-485 Modbus communication protocol with Wi-Fi interface
- ▶ 7" LCD color display
- ▶ Web-based data monitoring with downloadable Solis Mobile App
- ▶ 10 years standard warranty with extension options



Ordering: Solis-(25-40K)-US

- LSW-SPRT (SunSpec MLRSD Transmitter)
- LSW-RSS (Tigo MLRSD Transmitter)
- SW (No Transmitter)

Datasheet

Model Name	Solis-25K-US-XX*	Solis-30K-US-XX*	Solis-36K-US-XX*	Solis-40K-US-XX*
Input DC				
Recommended max. PV power	37.5 kW	45 kW	54 kW	54 kW
Max. input voltage	1000 V			
Rated voltage	700 V			
Start-up voltage	350 V			
MPPT voltage range	200 - 800 V			
Max. input current	4*18 A			
Max. short circuit current	4*28.1 A			
MPPT number/Max. input strings number	4 / 8			
Output AC				
Rated output power	25 kW	30 kW	36 kW	40 kW
Max. apparent output power	25 kVA	30 kVA	36 kVA	40 kVA
Max. output power	25 kW	30 kW	36 kW	40 kW
Rated grid voltage	3Φ/PE, 480 V			
Rated grid frequency	60 Hz			
Max. output current	30.1 A	36.1 A	43.3 A	48.1 A
Power Factor	>0.99 (0.8 leading - 0.8 lagging)			
THDi	<3%			
Efficiency				
Max. efficiency	98.6%			
CEC efficiency	98.3%			
Protection				
DC reverse-polarity protection	Yes			
Ground fault monitoring	Yes			
Anti-islanding protection	Yes			
Integrated AFCI (DC arc-fault circuit protection)	Yes			
Integrated DC switch	Yes			
Rapid shutdown	Yes			
General Data				
Dimensions (W*H*D)	SW: 21.1*38.0*14.1 in (535*966*358 mm), LSW: 21.1*45.9*14.1 in (535*1167*358 mm)			
Weight (Inverter/Wiring box)	SW: 127 lbs (57.7 kgs) / 22.8 lbs (10.3 kgs), LSW: 127 lbs (57.7 kgs)/26.5 lbs (12kgs)			
Topology	Transformerless			
Self consumption (night)	<1 W			
Relative humidity	0-100%			
Operating ambient temperature range	-13 °F to 140 °F (-25°C to 60°C)			
Storage environment	-13 °F to 176 °F (-25°C to 80°C)			
Ingress protection	TYPE 4X			
Cooling concept	Natural convection			
Max. operation altitude	13,120 ft (4000 m)			
Compliance	UL 1741, IEEE 1547, UL 1699B, UL 1998, FCC, UL 1741SA, California Rule 21, SRD-UL1741			
Features				
DC connection	4 knockout for 1.5" conduit at bottom and side, Fuse screw terminal (Copper 12-6AWG)			
AC connection	4 knockout for 1.5" conduit at bottom and side, terminal block, OT terminal (Copper or aluminum 8-2AWG), Aluminum requires bi-metallic compatible terminal			
Display	7.0"LCD color screen display			
Communication	Modbus RTU (Sunspec compliant), RS485, Optional: Cellular, Wi-Fi			

* **Ordering guidelines:** Determine the basic model from above and add your desired features as described on PG1
 Ex: Solis-40K-US-F-LSW-SPRT, (inverter with Fan and internal Sunspec transmitter)

Solis-(50-66)K-US-F

Solis Three Phase US Inverters



Features:

- ▶ Max. efficiency 98.8% (CEC efficiency 98.4%) with ultra-low start up voltage
- ▶ Compact and lightweight design inside a corrosion-resistant NEMA 4X enclosure
- ▶ Designed for all commercial, industrial, and utility-scale applications
- ▶ Transformer-less three phase design with 480 Vac output
- ▶ Wide voltage range and low startup voltage
- ▶ Industry-leading 4 MPPT designs with fast (<5 sec.) MPPT response times
- ▶ Integrated Arc Fault Circuit Interrupt (AFCI) option
- ▶ RS-485 Modbus communication protocol with Wi-Fi interface
- ▶ Web-based data monitoring with downloadable Solis Mobile App
- ▶ 10 years standard warranty with extension options



Ordering: Solis-(50-66K)-US-F

- LSW-SPRT (SunSpec MLRSD Transmitter)
- LSW-RSS (Tigo MLRSD Transmitter)
- SW (No Transmitter)

Datasheet

Model Name	Solis-50K-US-F-XX*	Solis-60K-US-F-XX*	Solis-66K-US-F-XX*
Input DC			
Recommended max. PV power	75 kW	90 kW	90 kW
Max. input voltage	1000 V		
Rated voltage	720 V		
Start-up voltage	200 V		
MPPT voltage range	200-850 V		
Max. input current	4*28.5 A		
Max. short circuit current	4*55 A		
MPPT number/Max. input strings number	4/16		
Output AC			
Rated output power	50 kW	60 kW	66 kW
Max. apparent output power	50 kVA	60 kVA	66 kVA
Max. output power	50 kW	60 kW	66 kW
Rated grid voltage	3Φ/PE, 480 V		
Rated grid frequency	60 Hz		
Max. output current	60.2 A	72.2 A	79.4 A
Power Factor	>0.99 (0.8 leading - 0.8 lagging)		
THDi	<3%		
Efficiency			
Max. efficiency	98.8%		
CEC efficiency	98.4%		
Protection			
DC reverse-polarity protection	Yes		
Ground fault monitoring	Yes		
Anti-islanding protection	Yes		
Integrated AFCI (DC arc-fault circuit protection)	Yes		
Integrated DC switch	Yes		
Rapid shutdown	Yes		
General Data			
Dimensions (W*H*D)	SW: 24.9*40.4*14.7 in (633*1027*374 mm), LSW: 24.9*47.5*14.7 in (633*1206*374 mm)		
Weight (inverter/wiring box)	SW: 147 lbs (66.7 kgs)/35.4 lbs (16 kgs), LSW: 147 lbs (66.7 kgs)/43.4 lbs (19.7 kgs)		
Topology	Transformerless		
Self consumption (night)	<1 W		
Relative humidity	0-100%		
Operating ambient temperature range	-13°F to 140°F (-25°C to 60°C)		
Storage environment	-13°F to 176°F (-25°C to 80°C)		
Ingress protection	TYPE 4X		
Cooling concept	Intelligent redundant fan-cooling		
Max. operation altitude	13,120 ft (4000 m)		
Compliance	UL 1741, IEEE 1547, UL 1699B, UL 1998, FCC, UL 1741SA, California Rule 21, SRD-UL1741, CAN/CSA C22.2 107.1-1		
Features			
DC connection	4 knockout for 2" conduit at bottom and side, Fuse screw terminal (Copper 12-6AWG)		
AC connection	4 knockout for 2" conduit at bottom and side, OT terminal (Copper or aluminum 8-2AWG) Aluminum requires bi-metallic compatible terminal		
Display	LCD		
Communication	Modbus RTU (Sunspec compliant), RS485, Optional: Cellular, Wi-Fi		

Solis-(75-100)K-5G-US

Solis Three Phase US Inverters



Model:

480V: Solis-75K-5G-US Solis-80K-5G-US
 Solis-90K-5G-US Solis-100K-5G-US

Ordering: Solis-(75-100)K-5G-US

- SPRT (SunSpec MLRSD Transmitter)
- RSS (Tigo MLRSD Transmitter)



Efficient

- ▶ 8/9/10 MPPTs, max. efficiency 99% (CEC efficiency 98.5%)
- ▶ > 150% DC/AC ratio
- ▶ Compatible with bifacial modules



Safe

- ▶ IP66
- ▶ CA Rule 21 compliant and UL 1741 SA Certified
- ▶ Built-in PID recovery for better module performance (optional)
- ▶ Globally recognised branded component for longer life



Smart

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



Economic

- ▶ Support "Y" type connection in DC side
- ▶ Support aluminium wire access to reduce cost

Datasheet

Model Name	Solis-75K-5G-US	Solis-80K-5G-US	Solis-90K-5G-US	Solis-100K-5G-US
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Input DC

Max. input voltage	1000 V			
Rated voltage	600 V			
Start-up voltage	195 V			
MPPT voltage range	180-1000 V			
Max. input current	8*26 A	9*26 A	10*26 A	
Max. short circuit current	8*40 A	9*40 A	10*40 A	
MPPT number/Max. input strings number	8/16	9/18	10/20	

Output AC

Rated output power	75 kW	80 kW	90 kW	100 kW
Max. apparent output power	75 kVA	80 kVA	90 kVA	100 kVA
Max. output power	75 kW	80 kW	90 kW	100 kW
Rated grid voltage	3Φ/PE, 480 V			
Rated grid frequency	60 Hz			
Max. output current	90.2 A	96.2 A	108.3 A	120.3 A
Power Factor	>0.99 (0.8 leading - 0.8 lagging)			
THDi	<3%			

Efficiency

Max. efficiency	98.7%		99.0%	
CEC efficiency	98.3%		98.5%	

Protection

DC reverse-polarity protection	Yes
Ground fault monitoring	Yes
Anti-islanding protection	Yes
Integrated AFCI (DC arc-fault circuit protection)	Yes
Strings monitoring	Yes
I/V Curve scanning	Yes
Integrated PID recovery	Optional
Rapid shutdown	Yes
AC switch	Yes

General Data

Dimensions(W*H*D)	41.9*22.3*13.6 in (1065*567*344.5 mm)
Weight	187 lbs (85 kgs)
Topology	Transformerless
Self consumption (night)	<2 W
Relative humidity	0-100%
Operating ambient temperature range	-13°F~140°F (-25°C~60°C)
Storage environment	-40°F~176°F (-40°C~80°C)
Ingress protection	TYPE 4X
Cooling concept	Intelligent redundant fan-cooling
Max. operation altitude	13,120 ft (4000 m)
Compliance	UL 1741, IEEE 1547, UL 1699B, UL 1998, FCC, UL 1741SA, California Rule 21

Features

DC connection	MC4 connector
AC connection	OT Terminal (max 185 mm ²)
Display	LCD
Communication	RS485, Ethernet, Optional: Wi-Fi, Cellular

Solis-125K-EHV-5G

Solis Three Phase US Inverters



Model:

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



Efficient

- ▶ Max. efficiency 99.1% (CEC efficiency 98.6%)
- ▶ > 150% DC/AC ratio
- ▶ Compatible with bifacial modules



Safe

- ▶ Built-in PID recovery for better module performance
- ▶ CA Rule 21 compliant and UL 1741 SA Certified
- ▶ Equipped with AC/DC switch, safe and convenient maintenance
- ▶ Globally recognised branded component for longer life



Smart

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



Economic

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

Datasheet

Model Name	Solis-125K-EHV-5G
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Input DC

Max. input voltage	1500 V
Rated voltage	950 V
Start-up voltage	900 V
MPPT voltage range	860-1450 V
Max. input current	150 A
Max. short circuit current	300 A
MPPT number/Max. input strings number	1/20

Output AC

Rated output power	125 kW
Max. apparent output power	125 kVA
Max. output power	125 kW
Rated grid voltage	3Φ/PE, 600 V
Rated grid frequency	60 Hz
Max. output current	120.3 A
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)	46.3*28.1*12.4 in (1178*713.5*315 mm)
Weight	185.2 lbs (84 kgs)
Topology	Transformerless
Self consumption (night)	<3 W
Relative humidity	0-100%
Operating ambient temperature range	-13°F to 140°F (-25°C to 60°C)
Storage environment	-13°F to 176°F (-25°C to 80°C)
Ingress protection	TYPE 4X
Cooling concept	Intelligent redundant fan-cooling
Max. operation altitude	13,120 ft (4000 m)
Compliance	UL 1741, UL 1741SA, UL 1998, IEEE 1547, FCC Part 15 (Class A & B), CAN/CSA C22.2 107.1-16, California Rule 21 Phaes II & III

Features

DC connection	MC4 connector
AC connection	OT terminal (max. 185 mm ²)
Display	LCD
Communication	RS485, Optional: Wi-Fi, Cellular, Ethernet

Solis-125K1-EHV-5G

Solis Three Phase US Inverters



Model:

600V: Solis-125K1-EHV-5G



Efficient

- ▶ Max. efficiency 99.1% (CEC efficiency 98.6%)
- ▶ Adapt to various combiner boxes, support high DC/AC ratio
- ▶ Adapt to various PV modules, also support 182mm, 210mm large PV module



Smart

- ▶ Support the monitoring of combiner box and inverter, realize string level monitoring
- ▶ Remote firmware upgrade with simple operation



Safe

- ▶ Built-in PID recovery for better module performance (optional)
- ▶ NEMA 4X protection
- ▶ Type II SPD for both DC and AC
- ▶ Intelligent redundant fan-cooling



Economic

- ▶ Max. DC input voltage: 1500V
- ▶ Supports aluminium wire access to reduce cost
- ▶ Easy installation, suitable for PV station upgrade

Datasheet

Model Name	Solis-125K1-EHV-5G
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Input DC

Max. input voltage	1500 V
Rated voltage	950 V
Start-up voltage	900 V
MPPT voltage range	860-1450 V
Max. input current	150 A
Max. short circuit current	300 A
MPPT number/Max. input strings number	1/1

Output AC

Rated output power	125 kW
Max. apparent output power	125 kVA
Max. output power	125 kW
Rated grid voltage	3Φ/PE, 600 V
Rated grid frequency	60 Hz
Max. output current	120 A
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
Ground fault monitoring	Yes
Surge protection	DC Type II / AC Type II
Anti-islanding protection	Yes
Strings monitoring	Yes
Integrated PID recovery	Optional
Integrated DC switch	Yes
Integrated AC switch	Yes

General Data

Dimensions (W*H*D)	37.1*28.9*12.2 in (942*733*311mm)
Weight	170 lbs (77 kg)
Topology	Transformerless
Self consumption (night)	<3 W (without anti-PID)
Operating ambient temperature range	-13°F to 140°F (-25°C to 60°C)
Storage environment	-13°F to 176°F (-25°C to 80°C)
Relative humidity	0-100%
Ingress protection	NEMA4X
Cooling concept	Intelligent redundant fan-cooling
Max. operation altitude	13,120 ft (4000 m)
Compliance	UL 1741, UL 1741SA, Rule 21, UL 1998, UL 1699B, IEEE 1547, FCC Part 15 (Class A & B), CAN/CSA C22.2 107.1-1, California Rule 21 phase II&III

Features

DC connection	OT terminal (max. 185 mm ²)
AC connection	OT terminal (max. 185 mm ²)
Display	LCD
Communication	RS485, Ethernet, Optional: PLC

Solis-(185-255)K-EHV-5G-US

Solis Three Phase US Inverters



Model:

600V: Solis-185K-EHV-5G-US
Solis-185K-EHV-5G-US-PLUS

800V: Solis-255K-EHV-5G-US
Solis-255K-EHV-5G-US-PLUS



Efficient

- ▶ 12/14 MPPTs, max. efficiency 99% (CEC efficiency 98.5%)
- ▶ 200% DC/AC ratio
- ▶ High power tracking density 60MPPT/MW
- ▶ Compatible with 500W+ bifacial modules



Smart

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



Safe

- ▶ IP66
- ▶ CA Rule 21 compliant and UL 1741 SA Certified
- ▶ Built-in PID recovery for better module performance
- ▶ Fuse free design, safe and maintenance free
- ▶ Globally recognised branded component for longer life



Economic

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

Datasheet

Model Name	Solis-185K-EHV-5G-US	Solis-185K-EHV-5G-US-PLUS	Solis-255K-EHV-5G-US	Solis-255K-EHV-5G-US-PLUS
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Input DC

Max. input voltage	1500 V			
Rated voltage	950 V		1080 V	
Start-up voltage	600 V			
MPPT voltage range	580-1500 V			
Max. input current	14*26 A	12*30 A	14*26 A	12*30 A
Max. short circuit current	14*40 A	12*50 A	14*40 A	12*50 A
MPPT number/Max. input strings number	14/28	12/24	14/28	12/24

Output AC

Rated output power	185 kW	185 kW	255 kW	255 kW
Max. apparent output power	185 kVA	185 kVA	255 kVA	255 kVA
Max. output power	185 kW	185 kW	255 kW	255 kW
Rated grid voltage	3Φ/PE, 600 V		3Φ/PE, 800 V	
Rated grid frequency	60 Hz			
Max. output current	178.0 A		184.0 A	
Power Factor	>0.99 (0.8 leading - 0.8 lagging)			
THDi	<3%			

Efficiency

Max. efficiency	99.0%
CEC efficiency	98.5%

Protection

DC reverse-polarity protection	Yes
Ground fault monitoring	Yes
Anti-islanding protection	Yes
Strings monitoring	Yes
I/V Curve scanning	Yes
Integrated PID recovery	Yes

General Data

Dimensions (W*H*D)	46.1*30.3*15.1 in (1170*770*384 mm)
Weight	249.0 lbs (113 kgs)
Topology	Transformerless
Self consumption (night)	<2 W
Relative humidity	0-100%
Ambient operating temperature range	-13°F to 140°F (-25°C ~ +60°C)
Storage environment	-40°F to 176°F (-40°C to 80°C)
Ingress protection	TYPE 4X
Cooling concept	Intelligent redundant fan-cooling
Max. operation altitude	13,120 ft (4000 m)
Compliance	UL 1741, UL 1741SA, UL 1998, IEEE 1547, FCC Part 15 (Class A & B), CAN/CSA C22.2 107.1-1, California Rule 21 Phaes II & III

Features

DC connection	MC4 connector
AC connection	OT terminal (max. 300 mm ²)
Display	LCD
Communication	RS485, Optional: PLC

RHI-1P(5-10)K-HVES-5G

Solis PV Storage Inverter



Model:

RHI-1P5K-HVES-5G RHI-1P6K-HVES-5G RHI-1P7.6K-HVES-5G
 RHI-1P9K-HVES-5G RHI-1P10K-HVES-5G

Features:

- ▶ Top-of-class 98% efficiency (CEC efficiency 97.5%)
- ▶ Dynamic MPPTs (2 MPPTs w/ 4 DC inputs)
- ▶ 3 operating modes: self-consumption; time-of-use; off-grid backup
- ▶ Compatible with LG and BYD High Voltage Li-Ion batteries
- ▶ High DC to AC ratio of 1.4
- ▶ Rule 21 and HECO Compliant
- ▶ Built-in Sunspec MLRSD signal transmitter
- ▶ Ready for NEC 2017-2020
- ▶ Sealed enclosure with built-in AC/DC wiring box and ATS
- ▶ Large color LCD for easy programming
- ▶ 24-hour intelligent energy management system



Ordering: RHI-1P(5-10)K-HVES-5G-DC-Meter

- SPRT (SunSpec MLRSD Transmitter)
- RGM-SPRT (Revenue Grade Meter and Transmitter)
- RSS (Tigo MLRSD Transmitter)
- RGM-RSS (Revenue Grade Meter and Tigo MLRSD Transmitter)

Datasheet

Model Name	RHI-1P5K-HVES-5G	RHI-1P6K-HVES-5G	RHI-1P7.6K-HVES-5G	RHI-1P9K-HVES-5G	RHI-1P10K-HVES-5G
Input DC (PV side)					
Recommended max. PV power	7000 W	8400 W	10600 W	12600 W	14000 W
Max. input voltage	500 V				
Rated voltage	330 V				
Start-up voltage	120 V				
MPPT voltage range	90-450 V				
Max. input current	26 A / 26 A				
Max. short circuit current	40 A / 40 A				
MPPT number/Max. input strings number	2/4				
Battery					
Battery type	Li-ion				
Battery voltage range	120-500 V				
Battery capacity	50-2000 Ah				
Max. charge/discharge power	7 kW				
Max. charge/discharge current	20 A				
Communication	CAN/RS485				
Output AC (back-up)					
Rated output power	6 kW				
Max. apparent output power	7 kW				
Back-up switch time	<10 ms				
Back-up switch time with ATR	< 150 ms				
Rated output voltage (L-L)	240 V				
Rated output voltage (L-N)*	120 V				
Rated frequency	60 Hz				
Rated output current	25 A				
THDv (linear load)	<3%				
Input AC (Grid side)					
Input voltage range	190-280V				
Max. input current	48A				
Frequency range	59.5-60.5 Hz				
Output AC (grid side)					
Rated output power	5 kW	6 kW	7.6 kW	9 kW	10 kW
Max. apparent output power	5 kW	6 kW	7.6 kW	9 kW	10 kW
Operation phase	1Φ/PE				
Rated grid voltage	208 V / 240 V				
Rated grid frequency	60 Hz				
Rating grid output current	24 A / 21 A	28.8 A / 25 A	36.5 A / 31.7 A	43.3 A / 37.5 A	48 A / 41.7 A
Max. output current	40 A / 40 A	40 A / 40 A	40 A / 50 A	50 A / 50 A	60 A / 60 A
Power Factor	>0.99 (0.8 leading - 0.8 lagging)				
THDi	<3%				
Efficiency					
Max. efficiency	98%				
CEC efficiency	97.5%				
Protection					
Ground fault monitoring	Yes				
Integrated AFCI (DC arc-fault circuit protection)	Yes				
DC reverse-polarity protection	Yes				
Rapid Shutdown NEC 2017	Built-in MLRSD Sunspec or Tigo Transmitter				
Compliant MLRSD Products	TS4-A-F/2F, APSmart RSD-S-PLC				
Protection class/Over voltage category	I/II				
General data					
Dimensions (W*H*D)	20.2*28.1*8.18 in (539*717*250 mm)				
Weight	66.1 lbs (30 kgs)				
Topology	Transformerless				
Operating temperature range	-13°F to 140°F (-25°C to 60°C)				
Ingress protection	TYPE 4X				
Cooling concept	Natural convection				
Max. operation altitude	6,560 ft (2000 m)				
Grid connection standard	IEEE1547A, UL 1741 SA, ISO-NE, CA Rule 21 phase III				
Safety/EMC standard	UL 1741 CRD, IEEE 1547, UL 1699B, UL 1998, UL 9540, CAN/CSA C22.2.107.1-1, FCC, Part 15 Class B, SRD-UL1741				
Compatible batteries	BYD B-Box H5.0/7.5/10, LG Energy Solutions RESU10H Type R				
Features					
DC connection	2 knockout for 1" conduit at side and bottom, Fuse screw terminal				
AC connection	3 knockout for 1" conduit at side and bottom, Screw clamp terminal				
Display	7.0"LCD color screen display				
Communication	RS485, Optional: Wi-Fi, Cellular				

Accessories

Solis Data Logging Stick

Ginlong Monitoring System



Data Logging Stick
Wi-Fi



Data Logging Stick
LAN

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

Datasheet

Model Name	DLS-W(Wi-Fi)	DLS-L(LAN)
Max. number of inverters	1	
Inverter communication	4pin	
Remote communication	Wi-Fi (802.11 b/g/n)	Ethernet 10/100 Mbps
Communication rate	9600 bps (adjustable:1200-57600 bps)	
Frequency	2.412 GHz-2.484 GHz	/
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	/	/
Compatible with the GSM Phase 2/2 +	/	/
External antenna	I-PEX antenna	/
Data collection intervals	5 minutes (adjustable: 1-20 minutes)	
Data interface	RS485	
Preferences setting	Web Server	
Firmware updates	Wireless	Ethernet
Data access	Wi-Fi point-to-point/Remote server	Remote server
Data storage	8MBYTE FLASH	

Electrical

Input voltage	DC 5 V	DC 5 V (+/-5%)
Working current	200-300 mA	110-200 mA
Static power consumption	/	/
Max. instantaneous power consumption	/	/

Environmental

Operating temperature	-10 ~ +85°C	-10 ~ +85°C
Operating humidity	10%-90% Relative humidity, no condensa	
Storage temperature	-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
Weight	56 g	

Other

Certificates	FCC, CE	
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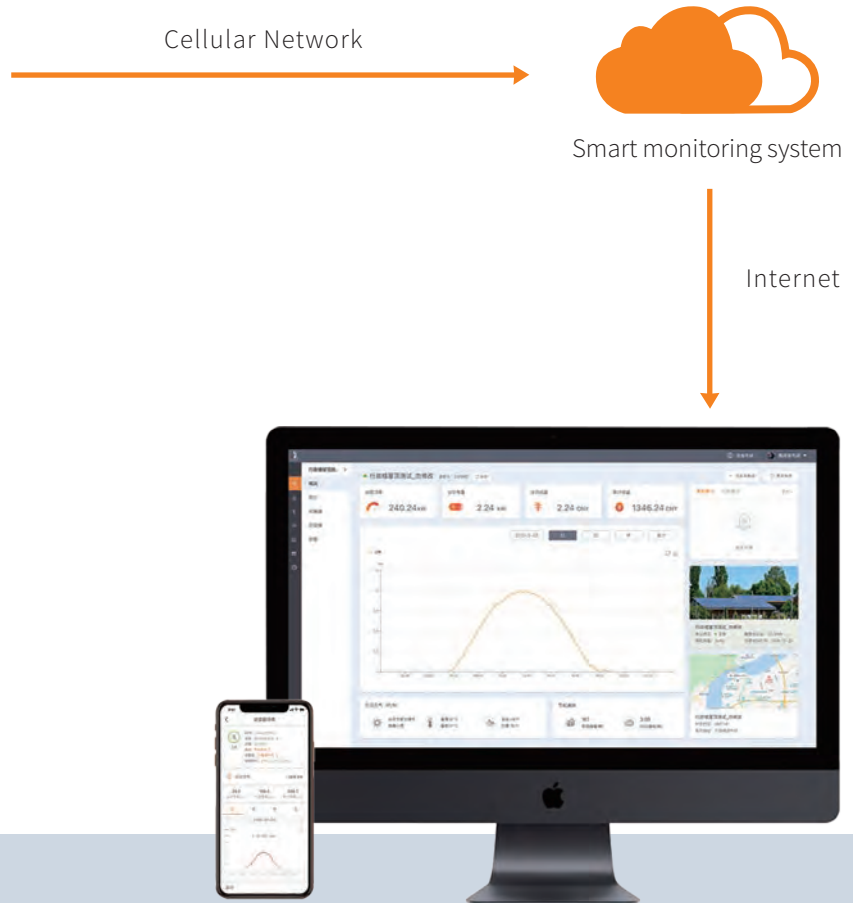
Accessories

Solis Cellular Data Logger

Ginlong Monitoring System



Data Logging Stick



Data Logging Stick 4G

Data Logging Stick: 4G

- Plug and Play
- Easy mobile scan feature to add to your monitoring account
- Free mobile and PC app for monitoring your solar from anywhere
- Advance network reach of 50 states including Hawaii

Datasheet

Model Name	Solis-Cellular	
Connected Inverters	1	
Serial Data Rate	9600 bps (Default) (1200-115200 bps)	
Data Collection	5 Min (Default) (1-15 Min)	
User Configuration	AT+ Command Set	
	Remote Server	
Bands	LTE FDD: B1/B3/B5/B7/B8/B20 LTE TDD: B38/B40/B41 WCDMA: B1/B5/B8 GSM/EDGE: B3/B8	
Frequency Range	704 MHz-960 MHz 1710 MHz -2690 MHz	
Transmit Power	Class 3 (23 dBm±2 dB) for LTE-TDD bands	Class 3 (23 dBm±2 dB) for LTE-FDD bands
	Class 3 (24 dBm+1/-3 dB) for WCDMA bands	Class 2 (24 dBm+1/-3 dB) for TD-SCDMA bands
	Class E2 (27 dBm±3 dB) for EDGE 850/900 MHz	Class E2 (26 dBm±3 dB) for EDGE 1800/1900 MHz
	Class 4 (33 dBm±2 dB) for GSM 900	
Antenna Options	External Stick	
Data Interface	RS 485	
Status Indicator	Inverter Connection	
	Server Connection	
	Cellular Network Connection	
Data Storage	Default 2 MBYTE FLASH	
SIM Card	Micro SIM card slot	

Electrical

Operating Voltage	DC 5 V-12 V
Max. Voltage	DC 15 V
Power Consumption	3.5 W

Environmental

Operating Temperature	-35 ~ +80°C
Operating Humidity	10-90% Relative, Non-Condensing
Storage Temperature	-45 ~ +90°C
Storage Humidity	<40%
Protection Class	IP 65

Physical

Dimensions(L*W*H)	1.85*1.61*6.3 in (47*41*160 mm)
Weight	130 g
External Interface	4-Pin Aviation Style Circular Connector
Firmware Upgrade	Remote

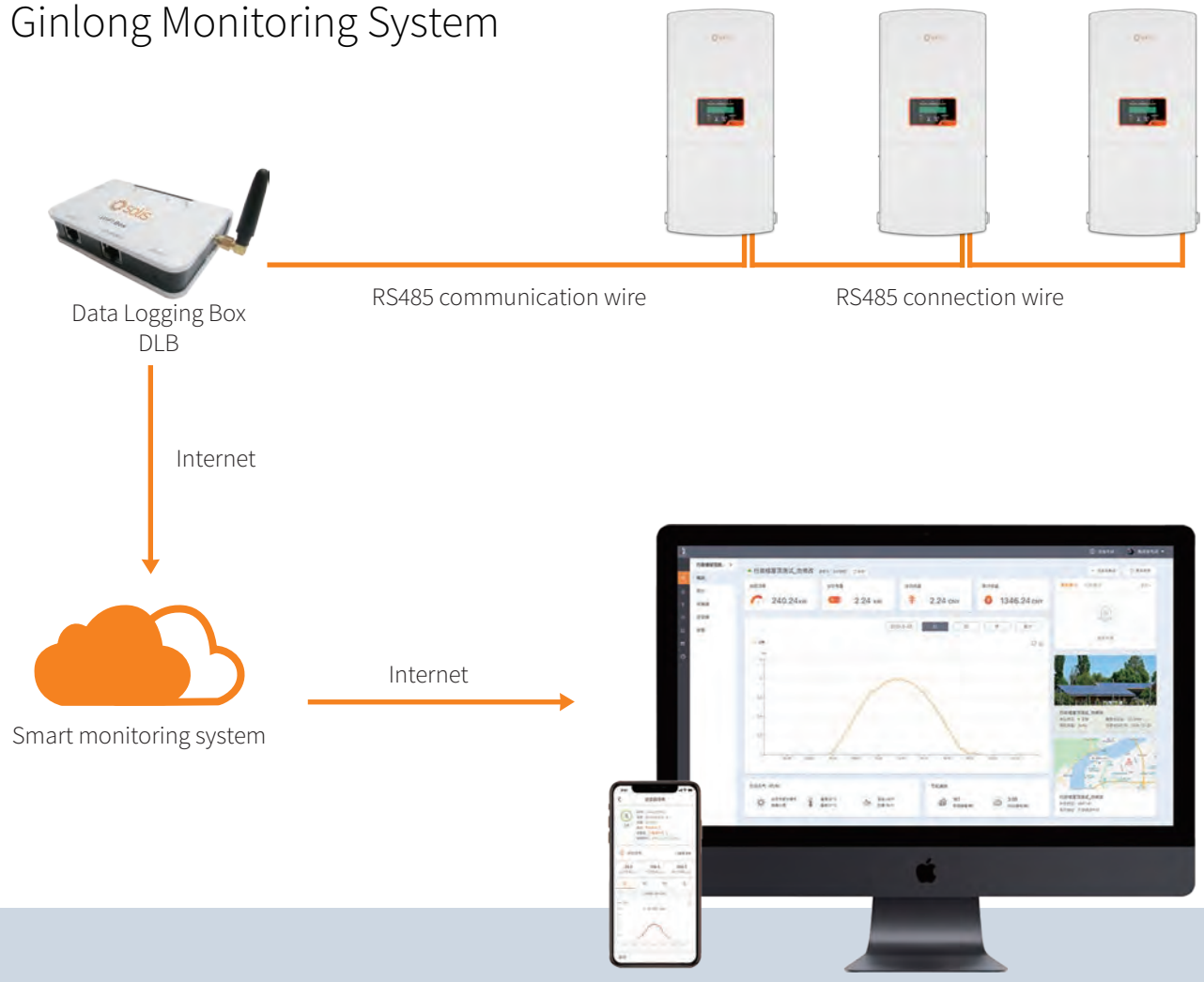
Other

Other parameters	Real Time Control, HTTP
Area	North America
Warranty	2 years
Certificates	CE, FCC, RoHS

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

Datasheet

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

Electrical

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

Environmental

Operating temperature	-10 to 65°C
Operating humidity	10%-90% relative humidity, no condensation
Storage temperature	-40 to 65°C
Storage humidity	<40%
Protection class	IP21

Physical

Dimensions (length*width*height)	110*86*26 mm
Weight (g)	108

Other

Warranty	2 years
Certificates	FCC, CE, RoHS



Case study





Mexico-Tamaulipas Carport, Mexico 5MW



ABP Ipswich, UK 1MW



Lincolnshire, UK 140kW



JTC Solar Farm, Singapore 5MW



Lumax Industries Ltd, India 750kW



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



Urussanga city Santa Catarina, Brazil 200kW



Dallas, USA 64kW



Punjab, India 150kW



Russia 4.2kW



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



USA 16kW



Kansas, U.S.A 25kW



California, U.S.A 15kW



UK 4.4kW

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



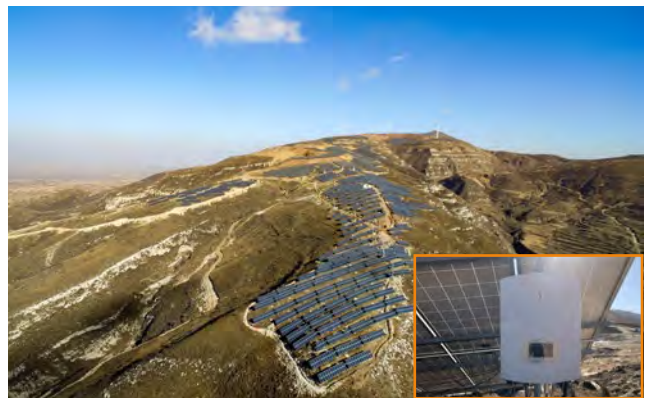
Jiangxi Ganzhou Hengjiang poverty alleviation PV Plant 8.45MW



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



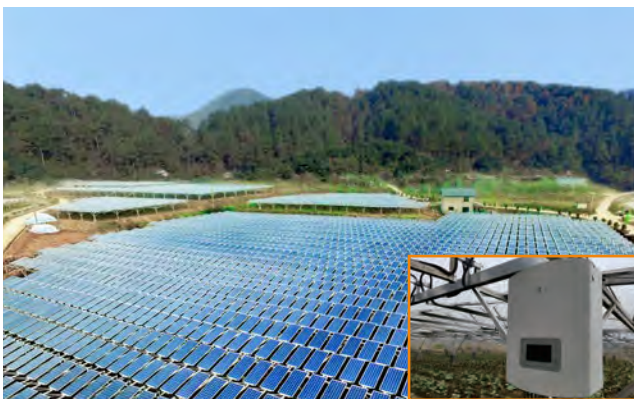
Quzhou Qinghu Agricultural-photovoltaic hybrid PV plant 20MW



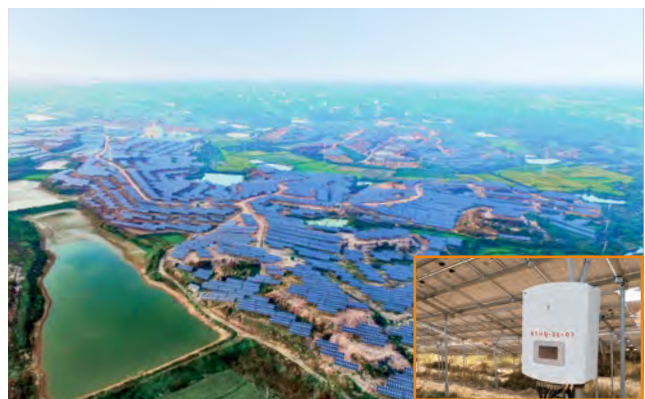
Zhejiang Jinyun Beitai 21MW



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



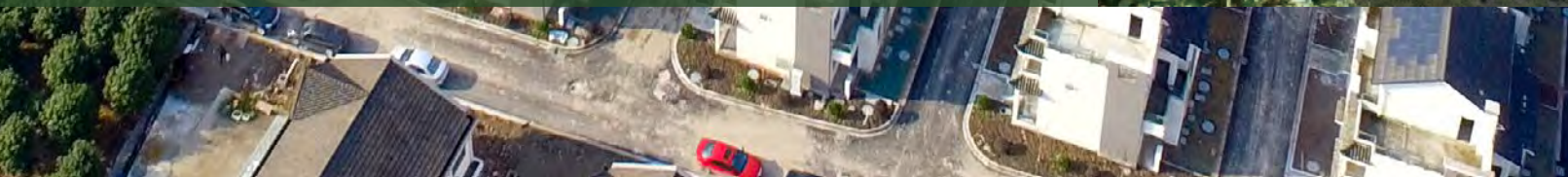
Shanxi Lvliang ZhongYang Jiajingtancheng PV rooftop 450kW



Heilongjiang PV plant



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





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