

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.

 solis



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

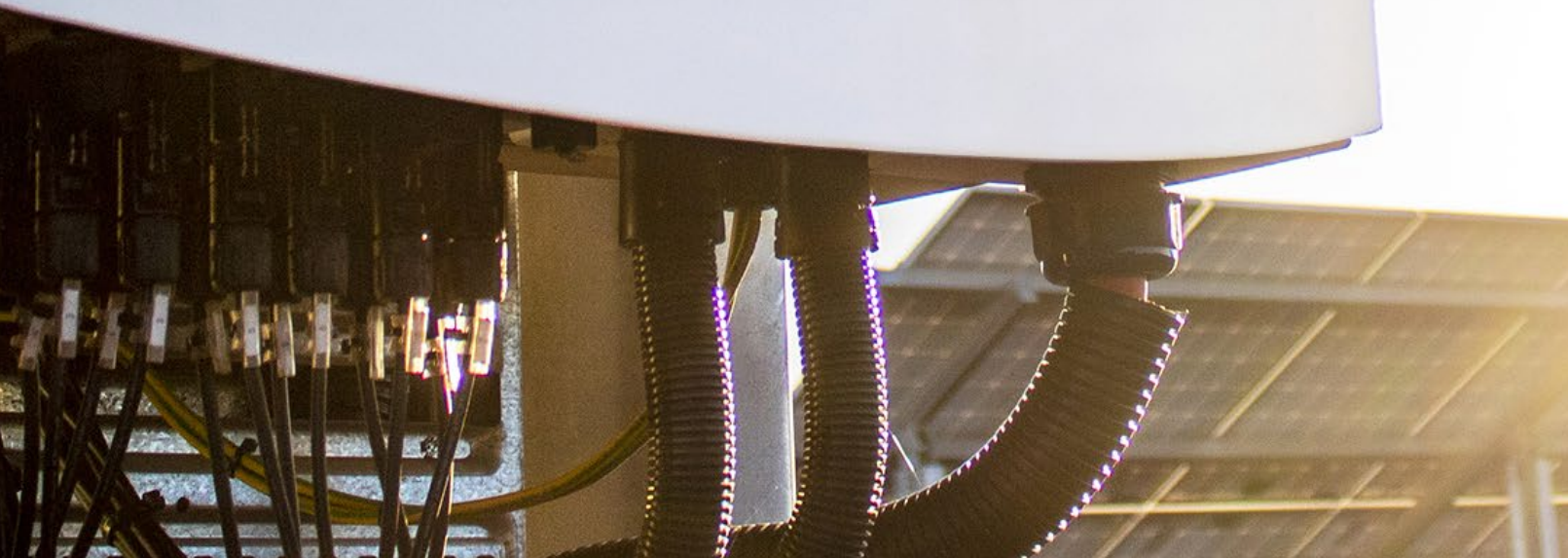
- U.S.A
- Australia
- China
- South Africa
- UK
- Netherlands
- Mexico
- Spain
- India
- Romania
- Brazil

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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CONTENTS

| | |
|--------------------------------|----|
| Solis Mini Series Inverters | 01 |
| Solis Single Phase Inverters | 03 |
| Solis Three Phase Inverters | 05 |
| Solis PV Station | 19 |
| Solis Energy Storage Inverters | 21 |
| Accessories | 27 |
| Case study | 33 |



Solis-mini-(1000-3000)-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-1000-4G | Solis-mini-1500-4G |
| Solis-mini-2000-4G | Solis-mini-2500-4G |
| Solis-mini-3000-4G | |

Datasheet

| Model Name | Solis-mini-1000-4G | Solis-mini-1500-4G | Solis-mini-2000-4G | Solis-mini-2500-4G | Solis-mini-3000-4G |
|---------------------------------------|--|--------------------|--------------------|--------------------|--------------------|
| Input DC | | | | | |
| Recommended max. PV power | 1500W | 2250kW | 3000W | 3500W | 3600W |
| Max. input voltage | 600V | | | | |
| Rated voltage | 330V | | | | |
| Start-up voltage | 60V | | 90V | | |
| MPPT voltage range | 50-500V | | 80-500V | | |
| Max. input current | 11A | | | | |
| Max. short circuit current | 17.2A | | | | |
| MPPT number/Max. input strings number | 1/1 | | | | |
| Output AC | | | | | |
| Rated output power | 1kW | 1.5kW | 2kW | 2.5kW | 3kW |
| Max. apparent output power | 1.1kVA | 1.7kVA | 2.2kVA | 2.8kVA | 3.3kVA |
| Max. output power | 1.1kW | 1.7kW | 2.2kW | 2.8kW | 3.3kW |
| Rated grid voltage | 1/N/PE, 220/230V | | | | |
| Rated grid frequency | 50/60Hz | | | | |
| Rated grid output current | 4.5A/4.3A | 6.8A/6.5A | 9.1A/8.7A | 11.4A/10.9A | 13.6A/13A |
| Max. output current | 5.2A | 8.1A | 10.5A | 13.3A | 15.7A |
| 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 | Yes | | | | |
| 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(4-5)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-1P4K-4G

Solis-1P5K-4G

Datasheet

| Model Name | Solis-1P4K-4G | Solis-1P5K-4G |
|---------------------------------------|--|---------------|
| Input DC | | |
| Recommended max. PV power | 4.6kW | 5.8kW |
| 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 | |
| Output AC | | |
| Rated output power | 4kW | 5kW |
| Max. apparent output power | 4.4kVA | 5kVA |
| Max. output power | 4.4kW | 5kW |
| Rated grid voltage | 1/N/PE, 220/230V | |
| Rated grid frequency | 50/60Hz | |
| Rated grid output current | 18.2A/17.4A | 22.7A/21.7A |
| Max. output current | 21.0A | 25.0A |
| 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 | Yes | |
| 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-3P(5-20)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-3P5K-4G | Solis-3P6K-4G | Solis-3P8K-4G |
| Solis-3P10K-4G | Solis-3P12K-4G | Solis-3P15K-4G |
| Solis-3P17K-4G | Solis-3P20K-4G | |

Datasheet

| Model Name | Solis-3P5K-4G | Solis-3P6K-4G | Solis-3P8K-4G | Solis-3P10K-4G | Solis-3P12K-4G | Solis-3P15K-4G | Solis-3P17K-4G | Solis-3P20K-4G |
|---|--|---------------|---------------|----------------|-----------------------------------|----------------|----------------|----------------|
| Input DC | | | | | | | | |
| Recommended max. PV power | 6kW | 7.2kW | 9.6kW | 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 | 5kW | 6kW | 8kW | 10kW | 12kW | 15kW | 17kW | 20kW |
| Max. apparent output power | 5.5kVA | 6.6kVA | 8.8kVA | 11kVA | 13.2kVA | 16.5kVA | 18.7kVA | 22kVA |
| Max. output power | 5.5kW | 6.6kW | 8.8kW | 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 | 7.6A/7.2A | 9.1A/8.7A | 12.2A/11.5A | 15.2A/14.4A | 18.2A/17.3A | 22.8A/21.7A | 25.8A/24.6A | 30.4A/28.9A |
| Max. output current | 7.9A | 9.5A | 12.7A | 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 | Yes | | | | | | | |
| 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-(25-40)K-5G, Solis-(40-50)K-HV-5G

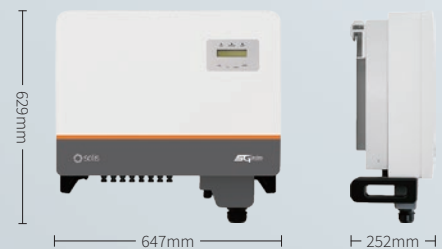
Solis Three Phase Inverters



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-40K-5G
480V: Solis-40K-HV-5G Solis-50K-HV-5G

Datasheet

| Model Name | Solis-25K-5G | Solis-30K-5G | Solis-33K-5G | Solis-40K-5G | Solis-40K-HV-5G | Solis-50K-HV-5G |
|---|---|--------------|--------------|--------------|-----------------|-----------------|
| Input DC | | | | | | |
| Recommended max. PV power | 33kW | 39kW | 43kW | 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 | 40kW | 40kW | 50kW |
| Max. apparent output power | 27.5kVA | 33kVA | 36.3kVA | 44kVA | 44kVA | 55kVA |
| Max. output power | 27.5kW | 33kW | 36.3kW | 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 | 60.8A/57.7A | 48.1A | 60.1A |
| Max. output current | 41.8A | 50.2A | 55.1A | 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 | Yes | | | | | |
| 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, IEC 61727, 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-(50-60)K, Solis-60K-HV

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

480V: Solis-60K-HV

Datasheet

| Model Name | Solis-50K | Solis-60K-HV | Solis-60K-4G |
|---|----------------------------|--|----------------------------|
| Input DC | | | |
| Recommended max. PV power | 60kW | 72kW | 72kW |
| Max. input voltage | | 1100V | |
| Rated voltage | 600V | 720V | 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 | 3/PE, 480V | 3/N/PE, 220/380V, 230/400V |
| Rated grid frequency | | 50/60Hz | |
| Rated grid output current | 72.2A/76A | 72.2A | 86.6A/91.2A |
| Max. output current | 83.3A | 80A | 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 | | Yes | |
| 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 Three Phase Inverters



Model:

400V: Solis-80K-5G



360 degree



Efficient

- ▶ 9 MPPTs, max. efficiency 98.7%
- ▶ > 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 |
|---|--|
| Input DC | |
| Max. input voltage | 1100V |
| Rated voltage | 600V |
| Start-up voltage | 195V |
| MPPT voltage range | 180-1000V |
| Max. input current | 9*26A |
| Max. short circuit current | 9*40A |
| MPPT number/Max. input strings number | 9/18 |
| Output AC | |
| Rated output power | 80kW |
| Max. apparent output power | 88kVA |
| Max. output power | 88kW |
| Rated grid voltage | 3/N/PE, 220/380 V, 230/400 V |
| Rated grid frequency | 50/60Hz |
| Rated grid output current | 121.6A |
| Max. output current | 133.7A |
| Power Factor | >0.99 (0.8 leading - 0.8 lagging) |
| THDi | <3% |
| Efficiency | |
| Max. efficiency | 98.7% |
| EU efficiency | 98.3% |
| Protection | |
| DC reverse-polarity protection | Yes |
| Short circuit protection | Yes |
| Output over current protection | Yes |
| Surge protection | DC Type II / AC Type II |
| Grid monitoring | Yes |
| Anti-islanding protection | Yes |
| 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 Three Phase Inverters



Model:

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



360 degree

Efficient

- ▶ 10 MPPTs, max. efficiency 98.7%
- ▶ > 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 |
|---|--|---------------|
| Input DC | | |
| Max. input voltage | 1100V | |
| Rated voltage | 600V | |
| 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 |
| Max. apparent output power | 110kVA | 121kVA |
| Max. output power | 110kW | 121kW |
| Rated grid voltage | 3/N/PE, 220/380V, 230/400V | |
| Rated grid frequency | 50/60Hz | |
| Rated grid output current | 152.0A | 167.1A |
| Max. output current | 167.1A | 183.8A |
| Power Factor | >0.99 (0.8 leading - 0.8 lagging) | |
| THDi | <3% | |
| Efficiency | | |
| Max. efficiency | 98.7% | |
| EU efficiency | 98.3% | |
| Protection | | |
| DC reverse-polarity protection | Yes | |
| Short circuit protection | Yes | |
| Output over current protection | Yes | |
| Surge protection | DC Type II / AC Type II (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

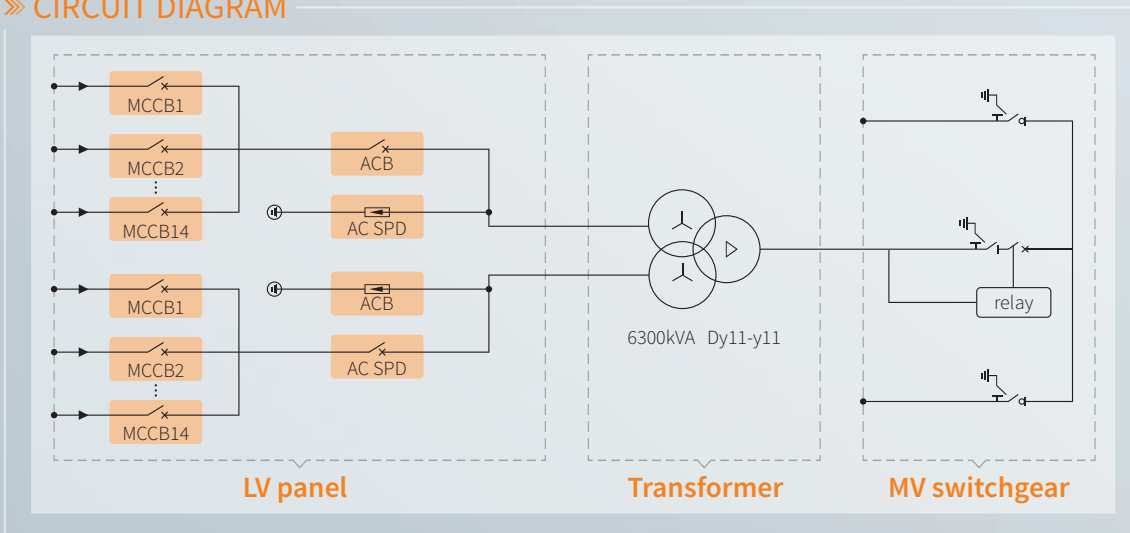
Reliable products

- ▶ 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 |
|------------|---------------|

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

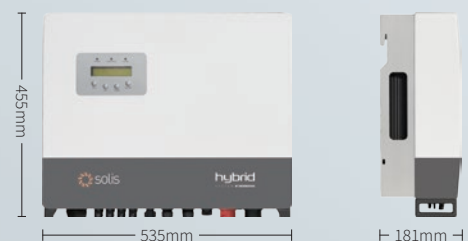
Solis Energy Storage Inverters



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

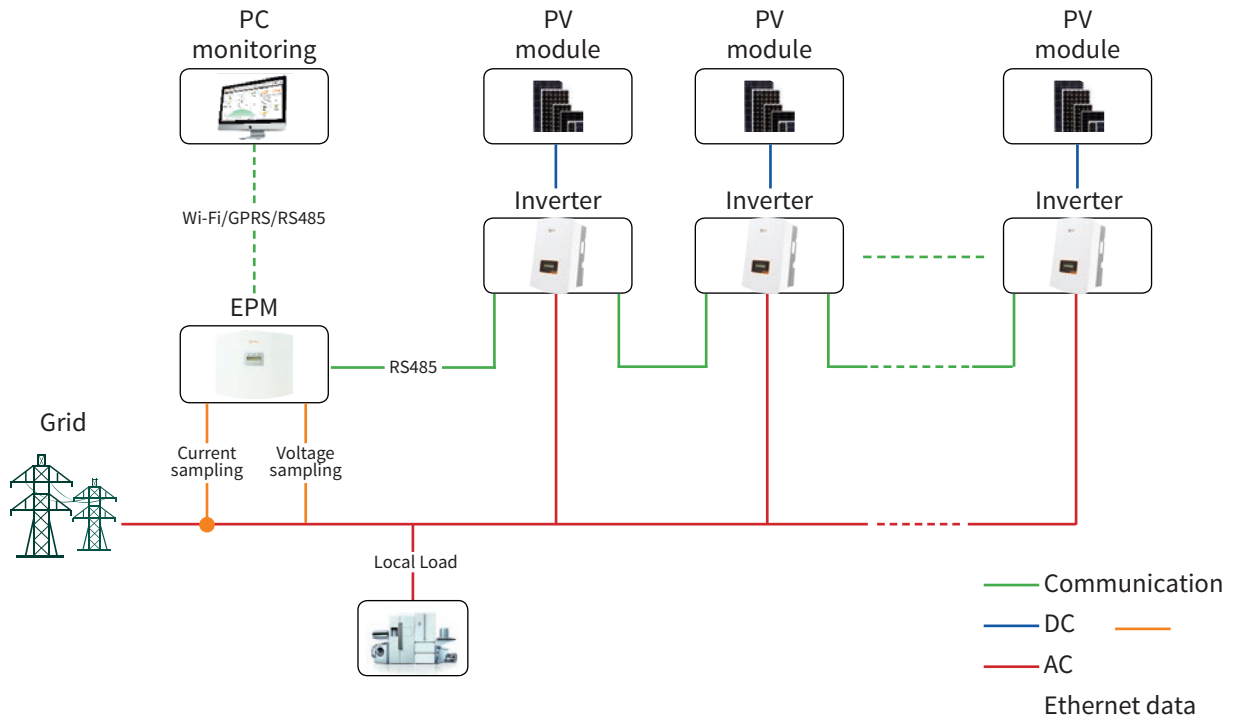
Datasheet

| 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 |
|------------|---------------|---------------|--------------------|
|------------|---------------|---------------|--------------------|

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 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-2.482GHz | / | 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 | | |

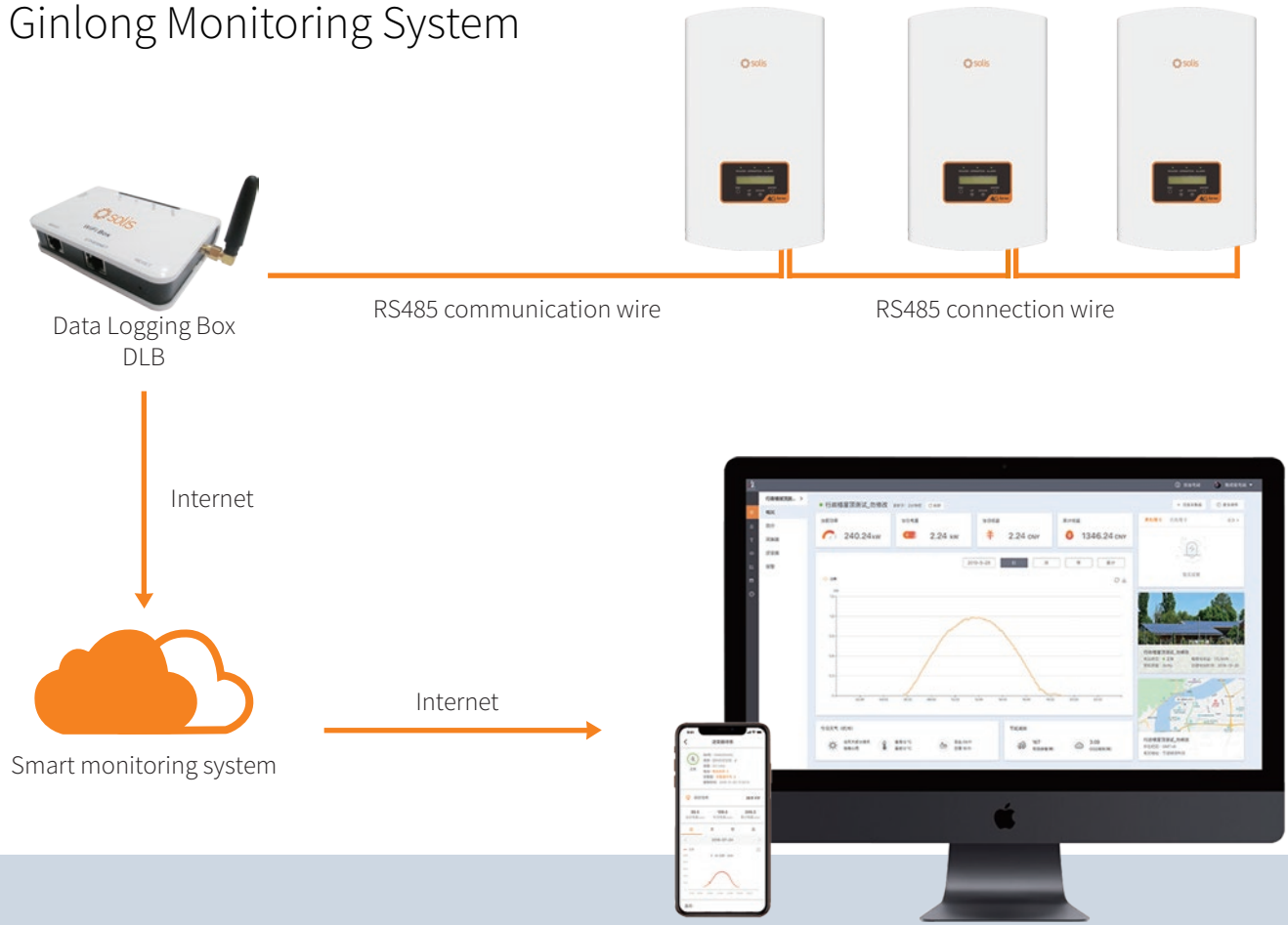
Other

| | | | |
|--------------|---------|--|--|
| Certificates | FCC, CE | | |
|--------------|---------|--|--|

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 | |
|--------------|---------------|--|



Case study





Mexico-Tamaulipas Carport, Mexico 5MW



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



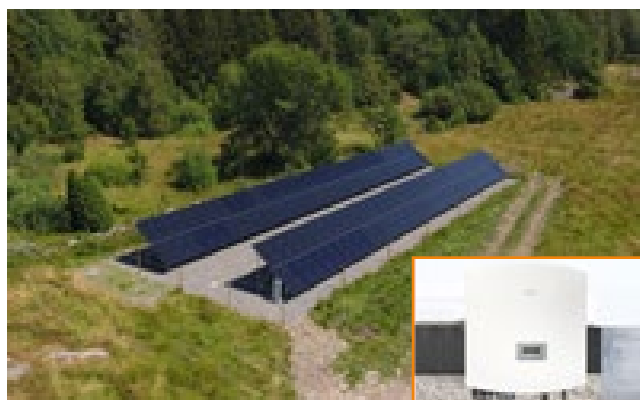
Adel Vokes Road, Australia 65.85kW



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



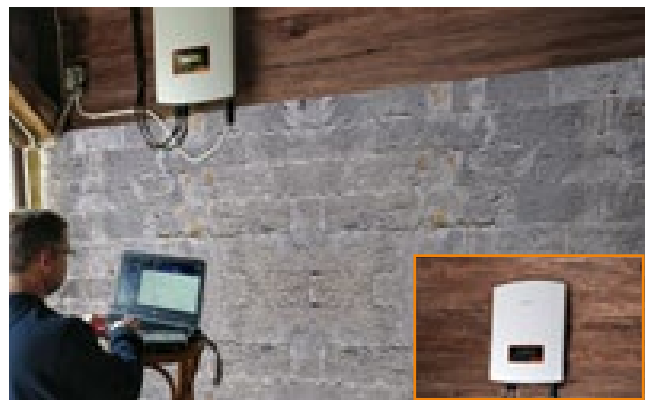
Joaquim Tavola, Portugal 15kW



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



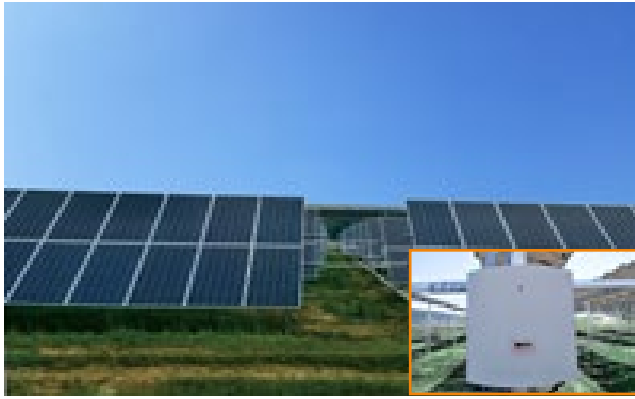
Changzhou Vaillant 2MW



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



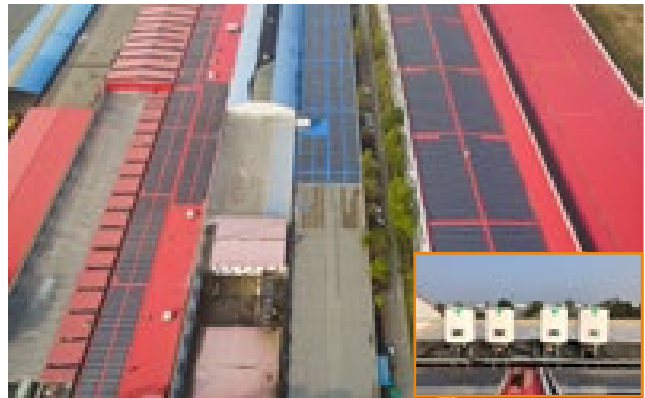
Jilin Heishui Fengman poverty alleviation PV Plant 5MW



Beijing Shunzhen Green Harbor's Plant 5.5MW



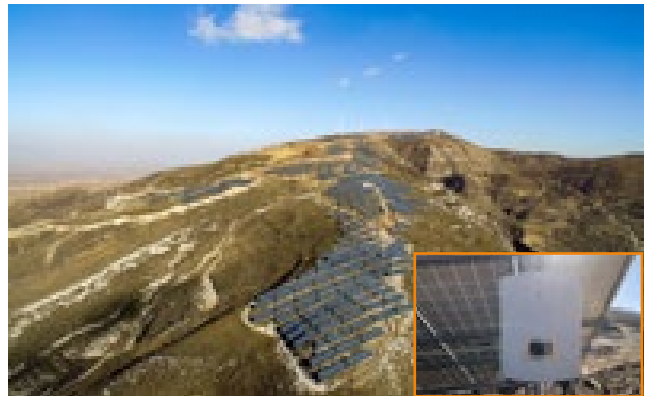
Jiangxi Ganzhou Hengjiang poverty alleviation PV Plant 8.45MW



Shandong Weifang Linqupoverty alleviation PV Plant 20MW



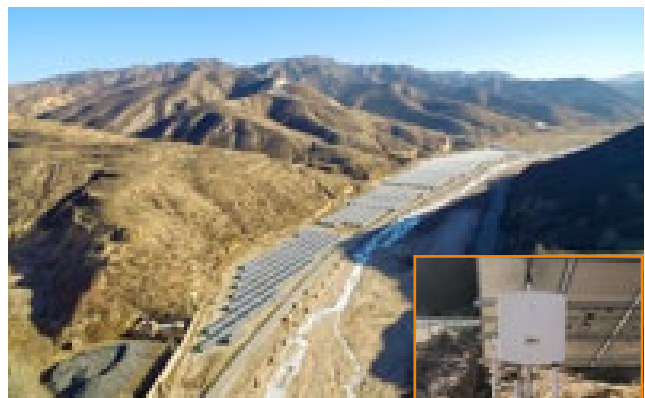
Hebei Baoding Fuping poverty alleviation PV Plant 6.6MW



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



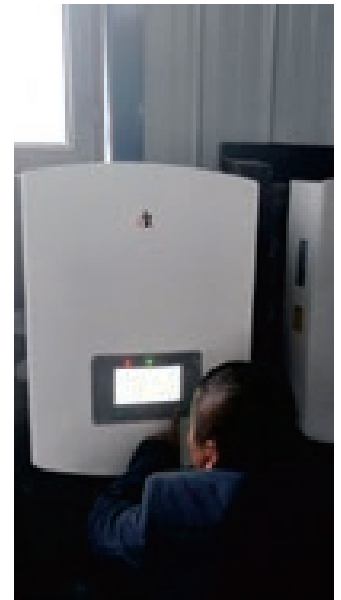
Zhejiang Jiangshan Xintang Reservoir 836kW



Liaoning Jiuzhai Gaizhou PV plant 20MW



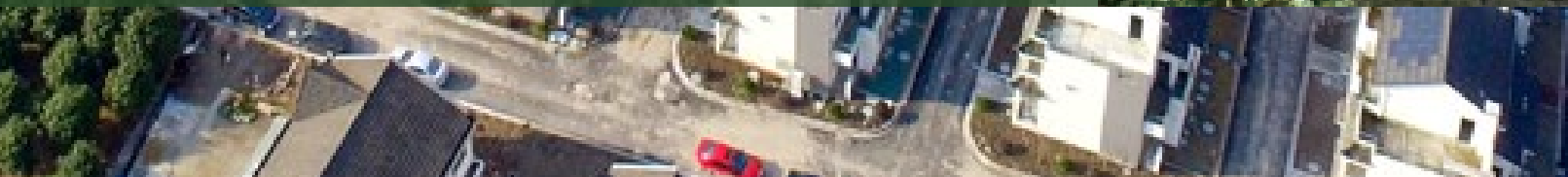
Shanxi Lvliang ZhongYang Jiajingtiancheng PV rooftop 450kW



Heilongjiang PV plant



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





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