

## Solis Three Phase Inverters

### » S5-GR3P(3-20)K



360 degree

#### Efficient

- ▶ Max. efficiency 98.7%
- ▶ String current up to **16A**
- ▶ Wide voltage range and low startup voltage

#### Smart

- ▶ Supports export power control
- ▶ Supports RS485, WiFi, GPRS
- ▶ Scan to register on SolisCloud, supports remote upgrade and control

#### Safe

- ▶ IP66
- ▶ AFCI protection, proactively reduces fire risk
- ▶ Automatic voltage stabilization technology in weak grid conditions

#### Economic

- ▶ Compact design, simple installation and maintenance
- ▶ > 150% DC/AC ratio
- ▶ Supports high power modules for lower installation costs

### Model:

S5-GR3P3K	S5-GR3P4K	S5-GR3P5K	S5-GR3P6K	S5-GR3P8K	S5-GR3P9K	S5-GR3P10K
S5-GR3P12K	S5-GR3P13K	S5-GR3P15K	S5-GR3P17K	S5-GR3P20K		

## Datasheet

Model Name	S5-GR3P3K	S5-GR3P4K	S5-GR3P5K	S5-GR3P6K	S5-GR3P8K	S5-GR3P9K	S5-GR3P10K	S5-GR3P12K	S5-GR3P13K	S5-GR3P15K	S5-GR3P17K	S5-GR3P20K
------------	-----------	-----------	-----------	-----------	-----------	-----------	------------	------------	------------	------------	------------	------------

### Input DC

Recommended max. PV power	4.5 kW	6 kW	7.5 kW	9 kW	12 kW	13.5 kW	15 kW	18 kW	19.5 kW	22.5 kW	25.5 kW	30 kW
Max. input voltage	1100 V											
Rated voltage	600 V											
Start-up voltage	180 V											
MPPT voltage range	160-1000 V											
Max. input current	16 A / 16 A						32 A / 32 A					
Max. short circuit current	20 A / 20 A						40 A / 40 A					
MPPT number/Max. input strings number	2/2						2/4					

### Output AC

Rated output power	3 kW	4 kW	5 kW	6 kW	8 kW	9 kW	10 kW	12 kW	13 kW	15 kW	17 kW	20 kW
Max. apparent output power	3.3 kVA	4.4 kVA	5.5 kVA	6.6 kVA	8.8 kVA	9.9 kVA	11 kVA	13.2 kVA	14.3 kVA	16.5 kVA	18.7 kVA	22 kVA
Max. output power	3.3 kW	4.4 kW	5.5 kW	6.6 kW	8.8 kW	9.9 kW	11 kW	13.2 kW	14.3 kW	16.5 kW	18.7 kW	22 kW
Rated grid voltage	3/N/PE, 220 V / 380 V, 230 V / 400 V											
Rated grid frequency	50 Hz / 60 Hz											
Rated grid output current	4.6 A / 4.3 A	6.1 A / 5.8 A	7.6 A / 7.2 A	9.1 A / 8.7 A	12.2 A / 11.5 A	13.7 A / 13.0 A	15.2 A / 14.4 A	18.2 A / 17.3 A	19.8 A / 18.8 A	22.8 A / 21.7 A	25.8 A / 24.6 A	30.4 A / 28.9 A
Max. output current	4.7 A	6.4 A	7.9 A	9.5 A	12.7 A	14.3 A	15.9 A	19.1 A	20.7 A	23.8 A	27 A	31.8 A
Power Factor	>0.99 (0.8 leading - 0.8 lagging)											
THDi	<2%											

### Efficiency

Max. efficiency	98.3%				98.5%				98.6%				98.7%
EU efficiency	97.7%				97.9%				98.0%				98.1%

### Protection

DC reverse-polarity protection	Yes											
Short circuit protection	Yes											
Output over current protection	Yes											
Surge protection	Yes											
Grid monitoring	Yes											
Anti-islanding protection	Yes											
Temperature protection	Yes											
Integrated AFCI (DC arc-fault circuit protection)	Yes <sup>(1)</sup>											
Integrated DC switch	Optional											

### General Data

Dimensions (W*H*D)	310*563*219 mm		
Weight	17.8 kg	18.8 kg	20 kg
Topology	Transformerless		
Self consumption (night)	<1 W		
Operating ambient temperature range	-25 ~ +60°C		
Relative humidity	0-100%		
Ingress protection	IP66		
Cooling concept	Natural convection	Intelligent redundant fan-cooling	
Max. operation altitude	4000 m		
Grid connection standard	G98 or G99, VDE-AR-N 4105 / VDE V 0124, EN 50549-1, VDE 0126 / UTE C 15 / VFR:2019, RD 1699 / RD 244 / UNE 206006 / UNE 206007-1, CEI 0-21, C10/11, NRS 097-2-1, TOR, EIFS 2018.2, IEC 62116, IEC 61727, IEC 60068, IEC 61683, EN 50530		
Safety/EMC standard	IEC/EN 62109-1/-2, IEC/EN 61000-6-1/-2/-3/-4		

### Features

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

(1) Activation required.



## LIMITED PRODUCT WARRANTY

The Ginlong Technologies Co., Ltd. ("**Ginlong**") Limited Product Warranty (the "**Limited Warranty**") in this document covers the products listed in Appendix A attached hereto (the "**Products**"), when a claim for service under this Limited Warranty (a "**Claim**") is made by a Claimant (as defined in Section B, below), provided all of the applicable terms and conditions herein have been satisfied.

### A. The Limited Warranty

Ginlong warrants that the Products will be free from defects and workmanship within the Limited Warranty Period set forth in Section C, below. This Limited Warranty is subject to the terms and conditions in this document. This Limited Warranty may extend a Customer's statutory rights and cannot be construed so as to diminish such statutory rights.

The Limited Warranty under this document is available on and from July 01, 2025 ("**Warranty Validation Date**"). Unless otherwise agreed in writing, the Limited Warranty under this document is not applicable to any Products produced prior to the Warranty Validation Date. The date of production of each product could be determined by its serial numbers. For the avoidance of doubt, the original terms and conditions supplied with that Product will continue to apply for any Product produced prior to the Warranty Validation Date.

### B. Limited Warranty Eligibility

#### Who may submit a Claim?

A "**Customer**" is anyone who purchased the Products:

1. directly from Ginlong, or
2. from an authorised reseller who acquired the Products from Ginlong legitimately and made no modifications to the Products.

A "**Warranty Holder**" may be:

1. a Customer; or
2. a transferee who receives a Product from a Customer and who has followed the proper process set forth in Section F, below, to transfer the Limited Warranty.

A "**Claimant**" may be:

1. a Warranty Holder; or
2. a third party designated by the Warranty Holder for the purpose of submitting a Claim on the Warranty Holder's behalf.

Only a Claimant may submit a Claim.

#### When must a Claim be submitted?

Any Claim must be received by Ginlong within the Limited Warranty Period set forth in Appendix A.

### C. Limited Warranty Period, Extended Limited Warranty Period and Products Covered

The Limited Warranty Period commences on the date the Product is sold to the Customer, if the Customer is an individual person. Otherwise, the Limited Warranty Period commences at the earlier of:

1. the date the Products are commissioned at installation; or
2. six (6) months after the Products are dispatched from the Ginlong factory.

(as applicable, the **Limited Warranty Commencement**).

The Limited Warranty Period is the timeframe from Limited Warranty Commencement until the expiration of the applicable Limited Warranty Period set forth in Appendix A. See the Appendix A attached hereto for details.

The Limited Warranty Period may be extended in accordance with Ginlong's policy, or a written agreement between Ginlong and the Warranty Holder. If the Claimant applies for extended Limited Warranty Period, such application shall be received by Ginlong within the twelve(12) months of the Limited Warranty Commencement, and the application shall be submitted only once. Before the extension is approved by Ginlong, the Products need to be delivered to the place designated by Ginlong. The service scope of extended Limited Warranty is limited to the replacement or repair of the Products' hardware. For other conditions and details of extended Limited Warranty, please refer to Ginlong's

policy or the written agreement between Ginlong and the Warranty Holder.

The Limited Warranty Period for any Products that has been replaced or repaired under this Limited Warranty shall be the greater of:

1. the remaining Warranty Period of the defective Product; or
2. three (3) months from repair/replacement.

#### **D. Limited Warranty Claim Procedure**

To make a Claim, the Claimant shall promptly notify Ginlong upon detection that the Products are non-conforming or defective. To determine if the Product is covered by this Limited Warranty, the Claimant shall notify Ginlong's service department in writing of the issue. Such notice shall include:

1. Detailed information about the defect;
2. Completed Warranty Claim Form, which can be obtained from a Solis Service Agent via the Solis website<sup>1</sup>;
3. Product Model (i.e. S6-GR1P(2.5-6)K) and Product Serial Number (i.e.160D72198270017);
4. Copy of the Product invoice; and
5. Copy of the installation report/certificate.

After receiving notice from the Claimant, Ginlong will determine whether or not the reported defect is eligible for coverage under the Limited Warranty. If Ginlong determines, in its sole discretion, that the reported defect is not eligible, Ginlong will notify the Claimant accordingly and will explain the reason why such coverage is not available. See Warranty Exclusions in Section E, below, for details.

Note that the Product label must be completely undamaged and legible and properly attached to the Product. If the aforementioned requirements are not fully met, Ginlong has no obligations under this Limited Warranty.

If all of the requirements herein are met and the Product is eligible for coverage under the Limited Warranty, Ginlong shall, in its sole discretion:

1. Provide replacement Product(s); or
2. Instruct an accredited service provider to visit the Warranty Holder's location to repair the defects or provide replacement Product(s); or
3. Direct the Warranty Holder to return the Product(s) to Ginlong for repair or replacement.

Ginlong will provide instructions for proper return or disposal of the defective Product. Any replacement provided by Ginlong may be, at Ginlong's sole discretion, new or factory refurbished. Any replacement provided by Ginlong will be at least functionally equivalent in feature, function, and compatibility to the Product. A replacement may have cosmetic defects that have no influence on energy production or safety compliance.

Ginlong may repair or replace faulty parts at its discretion. If the Products or any parts are replaced by Ginlong under this Limited Warranty, all of the rights, title and interests in the returned Products/parts shall vest in Ginlong upon replacement.

The Warranty Holder must return the Products/parts in the original packaging or equivalent. If the replaced Products/parts are not received by Ginlong within thirty (30) days from the date the Warranty Holder receives the replacement, the Warranty Holder will be charged for the Products/parts at the current price for new Products/parts.

Ginlong may, in its sole discretion, elect to ship replacement Products/parts either prior to or after receipt of the Product, or after prepayment of the value of the replacement Product and delivery costs.

No claim for compensation may be made for any loss of profit or use (including energy that has not been fed into the grid, energy that has not been used for self-consumption, etc.). In no event, whether in contract, tort, or otherwise, shall the maximum compensation for the Warranty Holder's losses caused by a Product exceed the amount paid by the Customer for the purchase of the Products.

Ginlong's shall have no obligation to render on-site replacement services in locations where Ginlong, in its sole discretion, deems the location or circumstances too risky to render such services.

If any Claim made pursuant to this Limited Warranty is determined to be unfounded (i.e. the returned Product is not faulty), Ginlong will charge the Warranty Holder for all costs incurred, including but not limited to labour, travel, and delivery to and from the Warranty Holder.

Ginlong will notify the Claimant of any costs to be borne by the Warranty Holder prior to repair/replacement of the

---

<sup>1</sup> <https://www.solisinverters.com/global/aftersales.html>

Product(s). Such the costs must be paid in advance. If the Warranty Holder declines to pay such costs, Ginlong reserves the right to withhold repair/replacement services.

Provided the Warranty Holder has been trained by Ginlong to perform an assembly replacement, Ginlong reserves the right to send an assembly in place of a replacement.

## **E. Limited Warranty Exclusions**

Ginlong shall not be responsible or have any liability for failure to fulfil service commitments within the committed period of time when such issues are beyond Ginlong's reasonable control.

This Limited Warranty does not apply to damage (to hardware or data), costs or fees, or performance limitations/failures related to:

- Access, labour or transport costs;
- Loss or damage occurring whilst in transit
- Items ancillary to installation not supplied by Ginlong;
- Duties, import/export fees or costs and other general administrative costs;
- Consequential damages including but not limited to loss of revenue
- Fault caused by any other circumstance, event or matter, including another component in the Claimant's photovoltaic system, or any other event, device or appliance at the installation site;
- Defect unable to be identified upon examination of Products at the time of purchase or installation;
- Force majeure, including but not limited to extreme weather, lightning strikes, natural disasters, power surges, fires, pests, wars, etc.;
- Non-conformity with local certification requirements because of their changes during the Limited Warranty Period;
- Actions of third parties, event or accident outside Ginlong's reasonable control and not arising under normal and standard operating conditions;
- Normal wear and tear;
- Improper handling, transportation, storage, or repackaging by anyone other than Ginlong;
- Failure to initially purchase the Products from Ginlong or the authorised reseller of Ginlong;
- Failure to return the replaced Products to Ginlong or the authorised reseller in time;
- Failure of the Customer to pay in full all amounts owing to Ginlong by the Customer;
- Expiry of the Limited Warranty Period;
- Failure to comply with Product manuals or other applicable documentation;
- Failure to meet system requirements, including but not limited to ambient environment or external electricity parameter settings, as stated in any applicable written documents;
- Improper system design, including insufficient protection from lightning or other environmental conditions;
- Accident, negligence, misuse, abuse, neglect, or intentional damage;
- Failure to observe safety regulations;
- Improper site preparation, installation, commissioning, or maintenance;
- Failure to have the Products installed correctly by a local grid company qualified installer and as per the installation instructions supplied with the Products or installed by Ginlong or the authorised reseller;
- Movement of the Products for any reason after they have been installed (regardless of whether the Products are subsequently reinstalled or moved back to the same location) unless the Products are reinstalled at the same location by a qualified installer and they are stored during any interim period in accordance with the Product manual;
- Repairs or attempted repairs by anyone other than Ginlong or its authorized representative;
- Products opened, modified, or disassembled without Ginlong's prior written consent;
- Adjustment, change, or removal of identification marks not in compliance with Ginlong's requirements or instructions;
- Problems in Warranty Holder's premises;
- Use in combination with software, equipment, and batteries not certified and listed on Ginlong's approved list for operation in the applicable territory with Ginlong's Energy Storage Inverter.

This Limited Warranty does not apply to cosmetic defects that do not impact energy production, or degrade form, fit, or function, or Products that were described in a quotation or delivery note as 'ex-display' or 'reconditioned' (A separate Warranty extension may have been issued to cover such Products).

## **F. Transferring the Limited Warranty**

The Limited Warranty may be transferred from the Customer to another party after obtaining Ginlong's written approval. Ginlong will initiate the transfer of the Limited Warranty. A transferred Limited Warranty will be valid for the

remainder of the Limited Warranty Period. Customer shall discuss the transfer details with Ginlong to ensure the Limited Warranty is properly transferred and not void or voided.

## **G. Data Protection**

If the Warranty Holder seeks warranty service provided by Ginlong, the Warranty Holder shall allow Ginlong to access, collect, and process information related to failure, detection, identifying, and debugging when providing the services. Such information will only be used to provide warranty services. Because the Warranty Holder is the controller of such information, Ginlong cannot confirm whether such information contains Warranty Holder confidential information or personal data.

The Warranty Holder shall have sole responsibility and ensure that they will obtain and retain all necessary consent, permission, and authorisation ("**Consent**"), in accordance with applicable legal requirements, for Ginlong to provide such service, so that Ginlong will not violate applicable legal requirements, Warranty Holder's privacy policies, or Warranty Holder's user-agreements in providing services.

Ginlong will take reasonable measures to ensure the security of Warranty Holder's information, but Ginlong is not responsible and shall have no direct or indirect liability related to the acquisition, processing, and/or loss of such information in the process of providing services.

If the Warranty Holder returns Products to Ginlong, it indicates that the Warranty Holder has backed up any confidential, private, personal, or other information stored in the Products and has completely deleted such information from the Products. It further indicates that the Warranty Holder authorises Ginlong to transfer the Products to the Ginlong service centre in other countries for maintenance. The Warranty Holder shall be solely responsible for deleting the above information before delivering the hardware to Ginlong. The Warranty Holder shall indemnify, defend, and hold Ginlong harmless from and against any and all claims, liabilities, obligations, costs, expenses, penalties, fines, confiscations and rulings imposed by any government agency or third party as a result of Ginlong's failure to comply with applicable laws and regulations in transferring and disposing of the above information.

Ginlong Technologies Co., Ltd.

Add: No. 57 Jintong Road, Binhai Industrial Park, Xiangshan, Ningbo, Zhejiang, 315712, P.R.China

Tel: +44 151 453 6515 | Web: [www.solisinverters.com](http://www.solisinverters.com) | E: [ukservice@solisinverters.com](mailto:ukservice@solisinverters.com)



## Appendix A

### Standard Limited Warranty Conditional For UK Market Only

Product	Limited Warranty Period
Solis Grid-tied Inverter on Sale	5 Years
Solis Energy Storage Inverter on Sale	5 Years
Solis Off-grid Inverter on Sale	2 Years
Accessories	2 Years