

# Compliance Document

No. D 086470 0128 Rev. 00

**Holder of Certificate:** **Ginlong Technologies Co., Ltd.**

No.57 Jintong Road  
Binhai Industrial Park, Xiangshan  
315712 Ningbo, Zhejiang  
PEOPLE'S REPUBLIC OF CHINA

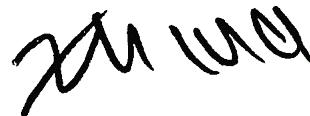
**Product:**

**Converter**  
**Grid-interactive inverter with storage**  
**battery system**

This Compliance document confirms the compliance with the listed standards on a voluntary basis. It refers only to the sample submitted for testing and certification and does not certify the quality or safety of the serial products. For details see: [www.tuvsud.com/ps-cert](http://www.tuvsud.com/ps-cert)

**Test report no.:** 704092201818-00

**Date,** 2023-03-07



( Zhengdong Ma )

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## Model(s):

Grid-interactive inverter: RHI-3K-48ES-5G, RHI-3K-48ES-5G-NS, RAI-3K-48ES-5G, RHI-3.6K-48ES-5G, RHI-3.6K-48ES-5G-NS, RHI-4K-48ES-5G-NS, RHI-4.6K-48ES-5G, RHI-4.6K-48ES-5G-NS, RHI-5K-48ES-5G, RHI-5K-48ES-5G-NS, RHI-6K-48ES-5G, RHI-6K-48ES-5G-NS, S5-EH1P3K-L, S5-EH1P3.6K-L, S5-EH1P4.6K-L, S5-EH1P5K-L, S5-EH1P6K-L, S5-EH1P3K-L-NS, S5-EH1P3.6K-L-NS, S5-EH1P4K-L-NS, S5-EH1P4.6K-L-NS, S5-EH1P5K-L-NS, S5-EH1P6K-L-NS

Storage battery system: 5K3-XP-EU

## Parameters:

| The following generators meet the requirements of CEI 0-21:2022                            |   |  |  |   |   |   |
|--|---|--|--|---|---|---|
| Manufacturer   | Ginlong Technologies Co., Ltd.<br>No.57 Jintong Road, Binhai Industrial Park, Xiangshan, 315712 Ningbo, Zhejiang, PEOPLE'S REPUBLIC OF CHINA  |  |  |   |   |   |
| Equipment type   | Grid-interactive inverter with storage battery system   |  |  |   |   |   |
| Brand  | Solis   |  |  |   |   |   |
| Number of phase  | <input checked="" type="checkbox"/> Single phase <input type="checkbox"/> Three phase<br>Frequency: 50Hz Voltage: a.c. 230V   |  |  |   |   |   |
| Primary energy used  | <input checked="" type="checkbox"/> Solar <input checked="" type="checkbox"/> Storage <input type="checkbox"/> Wind <input type="checkbox"/> Hydroelectric <input type="checkbox"/> CHP <input type="checkbox"/> Other:<br>Note: RAI-3K-48ES-5G can be operated with battery input only, other models can be operated with both PV and battery inputs.  |  |  |   |   |   |
| Section A<br>Generator model   | <table border="1"> <tr> <td>RHI-3K-48ES-5G,<br/>RHI-3K-48ES-5G-NS,<br/>S5-EH1P3K-L,<br/>S5-EH1P3K-L-NS,<br/>RAI-3K-48ES-5G</td> <td>RHI-3.6K-48ES-5G,<br/>RHI-3.6K-48ES-5G-NS,<br/>RHI-4K-48ES-5G-NS,<br/>S5-EH1P3.6K-L,<br/>S5-EH1P3.6K-L-NS,<br/>S5-EH1P4K-L-NS</td> <td>RHI-4.6K-48ES-5G,<br/>RHI-4.6K-48ES-5G-NS,<br/>S5-EH1P4.6K-L,<br/>S5-EH1P4.6K-L-NS</td> <td>RHI-5K-48ES-5G,<br/>RHI-5K-48ES-5G-NS,<br/>S5-EH1P5K-L,<br/>S5-EH1P5K-L-NS</td> <td>RHI-6K-48ES-5G,<br/>RHI-6K-48ES-5G-NS,<br/>S5-EH1P6K-L,<br/>S5-EH1P6K-L-NS</td> </tr> </table> | RHI-3K-48ES-5G,<br>RHI-3K-48ES-5G-NS,<br>S5-EH1P3K-L,<br>S5-EH1P3K-L-NS,<br>RAI-3K-48ES-5G | RHI-3.6K-48ES-5G,<br>RHI-3.6K-48ES-5G-NS,<br>RHI-4K-48ES-5G-NS,<br>S5-EH1P3.6K-L,<br>S5-EH1P3.6K-L-NS,<br>S5-EH1P4K-L-NS | RHI-4.6K-48ES-5G,<br>RHI-4.6K-48ES-5G-NS,<br>S5-EH1P4.6K-L,<br>S5-EH1P4.6K-L-NS | RHI-5K-48ES-5G,<br>RHI-5K-48ES-5G-NS,<br>S5-EH1P5K-L,<br>S5-EH1P5K-L-NS | RHI-6K-48ES-5G,<br>RHI-6K-48ES-5G-NS,<br>S5-EH1P6K-L,<br>S5-EH1P6K-L-NS |
| RHI-3K-48ES-5G,<br>RHI-3K-48ES-5G-NS,<br>S5-EH1P3K-L,<br>S5-EH1P3K-L-NS,<br>RAI-3K-48ES-5G | RHI-3.6K-48ES-5G,<br>RHI-3.6K-48ES-5G-NS,<br>RHI-4K-48ES-5G-NS,<br>S5-EH1P3.6K-L,<br>S5-EH1P3.6K-L-NS,<br>S5-EH1P4K-L-NS  | RHI-4.6K-48ES-5G,<br>RHI-4.6K-48ES-5G-NS,<br>S5-EH1P4.6K-L,<br>S5-EH1P4.6K-L-NS            | RHI-5K-48ES-5G,<br>RHI-5K-48ES-5G-NS,<br>S5-EH1P5K-L,<br>S5-EH1P5K-L-NS  | RHI-6K-48ES-5G,<br>RHI-6K-48ES-5G-NS,<br>S5-EH1P6K-L,<br>S5-EH1P6K-L-NS         |   |   |
| Rated power  | <table border="1"> <tr> <td>3000 W / 3300 VA</td> <td>3600 W / 4000 VA</td> <td>4600 W / 4600 VA</td> <td>5000 W / 5500 VA</td> <td>6000 W / 6600 VA</td> </tr> </table>  | 3000 W / 3300 VA   | 3600 W / 4000 VA   | 4600 W / 4600 VA  | 5000 W / 5500 VA  | 6000 W / 6600 VA  |
| 3000 W / 3300 VA   | 3600 W / 4000 VA  | 4600 W / 4600 VA   | 5000 W / 5500 VA   | 6000 W / 6600 VA  |   |   |
| The generator:   | <input type="checkbox"/> is suitable for installation in systems with an output power of more than 11.08 kW<br><input checked="" type="checkbox"/> is capable of limiting Idc to 0.5% of rated current:<br><input checked="" type="checkbox"/> uses a DC-sensitive protection function<br><input type="checkbox"/> uses a transformer operating at mains frequency  |  |  |   |   |   |

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|           |  |   |  |   |   |   |
|-----------|--|---|--|---|---|---|
| Section B | Characteristics of the interface protection system |   |  |   |   |   |
|           | Manufacturer                                       | Ginlong Technologies Co., Ltd.  |  |   |   |   |
|           | Model  | RHI-3K-48ES-5G, RHI-3K-48ES-5G-NS, RAI-3K-48ES-5G, RHI-3.6K-48ES-5G, RHI-3.6K-48ES-5G-NS, RHI-4K-48ES-5G-NS, RHI-4.6K-48ES-5G, RHI-4.6K-48ES-5G-NS, RHI-5K-48ES-5G, RHI-5K-48ES-5G-NS, RHI-6K-48ES-5G, RHI-6K-48ES-5G-NS, S5-EH1P3K-L, S5-EH1P3.6K-L, S5-EH1P4.6K-L, S5-EH1P5K-L, S5-EH1P6K-L, S5-EH1P3K-L-NS, S5-EH1P3.6K-L-NS, S5-EH1P4K-L-NS, S5-EH1P4.6K-L-NS, S5-EH1P5K-L-NS, S5-EH1P6K-L-NS |  |   |   |   |
|           | Type   | <input checked="" type="checkbox"/> Integrated <input type="checkbox"/> Not integrated  |  |   |   |   |
| Section C | Characteristics of inverter(s)                     |   |  |   |   |   |
|           | Model of inverter                                  | RHI-3K-48ES-5G,<br>RHI-3K-48ES-5G-NS,<br>S5-EH1P3K-L,<br>S5-EH1P3K-L-NS,<br>RAI-3K-48ES-5G  | RHI-3.6K-48ES-5G,<br>RHI-3.6K-48ES-5G-NS,<br>RHI-4K-48ES-5G-NS,<br>S5-EH1P3.6K-L,<br>S5-EH1P3.6K-L-NS,<br>S5-EH1P4K-L-NS | RHI-4.6K-48ES-5G,<br>RHI-4.6K-48ES-5G-NS,<br>S5-EH1P4.6K-L,<br>S5-EH1P4.6K-L-NS | RHI-5K-48ES-5G,<br>RHI-5K-48ES-5G-NS,<br>S5-EH1P5K-L,<br>S5-EH1P5K-L-NS | RHI-6K-48ES-5G,<br>RHI-6K-48ES-5G-NS,<br>S5-EH1P6K-L,<br>S5-EH1P6K-L-NS |
|           | Manufacturer of inverter                           | Ginlong Technologies Co., Ltd.  |  |   |   |   |
|           | Firmware version                                   | A1  |  |   |   |   |
|           | Rated power of inverter (P <sub>NINV</sub> )       | 3000 W  | 3600 W   | 4600 W  | 5000 W  | 6000 W  |

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| Characteristics of the Storage System (SdA)   |   |   |   |  |  |  |
|---|---|---|---|--|--|--|
| Representative Combination  | <table border="1"> <tr> <td>RHI-3K-48ES-5G,<br/>RHI-3K-48ES-5G-NS,<br/>S5-EH1P3K-L,<br/>S5-EH1P3K-L-NS,<br/>RAI-3K-48ES-5G<br/>with 5K3-XP-EU (1 -15 pieces)</td> <td>RHI-3.6K-48ES-5G,<br/>RHI-3.6K-48ES-5G-NS,<br/>RHI-4K-48ES-5G-NS,<br/>S5-EH1P3.6K-L,<br/>S5-EH1P3.6K-L-NS,<br/>S5-EH1P4K-L-NS<br/>with 5K3-XP-EU (1 -15 pieces)</td> <td>RHI-4.6K-48ES-5G,<br/>RHI-4.6K-48ES-5G-NS,<br/>S5-EH1P4.6K-L,<br/>S5-EH1P4.6K-L-NS<br/>with 5K3-XP-EU (1 -15 pieces)</td> <td>RHI-5K-48ES-5G,<br/>RHI-5K-48ES-5G-NS,<br/>S5-EH1P5K-L,<br/>S5-EH1P5K-L-NS<br/>with 5K3-XP-EU (1 -15 pieces)</td> <td>RHI-6K-48ES-5G,<br/>RHI-6K-48ES-5G-NS,<br/>S5-EH1P6K-L,<br/>S5-EH1P6K-L-NS<br/>with 5K3-XP-EU (1 -15 pieces)</td> </tr> </table> | RHI-3K-48ES-5G,<br>RHI-3K-48ES-5G-NS,<br>S5-EH1P3K-L,<br>S5-EH1P3K-L-NS,<br>RAI-3K-48ES-5G<br>with 5K3-XP-EU (1 -15 pieces) | RHI-3.6K-48ES-5G,<br>RHI-3.6K-48ES-5G-NS,<br>RHI-4K-48ES-5G-NS,<br>S5-EH1P3.6K-L,<br>S5-EH1P3.6K-L-NS,<br>S5-EH1P4K-L-NS<br>with 5K3-XP-EU (1 -15 pieces) | RHI-4.6K-48ES-5G,<br>RHI-4.6K-48ES-5G-NS,<br>S5-EH1P4.6K-L,<br>S5-EH1P4.6K-L-NS<br>with 5K3-XP-EU (1 -15 pieces) | RHI-5K-48ES-5G,<br>RHI-5K-48ES-5G-NS,<br>S5-EH1P5K-L,<br>S5-EH1P5K-L-NS<br>with 5K3-XP-EU (1 -15 pieces) | RHI-6K-48ES-5G,<br>RHI-6K-48ES-5G-NS,<br>S5-EH1P6K-L,<br>S5-EH1P6K-L-NS<br>with 5K3-XP-EU (1 -15 pieces) |
| RHI-3K-48ES-5G,<br>RHI-3K-48ES-5G-NS,<br>S5-EH1P3K-L,<br>S5-EH1P3K-L-NS,<br>RAI-3K-48ES-5G<br>with 5K3-XP-EU (1 -15 pieces) | RHI-3.6K-48ES-5G,<br>RHI-3.6K-48ES-5G-NS,<br>RHI-4K-48ES-5G-NS,<br>S5-EH1P3.6K-L,<br>S5-EH1P3.6K-L-NS,<br>S5-EH1P4K-L-NS<br>with 5K3-XP-EU (1 -15 pieces)   | RHI-4.6K-48ES-5G,<br>RHI-4.6K-48ES-5G-NS,<br>S5-EH1P4.6K-L,<br>S5-EH1P4.6K-L-NS<br>with 5K3-XP-EU (1 -15 pieces)            | RHI-5K-48ES-5G,<br>RHI-5K-48ES-5G-NS,<br>S5-EH1P5K-L,<br>S5-EH1P5K-L-NS<br>with 5K3-XP-EU (1 -15 pieces)  | RHI-6K-48ES-5G,<br>RHI-6K-48ES-5G-NS,<br>S5-EH1P6K-L,<br>S5-EH1P6K-L-NS<br>with 5K3-XP-EU (1 -15 pieces)         |  |  |
| Psn (nominal discharge power)   | 3000      3600      4600      4600      4600  |   |   |  |  |  |
| Pcn (nominal charging power)  | 3000      3600      4600      5000      5600  |   |   |  |  |  |
| Psmax (max. discharge power)  | 3000      3600      4600      4600      4600  |   |   |  |  |  |
| Pcmx (max. charging power)  | 3000      3600      4600      5000      5600  |   |   |  |  |  |
| Type  | <input checked="" type="checkbox"/> Bidirectional <input type="checkbox"/> Monodirectional  |   |   |  |  |  |
| Batteries that can be used with the above static converters   |   |   |   |  |  |  |
| Brand   | WECO  |   |   |  |  |  |
| Technology  | Li-Ion  |   |   |  |  |  |
| Models  | 5K3-XP-EU   |   |   |  |  |  |
| CUS module (kWh)  | 5.37  |   |   |  |  |  |
| BMS firmware version  | 6011  |   |   |  |  |  |
| Number of modules   | 1-15 pieces   |   |   |  |  |  |
| Note  | Batteries are not contained in the inverter and should be installed according to local regulations and in accordance with WECO instruction.   |   |   |  |  |  |

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|           |  |  |  |
|-----------|--|--|--|
| Section I | References of the laboratories that performed the tests and their test reports (RdP) |  |  |
|           | Selected method  | <input checked="" type="checkbox"/> Tests performed under the supervision of a certification body  | <input checked="" type="checkbox"/> Tests performed by an accredited laboratory  |
|           | Test Reports (RdP)   | 1) Test report according to Annex A & Bbis: 70.409.20.081.14-00, 70.409.20.081.14-01, 70.409.21.036.20-00, 70.409.21.036.20-01, 70.409.21.036.20-02, 70.409.22.018.18-00 | 2) Test report EMC:<br>a) C19-447-WT-01;<br>b) C19-447-WT-02;<br>c) 64772228001902   |
|           | Issued by  | Testing lab:<br>1) Manufacturer's laboratory<br>Tests performed under supervision of certifier from TÜV SÜD Product Service GmbH   | 1) -a) & -b) Shanghai Inspection and Testing Institute of Instruments and Automation Systems Co.,Ltd.<br>1) -c) TÜV SÜD Certification and Testing (China) Co., Ltd. Guangzhou Branch |
|           | Accreditation No.  | D-ZE-11321-01-00   | 1) -a) & b) CNAS L0130<br>1) -c) CNAS L3584  |
|           | Accreditation body ref.  | DAKKS  | CNAS   |
| Section M | Reference of the certification body  |  |  |
|           | Certification Body   | TÜV SÜD Product Service GmbH<br>DAKKS accreditation certificate D-ZE-11321-01-00 according to DIN EN ISO/IEC 17065:2013  |  |

**Tested according to:**

CEI 0-21:2022