

# **Certificate of compliance**

Applicant: Ginlong Technologies Co., Ltd.

No.57 Jintong Road, Binhai Industrial Park, Xiangshan, 315712 Ningbo, Zhejiang,

PEOPLE'S REPUBLIC OF CHINA

Product: Photovoltaic (PV) and battery inverter

Model: S6-EH1P3K-L-EU S6-EH1P6K-L

 S6-EH1P3.6K-L-EU
 S6-EH1P3K-L-WS

 S6-EH1P4.6K-L-EU
 S6-EH1P3.6K-L-WS

 S6-EH1P5K-L-EU
 S6-EH1P4.6K-L-WS

 S6-EH1P6K-L-EU
 S6-EH1P5K-L-WS

S6-EH1P6K-L-WS

Inverter for single-phase parallel connection to the public grid. The network monitoring and disconnection device is an integral part of the above-mentioned model.

#### Applied rules and standards:

#### EN 50549-1:2019

Requirements for parallel connection of installations with distribution networks - Part 1: Connection to an LV distribution network - Production of installations up to and including Type B

- 4.4 Normal operating range
- 4.5 Immunity to disturbances
- 4.6 Active response to frequency deviation
- 4.7 Power response to voltage variations and voltage changes
- 4.8 EMC and power quality
- 4.9 Interface protection

Certificate number:

- 4.10 Connection and starting to generate electrical power
- 4.11 Ceasing and reduction of active power on set point
- 4.13 Requirements regarding single fault tolerance of interface protection system and interface switch

#### DIN VDE V 0124-100:2020 (5.5.2.1 Functional safety of network and system protection)

Grid integration of generator plants - Low-voltage - Test requirements for generator units to be connected to and operated in parallel with low-voltage distribution networks

## Commission Regulation (EU) 2016/631 of 14 April 2016

Establishing a network code on requirements for grid connection of generators (NC RFG).

Type approval for generation units to use in Type A plants.

U23-0708

At the time of issue of this certificate, the safety concept of an aforementioned representative product corresponds to the valid safety specifications for the specified use in accordance with regulations.

Report number: CCCV-ESH-P22100044-R1

Certification Program: NSOP-0032-DEU-ZE-V01

Date of issue: 2023-08-25

**Certification body** 

Alf Assenkamp

DAKKS
Deutsche
Akkreditierungsstelle
D-ZE-12024-01-00

Certification body Bureau Veritas Consumer Products Services Germany GmbH accreditation to DIN EN ISO/IEC 17065

Testing laboratory accredited according to DIN EN ISO/IEC 17025

A partial representation of the certificate requires the written approval of Bureau Veritas Consumer Products Services Germany GmbH



# Annex to the EN 50549-1 certificate of compliance No. U23-0708

Appendix							
Extract from test report according to EN 50549-1 No. CCCV-ESH-P22100044-R1							
Type Approval and declaration of compliance with the requirements of EN 50549-1 and Commission Regulation (EU) 2016/631 of 14 April 2016							
Manufacturer / applicant	Ginlong Technologies Co., Ltd.						
	No.57 Jintong Road, Binhai Industrial Park, Xiangshan, 315712 Ningbo, Zhejiang, PEOPLE'S REPUBLIC OF CHINA						
FEOFLE 3 REPUBLIC OF CHINA							
Micro-generator Type	Photovoltaic and battery inverter						
mioro generator Typo	S6-EH1P3K-L-EU S6-EH1P3.6K-L-EU S6-EH1P4.6K-L-EU S6-EH1P5K-L-EU						
MPP DC voltage range [V]		90-		00 2000 2000			
Max. input DC voltage [V]	600						
Max. input DC current [A]	16/16						
Output AC voltage [V]	230, 50/60 Hz						
Rated AC current [A]	13,0	15,7	20,0	21,7			
Max AC current [A]	13,0	15,7	20,0	21,7			
Active Power [W]	3000	3600	4600	5000			
Max. apparent power [VA]	3000	3600	4600	5000			
Battery DC voltage range [V]	42-58						
Battery charge / discharge current [A]	62,5	75	100	105			
	S6-EH1P6K-L-EU	S6-EH1P3K-L-WS	S6-EH1P3.6K-L- WS	S6-EH1P4.6K-L- WS			
MPP DC voltage range [V]	90-520						
Max. input DC voltage [V]	600						
Max. input DC current [A]	16/16						
Output AC voltage [V]	230, 50/60 Hz						
Rated AC current [A]	26,1	13,0	15,7	20,0			
Max AC current [A]	26,1	13,0	15,7	20,0			
Active Power [W]	6000	3000	3600	4600			
Max. apparent power [VA]	6000	3000	3600	4600			
Battery DC voltage range [V]	42-58						
Battery charge / discharge current [A]	125	62,5	75	100			
	S6-EH1P5K-L- WS	<b>S6-EH1P6K-L- WS</b> 90-520	S6-EH1P6K-L				
MPP DC voltage range [V]							
Max. input DC voltage [V]	600						
Max. input DC current [A]	16/16						
Output AC voltage [V]	230, 50/60 Hz						
Rated AC current [A]	21,7	26,1	26,1				
Max AC current [A]	21,7 5000	26,1 6000	30,0 6000				
Active Power [W]							
Max. apparent power [VA]	5000	6000	6600				



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Appendix	
Extract from test report according to EN 50549-1	No. CCCV-ESH-P22100044-R1

Battery DC voltage range [V]				
Battery charge / discharge current [A]	105	125	125	
Firmware version	Λ1		_	_

## Description of the structure of the power generation unit:

The power generation unit is equipped with a PV/DC and line-side EMC filter. The power generation unit has no galvanic isolation between DC input and AC output. Output switch-off is performed with single-fault tolerance based on the inverter bridge and two series-connected relays in each line and neutral. This enables a safe disconnection of the power generation unit from the network in case of error.

#### Note:

The settings of the interface protection are password protected adjustable.

In case the above stated generators are used with an external protection device, the protection settings of the inverters are to be adjusted according to the manufacturer's declaration.

The above stated generators are tested according to the requirements in the EN 50549-1:2019 Commission Regulation (EU) 2016/631 of 14 April 2016. Any modification that affects the stated tests must be named by the manufacturer/supplier of the product to ensure that the product meets all requirements.