

# Certificate of Conformity

Certificate Number: CN-PV-220111R1

On the basis of the tests undertaken, the sample<s> of the below product have been found to comply with the requirements of the referenced specification<s>/standard<s> at the time the tests were carried out. It does not imply that Intertek has performed any surveillance or control of the manufacture(s). The manufacturer(s) shall ensure that the manufacturing process assures compliance of the production units with the examined products mentioned in this certificate.

Applicant: Shenzhen SOFARSOLAR Co., Ltd.

11/F., Gaoxingi Technology Building, No.67 Area, Xingdong Community,

Xin'an Sub-district, Bao'an District, Shenzhen City, China

Product: Inverter Module

Ratings & Principle See appendix of Certificate of Conformity

**Characteristics:** 

**Model:** ESI 3K-S1, ESI 3.68K-S1, ESI 4K-S1, ESI 4.6K-S1, ESI 5K-S1,

ESI 5K-S1-A, ESI 6K-S1

Brand Name<s>: 5 FAR

**Product Complies with:** EN 50549-1: 2019, Requirements for generating plants to be connected

in parallel with distribution networks

Part 1: Connection to a LV distribution network - Generating

plants up to and including type B

Type approval for Ireland interface settings

Certificate Issuing Office Intertek Testing Services Ltd. Shanghai

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Accredited by ACCREDIA in accordance with ISO/IEC 17065:2012

**Test Report No.<s>:** 220725014GZU-002

According to Annex H of the standard EN 50549-1:2019, generating plants compliant with the clauses of this European Standard are considered to be compliant with the relevant Article of COMMISSION REGULATION (EU) 2016/631, provided that all settings as provided by the DSO and the responsible party are complied with.

#### Replaces certificate CN-PV-220111 dated 1 June 2022

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Additional information in Appendix.

Signature

**Certification Manager: Grady Ye** 

Date: 29 July 2022

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PRD N° 306B



## **APPENDIX: Certificate of Conformity**

This is an Appendix to Certificate of Conformity Number: CN-PV-220111R1.

MODEL	ESI 3K-S1	ESI 3.68K-S1	ESI 4K-S1	ESI 4.6K-S1	
Max.DC input voltage	550Vdc				
MPPT voltage range	85~520Vdc				
Max.PV Isc	2*22.5A				
Rated battery voltage	400V				
Max.charging/discharging current	20A				
Max.charging/discharging power	3000W	3680W	4000W	4600W	
Rated grid voltage	230V,50Hz				
Rated output voltage	230V,50/60Hz				
Max.output current	15A	16A	20A	20.9A	
Power Factor	1 default (adjustable+/-0.8)				
Rated output power	3000W	3680W	4000W	4600W	
Backup Rated Current	13A	16A	17.4A	20A	
Backup Rated Apparent Power	3000VA	3680VA	4000VA	4600VA	
Ambient Temperature	-10~ +50°C				
Protection Degree	IP65				
Protection Class	Class I				
Inverter topology	Non-Isolated				
Overvoltage Category	AC III, DC II				
Firmware version:	V000001				



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MODEL	ESI 5K-S1	ESI 5K-S1-A	ESI 6K-S1	
Max.DC input voltage	550Vdc			
MPPT voltage range	85~520Vdc			
Max.PV Isc	2*22.5A			
Rated battery voltage	400V			
Max.charging/discharging current	20A			
Max.charging/discharging power	5000W	5000W	6000W	
Rated grid voltage		230V,50Hz		
Rated output voltage		230V,50/60Hz	//	
Max.output current	25A	22.7A	30A	
Power Factor	1 default (adjustable+/-0.8)			
Rated output power	5000W	5000W	6000W	
Backup Rated Current	21.7A	22.7A	26A	
Backup Rated Apparent Power	5000VA	5000VA	6000VA	
Ambient Temperature		-10~ +50°C	V	
Protection Degree	IP65			
Protection Class	Class I			
Inverter topology	Non-Isolated			
Overvoltage Category	AC III, DC II			
Firmware version:	V000001			



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#### Interface protection of Ireland interface settings:

Parameter	Trip setting	Clearance time	
I.S. EN 50549-1 Two Stage Voltage Settings	Stage 1	269 V / 468 V	70 s
	Stage 2	281 V / 488 V	0.7 s
Under voltage		191 V / 332 V	0.7 s
Over frequency*		52 Hz	0.5 s
Under frequency*		47 Hz	0.5 s

An explicit Loss of Mains functionality shall be included. Established methods such as, but not limited to, Rate of Change of Frequency, or Source Impedance Measurement may be used. Where Source Impedance is measured, this shall be achieved by purely passive means. Any implementation which involves the injection of pulses onto the DSO network, shall not be permitted.

ROCOF (**)	1.0 Hz/s	0.6 s
Vector Shift	Not permitted	