

Certificate No.: **HC23111401001-EG-IC-C001**

Date of issue: 2023-12-11

Valid until: Indefinitely

Applicant: **FOXESS CO., LTD.**
No.939, Jinhai Third Road, New Airport Industry Area, Longwan District,
Wenzhou, Zhejiang, China

Product: **Hybrid inverter (PV + DC coupled storage)**

Model(s): **KH7, KH8, KH9, KH10, KH10.5**

Trademark: 

Technical data: Nominal active output power [W]: 7000 ~ 10500
Nominal output AC voltage [V]: 230 (L + N + PE, 50 Hz)
(For further details see A.2 on p.2.)

Software version: Master: V1.20; Slave: V1.01

Applied standard(s) / guideline(s): **IEC 60068-2-1:2007 ***
Environmental testing – Part 2-1: Tests – Test A: Cold
IEC 60068-2-2:2007 *
Environmental testing – Part 2-2: Tests – Test B: Dry heat
IEC 60068-2-14:2009 *
Environmental testing – Part 2-14: Tests – Test N: Change of temperature
IEC 60068-2-30:2005 *
Environmental testing – Part 2-30: Tests –Test Db and guidance: Damp heat, cyclic (12 + 12-hour cycle)
IEC 60068-2-64:2019 *
Environmental testing – Part 2-64: Tests –Test Fh: Vibration, broadband random and guidance
IEC 61683:1999
Photovoltaic systems – Power conditioners – Procedure for measuring efficiency
IEC 61727:2004
Photovoltaic (PV) systems – Characteristics of the utility interface
IEC 62116:2014
Utility-interconnected photovoltaic inverters – Test procedure of islanding prevention measures

Note:

* The marked standards are not within the accreditation scope of the certification body.

Certification scheme: **CMPD-01**

Test report no.: **HC23111401001-EG-IC-001** (2023-12-08)
HC23111401002-EG-IC-001 (2023-12-08)
HC23111401003-EG-IC-001 (2023-12-08)
VTL23.11.069CE (2023-12-01)

This certificate confirms that the above-mentioned product(s) with the corresponding software meet the requirements of the referenced standard(s) / guideline(s) at the time of issuance of the certificate.

This certificate relates to type testing and does not imply LYNS's endorsement, approval, certification or on-going control of the product(s), either in terms of performance, design, manufacture or materials used. This certificate and the results stated herein relate solely to the sample product(s) tested and to the specific tests undertaken.

The certificate will remain valid for the stated period providing no changes are made to the product, production method etc. This certificate is only valid when this is also found at <http://www.lyns-tci.com/en/certificate-search> or contact Lyns-tci Technology Guangdong Co., Ltd..

This certificate is for the exclusive use of LYNS's Client and is provided pursuant to the agreement between LYNS and its Client. LYNS's responsibility and liability are limited to the terms and conditions of the agreement. LYNS assumes no liability to any party, other than to the Client in accordance with the agreement, for any loss, expense or damage occasioned using this verification.

The certificate is comprised of 3 pages (including Annex of 2 pages).

Dongguan, 2023-12-11



Dipl.-Ing. Weizhao Zheng
Head of certification body



PCA-159

Certification body Lyns-tci Technology Guangdong Co., Ltd. accredited according to ISO/IEC 17065 for product certification.

This document shall not be reproduced, except in full, without the written approval of Lyns-tci Technology Guangdong Co., Ltd.

A.1 Revision history of the certificate

Rev. No.	Date	Changes	Status
Rev. 0 (HC23111401001-EG-IC-C001)	2023-12-11	Initial issue	Active

A.2 Technical data of the power generating unit(s)

Product family	KH{7 ~ 10.5}		
Model	KH7	KH8	KH9
DC input (PV)			
Max. DC input voltage [V]	600		
Operating MPPT voltage range [V]	80 ~ 500		
Max. input DC current	16 A * 3		16 A * 4
Battery connection			
Battery voltage range [V]	85 ~ 480		
Battery charging current	max. 50 A * 2		
Battery discharging current	max. 50 A * 2		
AC connection			
No. of phases	<input checked="" type="checkbox"/> Single-phase <input type="checkbox"/> Three-phase		
Nominal output AC voltage [V]	230 (L + N + PE, 50 Hz)		
Max. output AC current [A]	33.5	38.3	43.0
Nominal active output power [W]	7000	8000	9000
Max. apparent output power [VA]	7700	8800	9900
Model	KH10	KH10.5	
DC input (PV)			
Max. DC input voltage [V]	600		
Operating MPPT voltage range [V]	80 ~ 500		
Max. input DC current [A]	16 A * 4		
Battery connection			
Battery voltage range [V]	85 ~ 480		
Battery charging current	max. 50 A * 2		
Battery discharging current	max. 50 A * 2		
AC connection			
No. of phases	<input checked="" type="checkbox"/> Single-phase <input type="checkbox"/> Three-phase		
Nominal output AC voltage [V]	230 (L + N + PE, 50 Hz)		
Max. output AC current [A]	45.7	47.7	
Nominal active output power [W]	10000	10500	
Max. apparent output power [VA]	10500	10500	

Annex to the Certificate No.: **HC23111401001-EG-IC-C001**

Operating temperature range	-25°C ~ +60°C
Degree of protection	IP65 (according to EN 60529)
Protection class	I (according to IEC 62109-1)
Type of internal transformer	No internal transformer (transformerless)
Firmware version	Master: V1.20; Slave: V1.01
Manufacturer	FOXESS CO., LTD. No.939, Jinhai Third Road, New Airport Industry Area, Longwan District, Wenzhou, Zhejiang, China

A.3 Remarks for type testing

Testing laboratory 1	Lyns-tci Technology Guangdong Co., Ltd. Room 1201, Unit 2, Building 18, No. 7, Science and Technology Boulevard, Houjie Town, Dongguan City, Guangdong, 523960 P.R.C (Accredited acc. ISO/IEC 17025: A2LA Accreditation no. 5200.02)
Testing location 1	Same as above
Measurement period	2023-11-18 ~ 2023-11-29
Testing laboratory 2	Jiangsu Vehicle Testing Services Co., Ltd. Building 6, No.278, Huajin Road, Tongan, SND, Suzhou, Jiangsu, China (Accredited acc. ISO/IEC 17025: CNAS Accreditation no. L12681)
Testing location 2	Same as above
Measurement period	2023-11-22 ~ 2023-11-30