

SOFAR 100-125KTLX-G4

100 / 110 / 125 kW

THREE-PHASE TEN MPPTS



Product advantages

- Max. efficiency up to 98.6%
- IP66 design for outdoor
- Maximum 10 MPPTs with 150%+ DC overload
- Type II SPD for both DC and AC side
- I-V curve scanning function
- Supports Modbus Communication, external Wi-Fi



Model	SOFAR 100KTLX-G4	SOFAR 110KTLX-G4	SOFAR 125KTLX-G4	SOFAR 125KTLX-G4-A
Input (DC)				
Max. input voltage	1100V			
Rated input voltage	625V			
Start-up voltage	200V			
MPPT operating voltage range	180V-1000V			
Number of MPP trackers	10			
Number of DC inputs	20			
Max. input MPPT current	10×40A			
Max. input short circuit current	10×50A			
Output (AC)				
Rated output power	100kW	100kW	110kW	125kW
Max. apparent power	100kVA@45°C / 90kVA@50°C	110kVA@45°C / 100kVA@50°C	125kVA@45°C / 110kVA@50°C	125kVA@45°C / 110kVA@50°C
Max. output current	152A@380V / 145A@400V / 139.2A@415V	167.2A@380V / 159.5A@400V / 153.1A@415V	190A@380V / 181.2A@400V / 174A@415V	190A@380V / 181.2A@400V / 174A@415V
Rated output voltage	3/N/PE, 380V / 400V / 415V			
Output voltage range	310-480Vac			
Rated output frequency	50/60Hz			
Output frequency range	45Hz-55Hz/55Hz-65Hz			
Active power adjustable range	0-100%			
THDi	<1%(@100%P)			
Power factor	1 (adjustable +/-0.8)			
Efficiency				
Max. efficiency	98.6%			
European efficiency	98.3%			
Protection				
DC reverse polarity protection	Yes			
Anti-islanding protection	Yes			
Leakage current protection	Yes			
Ground fault monitoring	Yes			
PV-array string fault monitoring	Yes			
DC switch	Yes			
AFCI	Yes			
SPD	PV: type II, AC: type II			
General Data				
Ambient temperature range	-30°C to +60°C			
Topology	Transformerless			
Degree of protection	IP66			
Allowable relative humidity range	0-100%			
Max. operating altitude	4000m (>3000m derating)			
Cooling	Smart air cooling			
Dimension (W×H×D)	970×695×325mm			
Weight	75kg			
Display	LCD & Bluetooth +APP			
Communication	RS485/Wi-Fi			
Standard	EN/IEC 62109-1/2, EN/IEC 61000-6-2/-4, IEC 61000-3-4/-5, EN 50530, EN 50549, IEC62116, IEC 61727, IEC 61683, IEC 60068-2-1/2/14/30, VDE V 0126-1-1, UTE C15-712-1, VDE-AR-N 4105/4110, NTS 631, UNE 217001, UNE 217002, G99, C10/11			

*All specifications are subject to change without notice.



Certificate of Conformity

Certificate No. : CCI230100165ENCER

Applicant : Shenzhen SOFARSOLAR Co., Ltd.
Address : 11/F., Gaoxingqi Technology Building, No.67 Area, Xingdong Community, Xin'an Sub-district, Bao'an District, Shenzhen City, China

Sample Name : Solar Grid-tied Inverter
Model/Item No. : SOFAR 125KTLX-G4-A, SOFAR 100KTLX-G4, SOFAR 110KTLX-G4, SOFAR 125KTLX-G4

Test Standards : IEC 62321-2:2013 IEC 62321-6:2015
IEC 62321-3-1:2013 IEC 62321-7-2:2017
IEC 62321-4: 2013+A1:2017 IEC 62321-8:2017
IEC 62321-5: 2013

The submitted sample(s) stated as above has(have) been tested by us with the listed standards and found in conformity with the requirements stated in Directive 2011/65/EU of the European Parliament and of the Council with regard to the restriction of the use of certain hazardous substances in electrical and electronic equipment and its subsequent amendments as well as Commission Delegated Directive (EU) 2015/863. It is possible to use CE marking on the product to demonstrate the conformity with this Directive.

This certification is part of the full test report(s) and should be read in conjunction with it. The certificate is based on a single evaluation of one sample of above-mentioned products. It does not imply an assessment of the whole production. Other CE marking directives may be applied, they have not been considered during this RoHS conformity assessment.



Technical director
Feb. 17, 2023

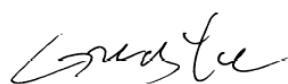
Certificate of Conformity

Certificate Number: CN-PV-230069

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., Gaoxinqi Technology Building, No.67 Area, Xingdong Community, Xin'an Sub-district, Bao'an District, Shenzhen City, China
Product:	Solar Grid-tied Inverter
Ratings & Principle Characteristics:	See appendix of Certificate of Conformity
Model:	SOFAR 100KTLX-G4, SOFAR 110KTLX-G4 SOFAR 125KTLX-G4, SOFAR 125KTLX-G4-A
Brand Name<s>:	
Product Complies with:	Ordinul ANRE Nr. 208/14.12.2018 For the approval of the Technical Regulation concerning the technical requirements for connection to electricity networks of public interest for generating modules, power plants consisting of generating modules and power plants consisting of offshore generating modules (offshore) Type approval for type B
Certificate Issuing Office Name & Address:	Intertek Testing Services Ltd. Shanghai West Area, 2 nd Floor, No. 707, Zhangyang Road China (Shanghai) Pilot Free Trade Zone, Shanghai, P. R. China
Test Report No.<s>:	221201104GZU-001

Additional information in Appendix.



Signature

Certification Manager: Grady Ye

Date: 28 February 2023

This Certificate is for the exclusive use of Intertek's client and is provided pursuant to the agreement between Intertek and its Client. Intertek's responsibility and liability are limited to the terms and conditions of the agreement. Intertek assumes no liability to any party, other than to the Client in accordance with the agreement, for any loss, expense or damage occasioned by the use of this Certificate. Only the Client is authorized to permit copying or distribution of this Certificate. Any use of the Intertek name or one of its marks for the sale or advertisement of the tested material, product or service must first be approved in writing by Intertek.

APPENDIX: Certificate of Conformity

This is an Appendix to Certificate of Conformity Number: CN-PV-230069

Model	SOFAR 100KTLX-G4	SOFAR 110KTLX-G4	SOFAR 125KTLX-G4	SOFAR 125KTLX-G4-A
Max. DC input Voltage	1100Vdc			
Operating MPPT voltage range	180Vdc – 1000Vdc			
Max. Input current	10*40A			
PV Isc	10*50A			
Nominal AC output voltage	3/N/PE 230Vac/400Vac			
Nominal AC output Frequency	50/60Hz			
Max. AC output current	145A	159.5A	181.2A	181.2A
Rated Output power	100.0KW	100.0KW	110.0KW	125.0KW
Max.Output Power	100.0KVA	110.0KVA	125.0KVA	125.0KVA
Power factor	1(adjustable +/-0.8)			
Safety level	Class I			
Ingress Protection	IP 66			
Operation Ambient Temperature	-30°C - 60°C			
Software version	V000001			

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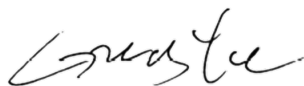
Certificate of Conformity

Certificate Number: CN-PV-230368

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., Gaoxinqi Technology Building, No.67 Area, Xingdong Community, Xin'an Sub-district, Bao'an District, Shenzhen City, China
Product:	Solar Grid-tied Inverter
Ratings & Principle Characteristics:	See appendix of Certificate of Conformity
Model:	SOFAR 100KTLX-G4, SOFAR 110KTLX-G4, SOFAR 125KTLX-G4
Brand Name<s>:	
Product Complies with:	PHILIPPINE DISTRIBUTION CODE (PDC) 2017 EDITION RESOLUTION NO.02, Series of 2018 Establishing the connection and Operational Requirements for Variable Renewable Energy (VRE) Generating Facilities Type test for Medium Embedded Generating Plants
Certificate Issuing Office Name & Address:	Intertek Testing Services Ltd. Shanghai West Area, 2 nd Floor, No. 707, Zhangyang Road China (Shanghai) Pilot Free Trade Zone, Shanghai, P. R. China Accredited by ACCREDIA in accordance with ISO/IEC 17065:2012
Test Report No.<s>:	221215056GZU-009

Additional information in Appendix.



Signature

Certification Manager: Grady Ye

Date: 25 June 2023



PRD N° 306B

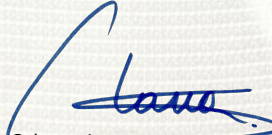
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APPENDIX: Certificate of Conformity

This is an Appendix to Certificate of Conformity Number: CN-PV-230368

Model	SOFAR 100KTLX-G4	SOFAR 110KTLX-G4	SOFAR 125KTLX-G4
Max. DC input Voltage	1100Vdc		
Operating MPPT voltage range	180Vdc – 1000Vdc		
Max. Input current	10*40A		
PV Isc	10*50A		
Nominal AC output voltage	3/N/PE 220Vac/380Vac		
Nominal AC output Frequency	60Hz		
Max. AC output current	152A	167.2A	190A
Rated Output power	100.0kW	100.0kW	110.0kW
Max.Output Power	100.0kVA	110.0kVA	125.0kVA
Power factor	1(adjustable +/-0.8)		
Safety level	Class I		
Ingress Protection	IP 66		
Operation Ambient Temperature	-30°C - 60°C		
Software version	V000001		

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Unit Certificate / Einheitenzertifikat		No: 230039RECO06-E1-CER Signed Copy No.1 / Unterzeichnete Kopie No.1			
License holder / Lizenzinhaber	Shenzhen SOFARSOLAR Co., Ltd. 11/F., Gaoxinqi Technology Building, No.67 Area, Xingdong Community, Xin'an Sub-district, Bao'an District, Shenzhen City, Guangdong Province, P.R. China				
Manufacturers / Herstellers	Dongguan SOFAR SOLAR Co., Ltd.. 1F - 6F, Building E, No. 1 JinQi Road, Bihu Industrial Park, Wulian Village, Fenggang Town, Dongguan City, Guangdong Province, P.R. China.				
Power generating unit type / Typ Erzeugungseinheit	PV Inverter				
	Trademark / Series	SofarSolar / SOFAR 100-125KTLX-G4 series			
	Model	SOFAR 100KTLX-G4	SOFAR 110KTLX-G4	SOFAR 125KTLX-G4	SOFAR 125KTLX-G4-A
Technical Data / Technische Daten	Maximum Output Power / Maximale Ausgangsleistung	100 kVA	110 kVA	125 kVA	125 kVA
	Rated active power/ Bemessungswirkleistung:	100 kW	100 kW	110 kW	125 kW
	Rated Voltage/ Bemessungsspannung	230/400 V 3/N/PE	230/400 V 3/N/PE	230/400 V 3/N/PE	230/400 V 3/N/PE
	Nominal Frequency / Nennfrequenz	50 / 60 Hz	50 / 60 Hz	50 / 60 Hz	50 / 60 Hz
	Software version / Softwareversion	V000001	V000001	V000001	V000001
Validated Simulation Model / Validiertes Simulationsmodell	Reference name: PGU_125kW.slx MD5 Checksum: 8389DD438CCD500CC55013D4FCC9ABBB Simulation platform: Matlab Simulink R2021b				
VDE application guide / VDE-Anwendungsregel	VDE-AR-N 4110: 2018-11. Technical requirements for the connection and operation of customer installations to the medium voltage network (TAR medium voltage) / VDE-AR-N 4110: 2018-11. Technische Voraussetzungen für den Anschluss und Betrieb von Kundenanlagen an das Mittelspannungsnetz (TAR-Mittelspannung).				
Certification programme / Zertifizierungsprogramm	FGW- Richtlinie TR 8 Rev. 9				
Other applicable standards/guidelines / Mitgeltende Normen/Richtlinien	FGW- Richtlinie TR 3 Rev. 25 (including supplement 1, dated on 22/01/2019) and FGW- Richtlinie TR 4 Rev. 9.				
The power generating unit mentioned above meets the requirements of the application guide listed above / Die oben bezeichnete Erzeugungseinheit erfüllt die Anforderungen der oben aufgeführten Anwendungsregel The following restrictions and deviations apply / Es gelten folgende Einschränkungen und Abweichungen: - The certified product does not provide test terminal. A connecting terminal plate has to be installed separately, if necessary. Das zertifizierte Produkt bietet kein Prüfklemmleiste. Eine Prüfklemmleiste ist bei Bedarf separat nachzurüsten. This certification according to ISO/IEC 17065 has been issued on basis of the certification procedure of SGS / Diese Zertifizierung nach ISO / IEC 17065 wurde auf Basis des Zertifizierungsverfahrens von SGS erteilt. The manufacturer has provided proof of certification of the quality management system of his production facility in accordance with ISO 9001 or is subject to production monitoring / Der Hersteller hat die Zertifizierung seines Qualitätsmanagementsystems seiner Fertigungsstätte nach ISO 9001 nachgewiesen bzw. unterliegt einer Fertigungsüberwachung. The certificate comprises the following information / Das Zertifikat beinhaltet folgende Angaben: • Technical data of the power generating unit, the auxiliary equipment used and the software version used / Technische Daten der Erzeugungseinheit, der eingesetzten Hilfseinrichtungen und der verwendeten Softwareversion. • Schematic structure of the power generating unit / Den schematischen Aufbau der Erzeugungseinheit. • Summarized information on the properties of the power generating unit / Zusammengefasste Angaben zu den Eigenschaften der Erzeugungseinheit. The certificate is comprised of 1 page and an Annex of 136 pages. Current revision of this annex is Revision 1 (dated on 02-08-2023). / Das Zertifikat besteht aus 1 Seite und einem Anhang mit 136 Seiten. Die aktuelle Revision dieses Anhangs ist Revision 1 (vom 02.08.2023). This certificate cancels and supersedes certificate n° 230039RECO06-CER. / Diese bescheinigung annulliert und setzt die bescheinigung nummer 230039RECO06-CER. The certificate is valid until / Dieses Zertifikat ist gültig bis: 14-06-2028 Place, Date/ Ort, Datum: Brussels, 11-08-2023					
 Calogero Lana Certification Manager					





Einheitenzertifikat <i>Unit certificate</i>		Nr / No.: 23-197-00
Hersteller / Antragsteller <i>Manufacturer / Applicant</i>	Shenzhen SOFARSOLAR Co., Ltd. 11/F., Gaoxingqi Technology Building, No.67 Area, Xingdong Community, Xin'an Sub-district, Bao'an District, Shenzhen City, China	
Typ Erzeugungseinheit <i>Power generation unit type</i>	SOFAR 100KTLX-G4, SOFAR 110KTLX-G4 SOFAR 125KTLX-G4, SOFAR 125KTLX-G4-A	
☒ Umrichter / <i>Inverter</i>	☐ Asynchrongenerator / <i>Asynchronous generator</i>	☐ Synchrongenerator / <i>Synchronous generator</i>
☐ Stirlinggenerator / <i>Stirling generator</i>	☐ Brennstoffzelle / <i>Fuel Cell</i>	☐ andere / <i>other</i>
Bemessungswerte <i>Assessment values</i>	max. Wirkleistung $P_{E_{max}}$ <i>max. active power $P_{E_{max}}$</i> Max. Scheinleistung $S_{E_{max}}$ <i>max apparent power $S_{E_{max}}$</i> Bemessungsspannung <i>Rated voltage</i> Bemessungsstrom (AC) I_r <i>Rated current (AC) I_r</i> Anfangs-Kurzschlusswechselstrom $I_{k''}$ <i>Initial short-circuit current $I_{k''}$</i> Siehe Anhang 1 <i>See annex 1</i>	
Netzanschlussregel <i>Network connection rule</i>	SOP-9-1_15 GCC Certification Program, 09/21 Auf Basis von / <i>Based on</i> : VDE-AR-N 4105:2018-11 Erzeugungsanlagen am Niederspannungsnetz – Technische Mindestanforderungen für Anschluss und Parallelbetrieb von Erzeugungsanlagen am Niederspannungsnetz. <i>Generators connected to the low-voltage distribution network– Technical minimum requirements for connection and parallel operation of power generation systems connected to the low-voltage network</i>	
Prüfanforderung <i>Test requirement</i>	DIN VDE V 0124-100 (VDE V 0124-100):(2020-06) Netzintegration von Erzeugungsanlagen- Niederspannung- Prüfanforderungen an Erzeugungseinheiten vorgesehen zum Anschluss und Parallelbetrieb am Niederspannungsnetz <i>Network integration of power generation systems – Low voltage" Test requirements for power generation units intended for connection to and parallel operation on the low-voltage network</i>	
Prüfbericht <i>Test Report</i>	221129BWA146-EG-DE-001 vom / from 2023-04-26	
Die oben bezeichnete Erzeugungseinheiten erfüllen die Anforderungen der VDE-AR-N 4105:2018-11. <i>The above designated power generation units meets the requirements of VDE-AR-N 4105:2018-11.</i>		

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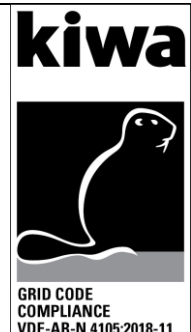
Kaufbeuren, 2023-05-10

Raphael Rader

- Digitally signed | see <http://ca.kiwa-deutschland.de> for more details -

Raphael Rader

Certification Engineer





Anhang / Annex 1 Beschreibung der Erzeugungseinheit

Description of the Unit

Hersteller / Antragsteller <i>Manufacturer / Applicant</i>	Shenzhen SOFARSOLAR Co., Ltd. 11/F., Gaoxinqi Technology Building, No.67 Area, Xingdong Community, Xin'an Sub-district, Bao'an District, Shenzhen City, China			
Typ Erzeugungseinheit <i>Power generation unit type</i>	SOFAR 100KTLX-G4	SOFAR 110KTLX-G4	SOFAR 125KTLX-G4	SOFAR 125KTLX-G4-A
max. Wirkleistung* $P_{E_{max}}$ <i>max. active power* $P_{E_{max}}$</i>	100 kW	100 kW	110 kW	125 kW (124815 W)
Max. Scheinleistung* $S_{E_{max}}$ <i>max apparent power* $S_{E_{max}}$</i>	100 kVA	110 kVA	125 kVA	125 kVA (125111 VA)
Bemessungsspannung <i>Rated voltage</i>	3/N/PE, 220/380Vac, 230/400Vac, 240/415Vac 50/60Hz " * * "			
Bemessungsstrom (AC) I_r <i>Rated current (AC) I_r</i>	145,0 A	145,0 A	159,4 A	181,2 A
Anfangs-Kurzschlusswechselstrom $I_{k''}$ <i>Initial short-circuit current $I_{k''}$</i>	145,0 A	159,5 A	181,2 A	181,2 A

*Herstellerangabe, Wert in Klammern ist messtechnisch ermittelter Wert

**manufacturer information, value in bracket indicate measured value*

** Geprüft mit 230Vac, 50Hz (P-N) / ***tested with 230Vac, 50Hz (P-N)*

Die Familie SOFAR 100KTLX-G4, SOFAR 110KTLX-G4, SOFAR 125KTLX-G4, SOFAR 125KTLX-G4-A sind transformatorlose, netzgekoppelter PV-Wechselrichter, die den Gleichstrom der PV-Module in netzkonformen Drehstrom umwandelt und in das öffentliche Stromnetz einspeist.

Die Familie wurde mit dem Modell SOFAR 125KTLX-G4-A geprüft. Die Ergebnisse sind auf andere Modelle zu übertragen

- Hardware-Version: V001

- Software-Version: V000001

The family SOFAR 100KTLX-G4, SOFAR 110KTLX-G4, SOFAR 125KTLX-G4,

SOFAR 125KTLX-G4-A are transformer-less on grid PV inverter, that converts the direct current of the PV panels to the grid-compliant, three-phase current and feeds into the utility grid

The product was tested on the SOFAR 125KTLX-G4-A. The results are to be transferred to other models.

• Hardware version: V001

• Software version: V000001

Die Messungen wurden zwischen 2022-12-01 und 2023-03-30 durchgeführt.

Prüflabor: Guangdong HuaChuang Technology Service Co, Ltd, A2LA-Akkreditierung Nr. 5200.02 gemäß. DIN EN ISO/IEC 17025

The measurements were carried out between 2022-12-01 and 2023-03-30. Test laboratory: Guangdong HuaChuang Technology Service Co., Ltd., A2LA Accreditation no. 5200.02 acc. DIN EN ISO/IEC 17025



Anhang / Annex 2				
E.5 Auszug aus dem Prüfbericht für Erzeugungseinheiten „Bestimmung der elektrischen Eigenschaften“ Extract of the test report for power generation units “Determination of electrical properties”			Nr. /No.: 221129BWA146-EG-DE-001	
Anlagenhersteller: System manufacturer:	Shenzhen SOFARSOLAR Co., Ltd. 11/F., Gaoxingqi Technology Building, No.67 Area, Xingdong Community, Xin'an Sub-district, Bao'an District, Shenzhen City, China			
Herstellerangaben: Manufacturer indications:	Anlagenart (BHKW, PV-WR...) System Type (BHKW, PV-WR...)	Netzgeführter PV-Wechselrichter Solar Grid-tied Inverter		
	Wirkleistung P _n Active power P _n	Siehe Anhang 1 P _{E_{max}} See annex 1 P _{E_{max}}		
	Scheinleistung S _n Apparent power S _n	Siehe Anhang 1 S _{E_{max}} See annex 1 S _{E_{max}}		
	Bemessungsspannung Rated voltage	3/N/PE,220/380Vac,230/400Vac,240/415Vac 50/60Hz		
Messzeitraum	Vom / from 2022-12-01 bis / to 2023-03-30			
Schnelle Spannungsänderungen / Rapid voltage changes:				
Einschalten ohne Vorgabe (zum Primärenergieträger) Connection without provisions (regarding the primary energy carrier)			k _i = 0,056	
Ungünstigster Fall beim Umschalten der Generatorstufen Most adverse case when switching between generator levels			k _i = ---	
Einschalten bei Nennbedingungen (des Primärenergieträgers) Connection at nominal conditions (of the primary energy carrier)			k _i = 0,070	
Ausschalten bei Bemessungsleistung Disconnection at rated power			k _i = 0,104	
Schlechtester Wert aller Schaltvorgänge Worst value of all switching operations			k _{imax} = 0,104	
Flicker				
Netzimpedanzwinkel ψ _k : Network impedance angle ψ _k :	30°	50°	70°	85°
Anlagenflickerbeiwert c _ψ : Initial flicker factor c _ψ :	0,46	0,43	0,39	0,35
S _{kfid} /S _n =20				



Oberschwingungen / Harmonics (Max. Value of all lines)										
Wirkleistung P/P _n [%] Active Power P/P _n [%]	10	20	30	40	50	60	70	80	90	100
Ordnungszahl Ordinal number	I[%]	I[%]	I[%]	I[%]	I[%]	I[%]	I[%]	I[%]	I[%]	I[%]
2	0,008	0,01	0,009	0,011	0,011	0,069	0,072	0,066	0,086	0,078
3	0,046	0,045	0,034	0,03	0,031	0,095	0,088	0,135	0,084	0,089
4	0,007	0,009	0,009	0,014	0,009	0,032	0,033	0,028	0,037	0,035
5	0,261	0,189	0,052	0,056	0,058	0,308	0,309	0,395	0,279	0,26
6	0,007	0,009	0,01	0,011	0,011	0,024	0,035	0,032	0,027	0,028
7	0,174	0,119	0,121	0,09	0,081	0,273	0,28	0,293	0,313	0,313
8	0,008	0,009	0,01	0,01	0,01	0,024	0,037	0,026	0,027	0,025
9	0,013	0,017	0,017	0,015	0,015	0,085	0,085	0,077	0,062	0,054
10	0,008	0,008	0,01	0,01	0,015	0,025	0,036	0,022	0,019	0,021
11	0,095	0,053	0,036	0,04	0,044	0,112	0,117	0,164	0,116	0,119
12	0,008	0,008	0,009	0,011	0,009	0,021	0,035	0,023	0,018	0,018
13	0,042	0,059	0,03	0,035	0,029	0,086	0,09	0,138	0,096	0,096
14	0,008	0,008	0,021	0,009	0,008	0,019	0,033	0,018	0,015	0,015
15	0,013	0,012	0,014	0,016	0,016	0,039	0,044	0,039	0,036	0,033
16	0,008	0,008	0,008	0,008	0,007	0,017	0,03	0,017	0,013	0,015
17	0,026	0,079	0,019	0,027	0,036	0,049	0,046	0,082	0,045	0,043
18	0,007	0,014	0,007	0,007	0,007	0,016	0,029	0,017	0,012	0,013
19	0,077	0,051	0,019	0,022	0,035	0,047	0,044	0,067	0,044	0,042
20	0,006	0,007	0,006	0,007	0,007	0,021	0,029	0,02	0,015	0,013
21	0,013	0,018	0,013	0,016	0,016	0,02	0,028	0,024	0,02	0,02
22	0,005	0,006	0,006	0,006	0,006	0,012	0,023	0,014	0,01	0,011
23	0,046	0,063	0,017	0,028	0,035	0,051	0,045	0,052	0,037	0,033
24	0,005	0,006	0,006	0,007	0,006	0,012	0,023	0,012	0,011	0,011
25	0,048	0,063	0,019	0,019	0,033	0,048	0,043	0,043	0,038	0,033
26	0,005	0,006	0,006	0,006	0,007	0,011	0,019	0,012	0,009	0,01
27	0,014	0,013	0,016	0,016	0,016	0,018	0,023	0,017	0,018	0,019
28	0,004	0,004	0,006	0,006	0,006	0,011	0,02	0,012	0,008	0,009
29	0,103	0,047	0,019	0,026	0,034	0,048	0,045	0,046	0,043	0,042
30	0,004	0,007	0,005	0,007	0,005	0,01	0,02	0,011	0,011	0,013
31	0,096	0,024	0,026	0,021	0,03	0,043	0,041	0,038	0,038	0,035
32	0,004	0,007	0,005	0,007	0,007	0,009	0,017	0,011	0,008	0,008
33	0,015	0,011	0,018	0,016	0,017	0,019	0,022	0,018	0,017	0,017
34	0,006	0,005	0,005	0,006	0,006	0,008	0,017	0,011	0,008	0,009
35	0,082	0,041	0,043	0,022	0,034	0,043	0,043	0,055	0,04	0,039
36	0,003	0,007	0,004	0,006	0,006	0,008	0,017	0,011	0,009	0,009
37	0,07	0,065	0,041	0,02	0,031	0,038	0,037	0,055	0,035	0,033
38	0,003	0,008	0,005	0,007	0,007	0,012	0,016	0,017	0,007	0,007
39	0,015	0,021	0,017	0,015	0,016	0,017	0,019	0,016	0,016	0,016
40	0,004	0,006	0,004	0,005	0,007	0,008	0,017	0,012	0,008	0,008



Zwischenharmonische / Interharmonics (max Values of all lines)										
Wirkleistung P/P _n [%] Active power P/P _n [%]	10	20	30	40	50	60	70	80	90	100
Frequenz [Hz] Frequenzy [Hz]	I[%]	I[%]	I[%]	I[%]	I[%]	I[%]	I[%]	I[%]	I[%]	I[%]
75	0,012	0,016	0,017	0,017	0,018	0,241	0,27	0,304	0,348	0,385
125	0,011	0,013	0,013	0,014	0,015	0,077	0,086	0,092	0,106	0,118
175	0,012	0,015	0,014	0,015	0,013	0,058	0,064	0,068	0,077	0,09
225	0,013	0,016	0,017	0,016	0,015	0,054	0,072	0,07	0,079	0,09
275	0,014	0,017	0,019	0,017	0,018	0,041	0,073	0,045	0,049	0,055
325	0,015	0,017	0,019	0,018	0,018	0,042	0,066	0,045	0,052	0,078
375	0,016	0,019	0,019	0,018	0,019	0,043	0,081	0,036	0,041	0,047
425	0,015	0,018	0,02	0,017	0,018	0,033	0,059	0,033	0,039	0,061
475	0,015	0,016	0,019	0,017	0,023	0,031	0,072	0,032	0,034	0,041
525	0,014	0,016	0,019	0,017	0,037	0,034	0,073	0,032	0,032	0,037
575	0,015	0,016	0,017	0,017	0,025	0,037	0,073	0,035	0,033	0,036
625	0,014	0,015	0,017	0,05	0,016	0,034	0,068	0,031	0,029	0,032
675	0,014	0,015	0,031	0,015	0,014	0,038	0,073	0,035	0,034	0,038
725	0,013	0,015	0,016	0,013	0,014	0,026	0,06	0,025	0,024	0,03
775	0,012	0,015	0,013	0,012	0,013	0,023	0,061	0,025	0,024	0,029
825	0,013	0,015	0,012	0,012	0,012	0,028	0,056	0,027	0,026	0,031
875	0,011	0,023	0,011	0,011	0,011	0,028	0,057	0,027	0,026	0,028
925	0,011	0,017	0,011	0,01	0,01	0,028	0,05	0,024	0,023	0,025
975	0,01	0,013	0,01	0,009	0,012	0,028	0,053	0,026	0,027	0,029
1025	0,009	0,012	0,01	0,009	0,011	0,019	0,044	0,018	0,019	0,021
1075	0,009	0,011	0,009	0,008	0,012	0,017	0,043	0,018	0,018	0,02
1125	0,009	0,01	0,009	0,008	0,011	0,023	0,041	0,021	0,021	0,024
1175	0,009	0,01	0,008	0,008	0,008	0,023	0,043	0,02	0,019	0,022
1225	0,009	0,009	0,009	0,012	0,009	0,023	0,035	0,02	0,019	0,019
1275	0,008	0,008	0,008	0,01	0,007	0,022	0,042	0,019	0,019	0,021
1325	0,008	0,007	0,007	0,007	0,007	0,015	0,032	0,014	0,014	0,017
1375	0,007	0,007	0,011	0,006	0,007	0,013	0,032	0,014	0,013	0,016
1425	0,007	0,006	0,007	0,006	0,006	0,021	0,032	0,019	0,018	0,019
1475	0,007	0,006	0,006	0,006	0,006	0,019	0,033	0,017	0,017	0,018
1525	0,007	0,006	0,006	0,006	0,006	0,02	0,028	0,017	0,017	0,025
1575	0,007	0,006	0,006	0,006	0,006	0,018	0,034	0,016	0,016	0,022
1625	0,006	0,006	0,006	0,005	0,006	0,012	0,025	0,011	0,011	0,013
1675	0,007	0,006	0,006	0,005	0,006	0,01	0,026	0,011	0,011	0,013
1725	0,006	0,007	0,005	0,005	0,005	0,017	0,027	0,016	0,016	0,017
1775	0,006	0,007	0,005	0,005	0,005	0,016	0,027	0,015	0,015	0,017
1825	0,006	0,007	0,005	0,005	0,005	0,018	0,024	0,015	0,021	0,015
1875	0,006	0,006	0,005	0,005	0,005	0,017	0,028	0,016	0,014	0,015
1925	0,006	0,008	0,005	0,005	0,005	0,011	0,027	0,011	0,009	0,011
1975	0,005	0,006	0,005	0,005	0,005	0,011	0,024	0,012	0,01	0,011



Höhere Frequenzen / Higher frequencies (max Values of all lines)										
Wirkleistung P/P _n [%] Active power P/P _n [%]	10	20	30	40	50	60	70	80	90	100
Frequenz [kHz] Frequenz [kHz]	I[%]	I[%]	I[%]	I[%]	I[%]	I[%]	I[%]	I[%]	I[%]	I[%]
2,1	0,102	0,113	0,063	0,024	0,043	0,054	0,07	0,056	0,055	0,053
2,3	0,05	0,06	0,039	0,026	0,03	0,041	0,059	0,043	0,04	0,042
2,5	0,045	0,054	0,036	0,031	0,029	0,037	0,055	0,039	0,038	0,037
2,7	0,04	0,075	0,045	0,041	0,033	0,045	0,059	0,048	0,044	0,043
2,9	0,033	0,039	0,066	0,062	0,058	0,049	0,059	0,069	0,065	0,07
3,1	0,021	0,023	0,047	0,035	0,024	0,039	0,05	0,039	0,037	0,039
3,3	0,034	0,023	0,048	0,032	0,019	0,046	0,062	0,052	0,047	0,044
3,5	0,029	0,026	0,021	0,015	0,013	0,033	0,059	0,044	0,04	0,038
3,7	0,03	0,025	0,02	0,015	0,012	0,02	0,045	0,034	0,053	0,049
3,9	0,047	0,033	0,029	0,016	0,015	0,021	0,043	0,027	0,047	0,049
4,1	0,035	0,03	0,027	0,016	0,013	0,019	0,049	0,019	0,015	0,024
4,3	0,032	0,029	0,026	0,016	0,012	0,019	0,053	0,02	0,013	0,013
4,5	0,045	0,029	0,027	0,021	0,015	0,024	0,038	0,019	0,016	0,016
4,7	0,032	0,038	0,031	0,03	0,028	0,076	0,103	0,037	0,033	0,037
4,9	0,026	0,025	0,02	0,015	0,012	0,019	0,051	0,018	0,014	0,014
5,1	0,033	0,02	0,027	0,015	0,012	0,019	0,034	0,017	0,015	0,014
5,3	0,021	0,015	0,018	0,012	0,009	0,016	0,037	0,015	0,012	0,014
5,5	0,02	0,014	0,016	0,011	0,009	0,017	0,035	0,015	0,013	0,012
5,7	0,018	0,012	0,018	0,013	0,01	0,018	0,031	0,015	0,013	0,013
5,9	0,017	0,013	0,018	0,016	0,014	0,024	0,024	0,013	0,012	0,013
6,1	0,022	0,02	0,023	0,02	0,026	0,078	0,032	0,023	0,024	0,024
6,3	0,009	0,007	0,014	0,011	0,009	0,016	0,023	0,013	0,011	0,013
6,5	0,009	0,006	0,009	0,008	0,008	0,012	0,018	0,011	0,01	0,011
6,7	0,007	0,005	0,008	0,008	0,008	0,01	0,017	0,011	0,009	0,011
6,9	0,008	0,006	0,008	0,007	0,007	0,01	0,015	0,011	0,01	0,011
7,1	0,007	0,004	0,006	0,006	0,006	0,008	0,013	0,009	0,008	0,009
7,3	0,007	0,004	0,005	0,005	0,005	0,007	0,011	0,009	0,008	0,008
7,5	0,008	0,004	0,005	0,005	0,005	0,007	0,011	0,009	0,008	0,009
7,7	0,007	0,004	0,005	0,005	0,006	0,007	0,01	0,009	0,007	0,008
7,9	0,006	0,004	0,004	0,005	0,005	0,007	0,01	0,009	0,007	0,008
8,1	0,006	0,004	0,005	0,005	0,005	0,006	0,009	0,008	0,007	0,008
8,3	0,005	0,004	0,004	0,005	0,005	0,006	0,009	0,008	0,007	0,007
8,5	0,005	0,004	0,004	0,005	0,005	0,006	0,008	0,008	0,007	0,007
8,7	0,005	0,004	0,005	0,008	0,008	0,007	0,009	0,008	0,007	0,01
8,9	0,005	0,004	0,007	0,006	0,006	0,009	0,01	0,01	0,009	0,007

CERTIFICATE of Conformity



Registration No.: AK 50599175 0001

Report No.: CN23PPQW 001

Holder: Shenzhen SOFARSOLAR Co., Ltd.
11/F., Gaoxingqi Technology Building
No.67 Area, Xingdong Community
Xin'an Sub-district, Bao'an District
Shenzhen City
Guangdong
P.R. China

Product: PV-Inverter
(Solar Grid-tied Inverter)

Identification: Type Designation: SOFAR 100KTLX-G4, SOFAR 110KTLX-G4,
SOFAR 125KTLX-G4
Serial No. : Engineering samples
Remark(s): Compliance with the requirement of Central
Electricity Authority Notification 2007-02 and 2019-02.
Refer to test report CN23PPQW 001 for details.

Tested acc. to: IEC TS 62910:2015

The certificate of conformity refers to the above mentioned product. This is to certify that the specimen is in conformity with the assessment requirement mentioned above. This certificate does not imply assessment of the production of the product and does not permit the use of a TÜV Rheinland mark of conformity.

Certification Body

Date 28.08.2023



A handwritten signature in blue ink, appearing to read "A. Chen".
A. Chen

TÜV Rheinland LGA Products GmbH - Tillystraße 2 - 90431 Nürnberg

Shenzhen SOFARSOLAR Co., Ltd.

Date : 28.08.2023
Our ref. : Lied 02
Your ref.: 168424326

11/F., Gaoxingqi Technology Building
No.67 Area, Xingdong Community
Xin'an Sub-district, Bao'an
District
Shenzhen City
Guangdong
P.R. China

Ref : AK Certificate of Conformity

Type of Equipment : Solar Grid-tied Inverter
Model Designation : See Certificate
Certificate No. : AK 50599175 0001
Report No. : CN23PPQW 001

Dear Ladies and Gentlemen,

We herewith confirm that a sample of the above mentioned technical equipment has been tested and was found to be in accordance with the relevant requirements.

Enclosed please find your Certificate of Conformity.

We appreciate your kind support and would like to offer our assistance and continuous services in the future.

With kind regards,

Certification Body



A. Chen

Enclosure

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