AC COUPLED ESS INVERTER

LXP 3600 ACS

HIGH PERFORMANCE

- Up to **70A** Charge/Discharge current of battery
- Up to **3600W** Charge/Discharge power of grid
- Up to **96%** Efficiency of Charge/Discharge With High Frequency Isolation

ENHANCE UPS

- Seamless switching within **0.01S** with stronger back-up output
- Up to **36kW** capacity of UPS in parallel (MG)*

* The model with parallel function is different from standard one, it is MG model.

EASY TO USE

- Schedulable working modes, easy installation and setting

REMOTE MONITORING & MAINTENANCE

- Remote monitoring and upgrade

OPTIMIZED HEAT CONTROL

- Much better heat dispassion, and much lower derating

SAFER OPERATION

- Protected connection area, multiple protection devices

IP65 PROTECTION

- Designed for both outdoor and indoor installation

LXP 3600 ACS

AC coupled energy storage inverter, specially designed for retrofitting solar system. By simply install an AC coupled energy storage system based on this inverter at the AC output of on-grid solar system, you could retrofit your existed on-grid solar system to a solar energy storage system and increase the solar self-consumption rate, enhanced UPS back-up function and reduce energy bill.

Battery Input/Output	3.6K ACS
Compatible Battery Type	Lithium-ion, Lead-Acid etc.
Nominal Battery Voltage	48V.d.c
Max. Charging Voltage(V)	<=60 V(Configurable)
Max. Charge/Discharge Current	70A /70A
Battery Capacity(Ah)	>100Ah
Charging Mode for Li-Ion Battery	Self-adaption to BMS
Charging for Lead-acid Battery	3-stage adaptive with maintenance
Battery Back Feed Current	0A

AC Input/Output	
Nominal AC Output Power to Utility	3600VA
Max. AC Output Power to Utility	3600VA
Max. AC Input Power from Utility	5980VA
Max. AC Output Current to Utility	16A
Max. AC Input Current From Utility	26A
Nominal Output Voltage	220/230V.a.c
AC Voltage Range	180 - 270V.a.c
Nominal AC Frequency	50Hz/60Hz
AC Over Current Protection	31A
Power Factor	1(adjustable 0.8leading -0.8lagging)
THDI	<3%
AC Over Voltage Category	Category III

UPS Output	
Max. Output Power	3600VA
Nominal Output Voltage	230V.a.c
Nominal Output Frequency	50Hz / 60Hz
Max. Output Current	16A
Peak Power	4500VA, 30s
THDV(linear load)	<3%
Switching Time	Typical 0.01s
Back-up Over Current Protection	31A

Efficiency	
Max. Charge/Discharge Efficiency	96%

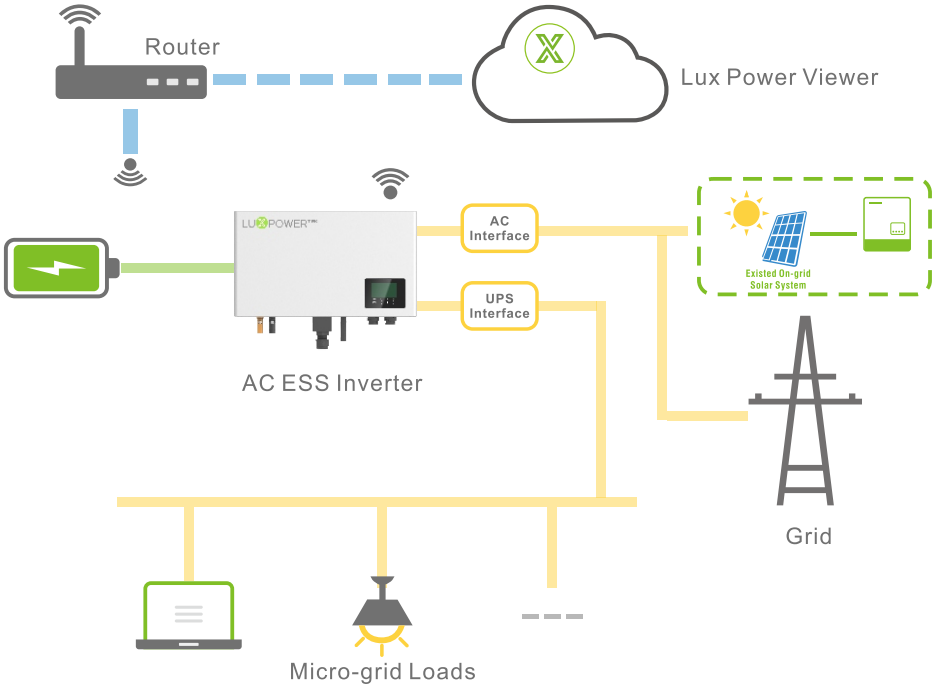
Protection	
Reverse Polarity Protection	Yes
Over Current/Voltage Protection	Yes
Anti-islanding Protection	Yes
AC Short-circuit Protection	Yes
Leakage Current Protection	Yes
Ground Fault Monitoring	Yes
Grid Monitoring	Yes
Ingress Protection Degree	IP65 / NEMA4X

General Data	
Dimension (W/H/D)	565 / 324 / 171
Weight	15.6 kg
Topology	HF
Cooling Concept	Natural Convection
Relatively Humidity	100%
Altitude	<2000m
Noise Emission	<25dB
Standby Consumption	<5W
Display & Communication Interfaces	LCD, LED, RS485, Wi-Fi, CAN

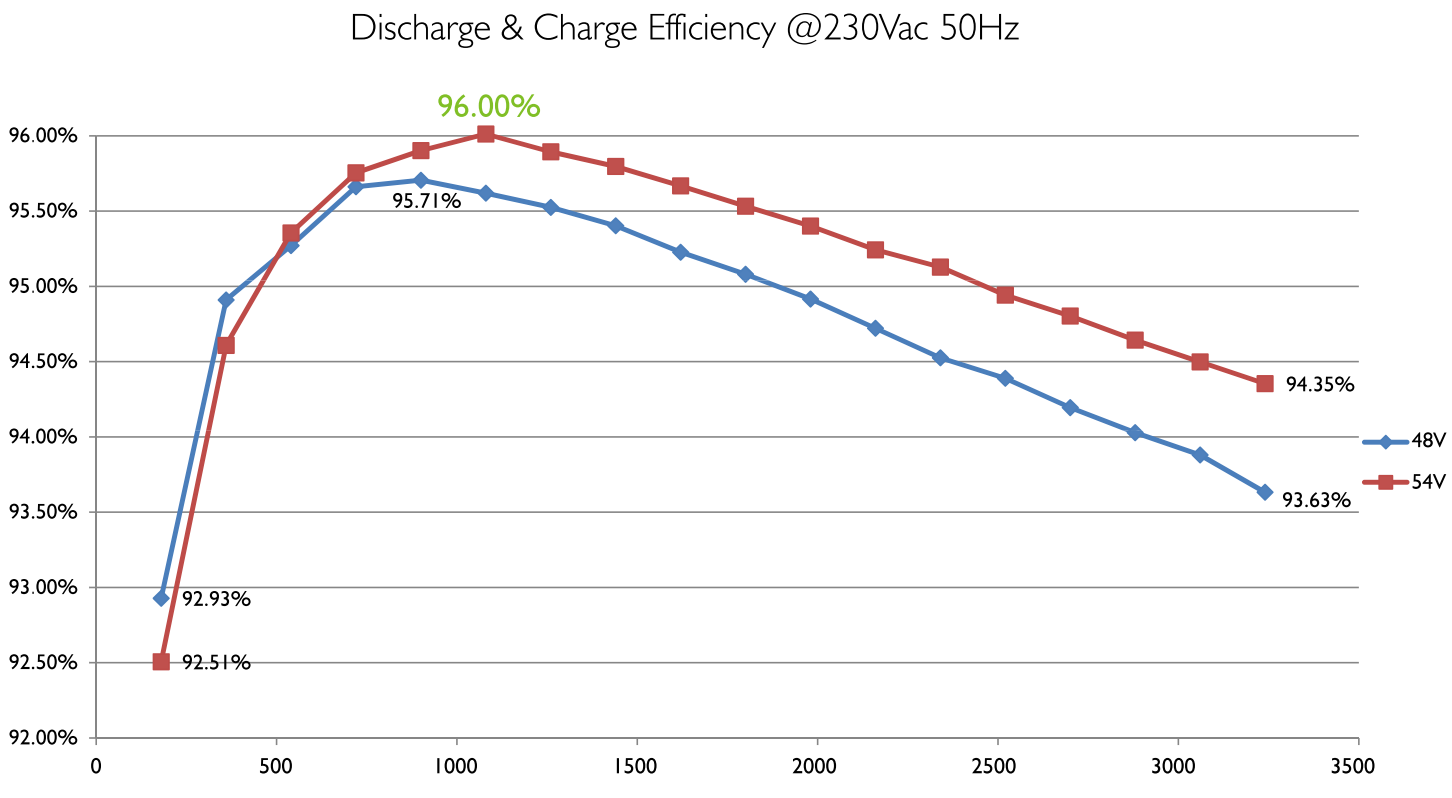
Certification & Approvals	G83, G100,CE,SAA EN61000-6-3

System Connection

To retrofit existed on-grid solar system to solar energy storage hybrid system could not be easier than install a LXP AC series inverter coupled on AC side with a battery pack.

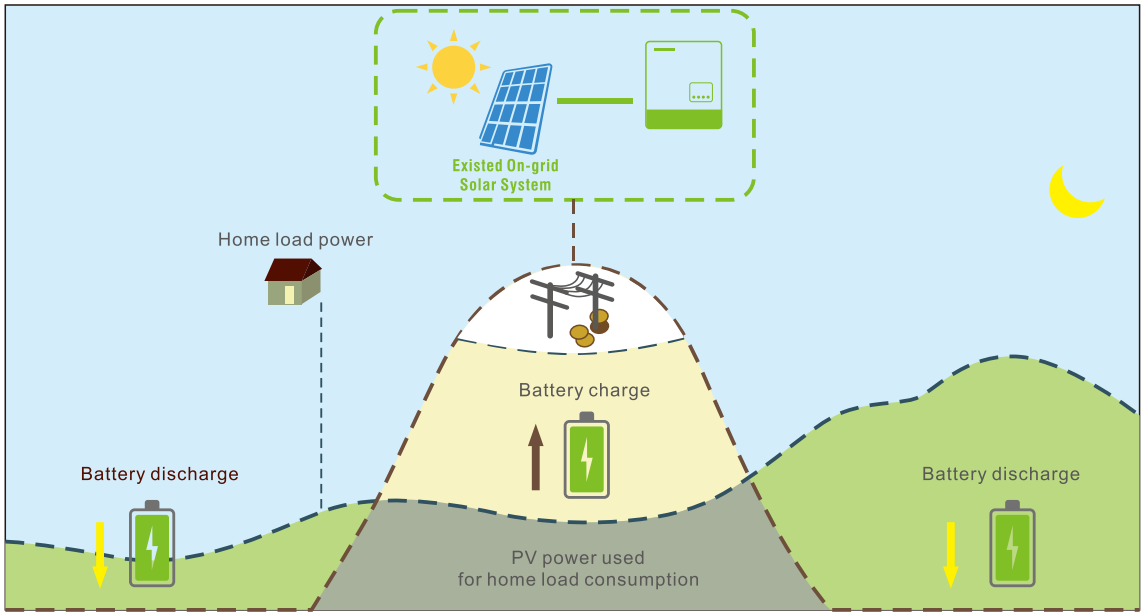


Charge/Discharge Efficiency Cuv



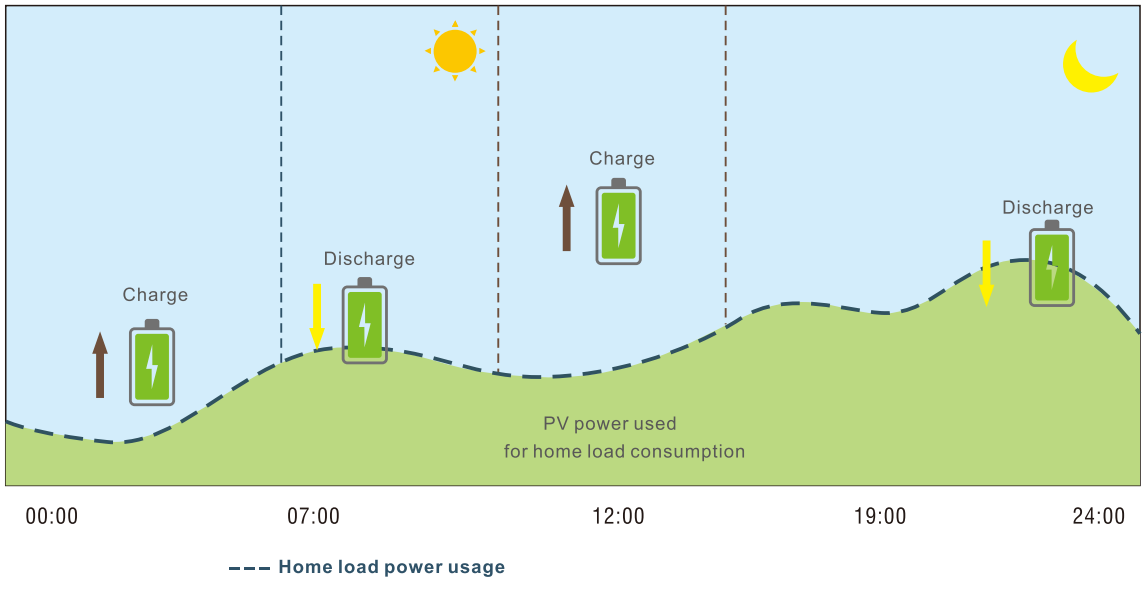
Self Consumption

Under Self Use mode, AC coupled inverter will detect the power of on-grid inverter generated, which will be used by local loads first, and rest will be stored in the battery by using AC coupled inverter, excessive power will be feed back into the grid. This is the default mode which will increase the self consumption rate and reduce the energy bill significantly



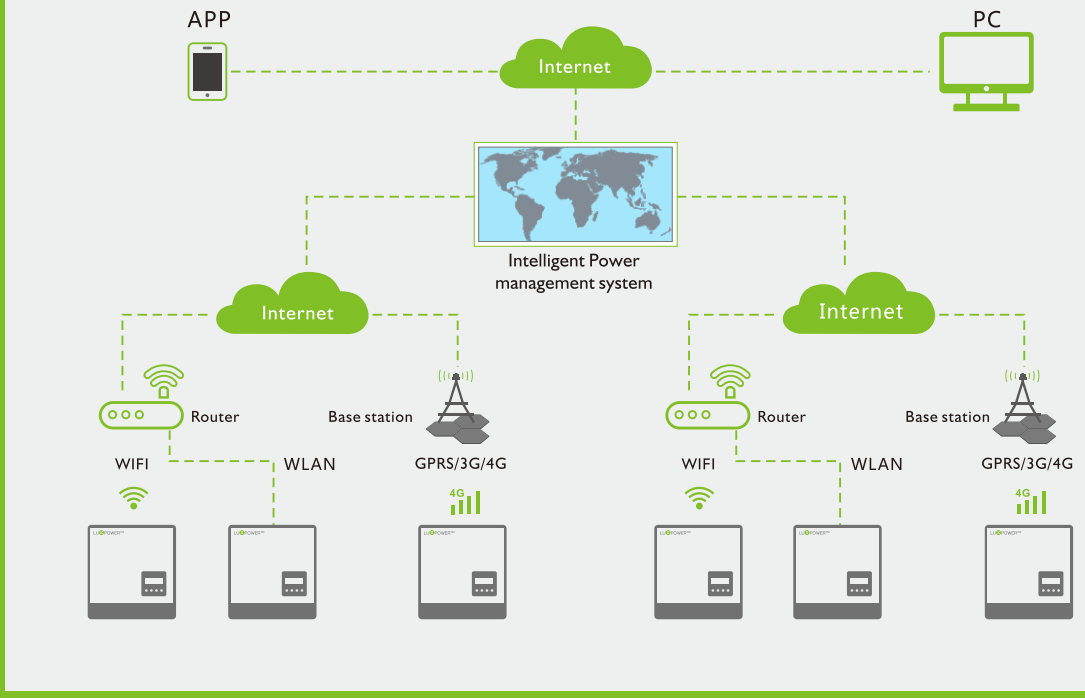
Force Time Use

This mode suits for situation where the price difference of energy is big. User can set the charging and discharging time and priority of energy use under Force Time Use mode. The user can also choose whether to charge the battery using grid power if the regulations permitted.

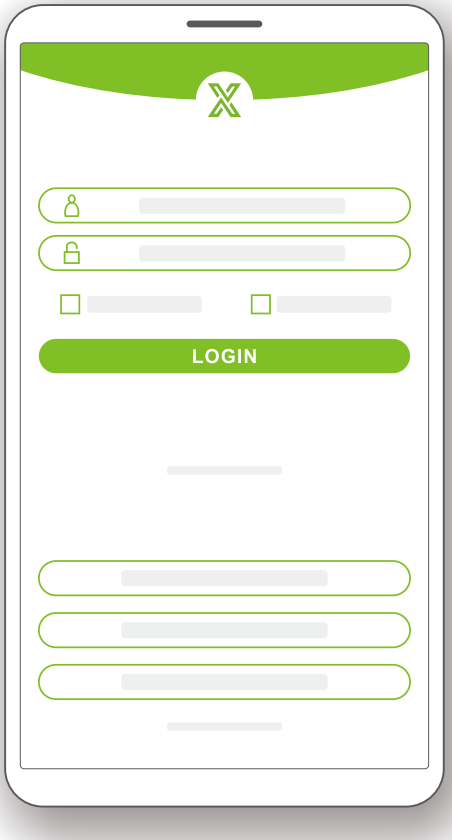


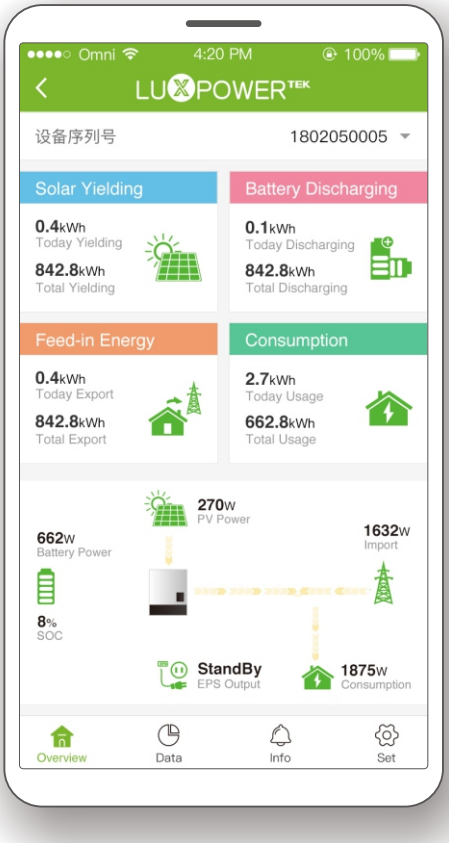
Intelligent Monitor System

Network architecture



LuxPower View





Android APP

IOS APP

Monitoring Features

- Real-time monitoring and Management platform based on smart cloud technology
- Advanced remote upgrade and management function for easy usage, maintenance and services
- Real-time running data stored locally in the inverter for up to 30 days when wifi or LAN monitoring connection disconnected
- One-click WIFI connection and much easier operation on the monitoring and management platform.
- Multi-level system monitoring and management
- Available for Web, iOS and Android system.

Certificate

Attestation of Conformity

Equipment: Hybrid inverter

Brand Name: LUXPOWER

Test Model No.: LXP-3K hybrid, LXP-4K hybrid, LXP-4.6K hybrid

Applicant: ShenZhen Lux Power technology Co., LTD
Room 403, 4th Floor, Building 63, ZhongxuNew Industrial Park, Zhongwu Community,Hangcheng Street, Baoan District,Shenzhen

Report No.: PVDE170830N034

Use in accordance with regulations:
Power generation systems connected to the low-voltage distribution network.
Technical minimum requirements for the connection to and parallel operation with low-voltage distribution networks.

Applied rules and standards
DIN VDE V 0124-100 (VDE V 0124-100):2012-07 – Grid integration of power generation systems – Low voltage
Test requirements for generation units to be connected and operated parallel with the low voltage distribution networks

VDE-AR-N 4105:2011-08 – Power generation systems connected to the low-voltage distribution network
Technical minimum requirements for the connection to and parallel operation with low-voltage distribution networks

Name: Ted Wu
Senior Manager/ PV Inverter Team
Date: 2018-05-03

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Information given in this document is related to the tested specimen of the described electrical sample.

Certificate of Conformity

Certificate No.: 1788AP0830N034006
Equipment: Hybrid inverter
Brand Name: LUXPOWER
Test Model No.: LXP-3K hybrid, LXP-4K hybrid, LXP-4.6K hybrid, LXP-5K hybrid
Applicant: ShenZhen Lux Power technology Co., LTD
Room 403, 4th Floor, Building 63, ZhongxuNew Industrial Park, Zhongwu Community,Hangcheng Street, Baoan District,Shenzhen
Report No.: LD170830N034-1, LD170830N034-2

The submitted sample of the above equipment has been tested for CE marking according to following European Directive and standards:

- Low Voltage Directive 2014/35/EU.

The referred test report(s) show that the product complies with standard(s) recognized as giving presumption of compliance with the essential requirements in the specified European Directive.

This verification does not imply assessment of the production of the product. The CE marking may be affixed if all relevant and effective European Directives with CE are applicable.

Applied rules and standards
IEC/EN 62109-1:2010
Safety of power converters for use in photovoltaic power systems – Part 1: General requirements
IEC/EN 62109-2:2011
Safety of power converters for use in photovoltaic power systems –
Part 2: Particular requirements for inverters
IEC/EN 62040-1:2008
Uninterruptible power systems (UPS) - Part 1: General and safety requirements for UPS

Name: Ted Wu
Senior Manager/ PV Inverter Team
Date: 2017-08-18

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Information given in this document is related to the tested specimen of the described electrical sample.

Certificate of Conformity

Certificate No.: 1788AP0830N034001
Equipment: Hybrid inverter
Brand Name: LUXPOWER
Test Model No.: LXP-3K hybrid, LXP-4K hybrid, LXP-4.6K hybrid, LXP-5K hybrid
Applicant: ShenZhen Lux Power technology Co., LTD
Room 403, 4th Floor, Building 63, ZhongxuNew Industrial Park, Zhongwu Community,Hangcheng Street, Baoan District,Shenzhen
Report No.: PVDE170830N034-1

Use in accordance with regulations:
Power generation systems connected to the low-voltage distribution network.
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.

Applied rules and standards
DIN VDE 0126-1-1 (VDE V 0126-1-1):2013-08
Automatic disconnection device between a generator and the public low-voltage grid

Name: Ted Wu
Senior Manager/ PV Inverter Team
Date: 2018-05-10

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Information given in this document is related to the tested specimen of the described electrical sample.

Test Verification of Conformity

Verification Number: 1809060330GZU-001

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. This verification is part of the full test report<s> and should be read in conjunction with it <them>.

Applicant Name & Address: Shen Zhen Lux Power Technology Co., LTD
Room 403, 4th Floor, Building 63, Zhongwu New Industrial Park, Zhongwu Community, Hangcheng Street, Baoan District, Shenzhen, China

Product Description: Hybrid Inverter

Ratings & Principle Characteristics: See Appendix to Test Verification of Conformity

Models/Type References: LXP-3K hybrid, LXP-3.6K hybrid, LXP-4K hybrid, LXP-4.6K hybrid, LXP-5K hybrid

Brand Name<s>: LUXPOWER

Specification<s>/Standard<s>: EN 50438: 2013, Requirements for micro-generating plants to be connected in parallel with public low-voltage distribution networks
Type approval for Turkey and the default interface settings are applied for all CENELEC members that do not have specific settings and requirements

Verification Issuing Office Name & Address: Intertek Testing Services Shenzhen Ltd. Guangzhou Branch
Block E, No.7-2 Guang Dong Software Science Park, Caipin Road, Guangzhou Science City, GETDD, Guangzhou, China

Test Report Number<s>: 1809060330GZU-001

Additional information in Appendix.

Signature
Name: Grady Ye
Position: Manager
Date: 25 Jan., 2019

Dichiarazione di conformità

alle prescrizioni alla Norma CEI 0-21

NOME ORGANISMO CERTIFICATORE: Bureau Veritas Consumer Products Services Germany GmbH
Accreditamento a DAkkS, D-PL-12024-01-00, Rif. DIN EN ISO/IEC 17065
OGGETTO: Data validità: 15-ottobre-2020
CEI 0-21: 2012-06
CEI 0-21; V1: 2012-12 edizione Dicembre 2012
CEI 0-21; V2: 2013-12 edizione Dicembre 2013
CEI 0-21: 2014-09
CEI 0-21; V1: 2014-12 edizione Dicembre 2014
CEI 0-21: 2017-07
CEI 0-21; V1: 2017-07 edizione Luglio 2017
Regola tecnica di riferimento per la connessione di Utenti attivi e passivi alle reti BT delle imprese distributrici di energia elettrica

TIPOLOGIA DI APPARATO CUI SI RIFERISCE LA DICHIARAZIONE:

DISPOSITIVO DI INTERFACCIA	PROTEZIONE DI INTERFACCIA	DISPOSITIVO DI CONVERSIONE STATICA	DISPOSITIVO DI GENERAZIONE ROTANTE
	X	X	

COSTRUTTORE: ShenZhen Lux Power technology Co., LTD
Room 403, 4th Floor, Building 63, ZhongxuNew Industrial Park, Zhongwu Community,Hangcheng Street, Baoan District,Shenzhen China

TIPO APPARECCHIATURA:	Fotovoltaici Inverter a Inverter per sistemi di l'accumulatori (produzioni secondo allegato B bis)			
MODELLO:	LXP-3K hybrid	LXP-4K hybrid	LXP-4.6K hybrid	LXP-5K hybrid
POTENZA NOMINALE:	3,0 kW	4,0 kW	4,6 kW	5,0 kW

VERSIONE FIRMWARE: AA1.0
NUMERO DI FASI: monofase
NOTA
Il dispositivo è in grado di limitare la sin allo 0,5% della corrente nominale.
Il dispositivo è per impianti fino a 11,08kW
Gli inverter ShenZhen Lux Power technology Co., LTD hanno un limite di potenza apparente massima. Nel caso in cui un impianto debba poter funzionare con un fattore di potenza diverso dall'unità, è necessario settare la potenza attiva massima in modo tale, da poter raggiungere in ogni momento il valo alfi vita.ita.

RIFERIMENTI DEI LABORATORI CHE HANNO ESEGUITO LE PROVE:
Bureau Veritas Consumer Products Services Germany GmbH
Accreditamento a DAkkS, D-PL-12024-03-03, Rif. DIN EN ISO/IEC 17025
Data validità: 11-giugno-2018
Esaminato il certificato ISO 9001 del costruttore n°FM 80124, emesso dal BSI. Esaminati i Fascicoli Prove n° IIITH0562-CEI 0-21_E, emessi dal laboratorio Bureau Veritas Consumer Products Services Germany GmbH. Esaminata la dichiarazione di conformità CE del costruttore con i relativi rapporti di prova n°CE170830N034 emessi dal laboratorio Bureau Veritas Shenzhen Co., Ltd. Dongguan Branch. Si dichiara che il prodotto indicato è conforme alle prescrizioni CEI 0-21: 2012-06, CEI 0-21, V1: 2012-12, CEI 0-21, V2: 2013-12, CEI 0-21: 2014-09, CEI 0-21; V1: 2014-12, CEI 0-21: 2016-07, CEI 0-21, V1: 2017-07.

Numero di certificato: U18-0677
Data di emissione: 2018-12-20
Organismo di certificazione

Organismo di certificazione Bureau Veritas Consumer Products Services Germany GmbH
Accreditamento a DAkkS ISO/IEC 17065

Certificate of Conformity

Certificate Number: CN-PV-190006

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

Applicant Name & Address: ShenZhen Lux Power technology Co.,LTD
Room 403,4th Floor, Building 63, Zhongwu New industrial Park, Zhongwu Community, Hangcheng Street, Baoan District, Shenzhen, China

Product Description: Hybrid Inverter

Ratings & Principle Characteristics: See Annex to Certificate of Conformity

Models/Type References: LXP 3K Hybrid, LXP 4K Hybrid, LXP 5K Hybrid

Brand Name: LUXPOWER

Specification/Standard: NRS 097-2-1:2017 GRID INTERCONNECTION OF EMBEDDED GENERATION PART 2: SMALL-SCALE EMBEDDED GENERATION SECTION 1: UTILITY INTERFACE
Type approval

Certificate Issuing Office Name & Address: Intertek Testing Services Ltd. Shanghai
2JF (West Side), No. 707, Zhangyang Road, Free Trade Experimental Area, Shanghai, P.R. China

Test Report Number: 190624070CZU-001

Additional information in Appendix.

Signature
Name: Grady Ye
Position: Certifier
Date: 29 Aug 2019

Attestation of Conformity

Equipment: Hybrid inverter

Brand Name: LUXPOWER

Test Model No.: LXP-3K hybrid

Applicant: ShenZhen Lux Power technology Co., LTD
Room 403, 4th Floor, Building 63, ZhongxuNew Industrial Park, Zhongwu Community,Hangcheng Street, Baoan District,Shenzhen

Report No.: PVUK170830N034-2

Use in accordance with regulations:
Automatic disconnection device with single-phase mains surveillance in accordance with Engineering Recommendation G83/2 for photovoltaic systems with a single-phase parallel coupling via an inverter in the public mains supply. The automatic disconnection device is an integral part of the aforementioned inverter. This serves as a replacement for the disconnection device with isolating function that can access the distribution network provider at any time.

Applied rules and standards
Engineering Recommendation G83/2:2012
Recommendations for the Connection of Type Tested Small-scale Embedded Generators (Up to 16A per Phase) in Parallel with Low-Voltage Distribution Systems

DIN V VDE V 0126-1-1:2006-02 (Functional safety)
Automatic disconnection device between a generator and the public low-voltage grid

Name: Ted Wu
Senior Manager/ PV Inverter Team
Date: 2018-03-29

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ATTESTATION
of conformity with European Directives

Attestation Number: 1788AE0830N034001
Product: Hybrid inverter
Brand Name: LuxPowerTek
Model: LXP-3K hybrid, LXP-5K hybrid
Additional Model: LXP-4K hybrid, LXP-4.6K hybrid
Applicant: ShenZhen Lux Power technology Co., LTD
Address: Room 403, 4th Floor, Building 63, Zhongwu New Industrial Park, Zhongwu Community, Hangcheng Street, Baoan District, Shenzhen
Technical Characteristics: DC input: 100-550V
AC output: 100-270V 50/60Hz
Battery: DC 42-60V

The submitted sample of the above equipment has been tested for CE marking according to following European Directive and following standards:

- Electromagnetic Compatibility Directive 2014/30/EU

Standards	Report Number	Report date
EN 61000-6-3:2007 + A1:2011 EN 61000-3-2:2014 EN 61000-3-3:2013 EN 61000-3-11:2001 EN 61000-3-12:2011 EN 55007-6-2:2005	CE170830N034	Mar. 15, 2018

The referred test report(s) show that the product complies with standard(s) recognized as giving presumption of compliance with the essential requirements in the specified European Directive.

This verification does not imply assessment of the production of the product. The CE marking may be affixed if all relevant and effective European Directives with CE are applicable.

Supervisor
EMC Department

Name: Madison Luo
Date: Mar. 15, 2018

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Bureau Veritas Shenzhen Co., Ltd. Dongguan Branch
No. 34, Chenxudu Section, Guanlin Rd., Houjie Town, Dongguan City, Guangdong 523942, China
Tel: +86 769 8593 5888
Fax: +86 769 8593 1080
Email: customerservice.dg@cn.bureauveritas.com

Certificate of Conformity

Certificate No.: 1788AP0830N034005
Equipment: Hybrid inverter
Brand Name: LUXPOWER
Test Model No.: LXP-4K hybrid, LXP-4.6K hybrid, LXP-5K hybrid
Applicant: ShenZhen Lux Power technology Co., LTD
Room 403, 4th Floor, Building 63, ZhongxuNew Industrial Park, Zhongwu Community,Hangcheng Street, Baoan District,Shenzhen
Report No.: PVUK170830N034-1

Use in accordance with regulations:
Automatic disconnection device with single-phase mains surveillance in accordance with Engineering Recommendation G59/3 for photovoltaic systems with a single-phase parallel coupling via an inverter in the public mains supply. The automatic disconnection device is an integral part of the aforementioned inverter. This serves as a replacement for the disconnection device with isolating function that can access the distribution network provider at any time.

Applied rules and standards
Engineering Recommendation G59 Issue 3 Amendment 3-February 2018
Recommendations for the Connection of Generating Plant To The Distribution Systems of Licensed Distribution Network Operators

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.

Name: Ted Wu
Senior Manager/ PV Inverter Team
Date: 2018-06-01

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Information given in this document is related to the tested specimen of the described electrical sample.

Application

“Where sun shined
Power always on”

LUXPOWER TEK

www.luxpowertek.com | info@luxpowertek.com