

DICHIARAZIONE DI CONFORMITÀ alla norma CEIO-21:2019-04

1. Tipologia di Apparecchiatura cui si riferisce la dichiarazione						
Costruttore Manufacturer	Shenzhen Growatt New Energy technology Co., LTD 1 st East & 3 rd Floor of Building A, Building B, Jiayu Industrial Park, #28 GuangHui Road, LongTeng Community, Shiyang Street, Baoan District, Shenzhen, P.R.China					
Tipo apparecchiatura Product Type	Dispositivo di Interfaccia	Protezione di Interfaccia	Dispositivo di conversione statica	Dispositivo di Generazione Rotante		
	SI	SI	SI	NO		
Modello Model	Growatt SPH 4000 TL3BH	Growatt SPH 5000 TL3BH	Growatt SPH 6000 TL3BH	Growatt SPH 7000 TL3BH	Growatt SPH 8000 TL3BH	Growatt SPH 10000 TL3BH
Versione FW Software release	YA1.0 e Superiori					
Numero di Fasi	3 (Trifase)					
Potenza Nominale Power Rating	4000 W	5000 W	6000 W	7000 W	8000 W	10000 W
Psn (potenza di Scarica Nominale)	4000 W	5000 W	6000 W	7000 W	8000 W	10000 W
Pcn (potenza di Carica Nominale)	4000 W	5000 W	6000 W	7000 W	8000 W	10000 W
Psmax (potenza di Scarica Massima)	4000 W	5000 W	6000 W	7000 W	8000 W	10000 W
Pcmax (potenza di Carica Massima)	4000 W	5000 W	6000 W	7000 W	8000 W	10000 W
Tipologia (Type)	Bidirezionale					
Gli inverter suddetti possono essere installati con le seguenti batterie: The inverters here above listed may be installed with the following batteries:						
Costruttore Manufacturer	Pylontech					
Modello batterie Battery model	H48050					
Tecnologia (Technology)	Elettrochimica					
Capacità Nominale del modulo batteria (kWh): Nominal Capacity of each battery module (kWh):	2,4					
Numero(i) di modulo batteria raccomandato dal produttore Number(s) of battery modules recommended by the manufacturer	4-10					
CUS (Capacità utile del Sistema di accumulo) CUS (Useful capacity of storage system)	9,6 kWh – 24 kWh					
Control Model	SC0500-100S/SC1000-100S					
Versione Firmware del BMS BMS Firmware Version	PowerCube_CMU_A					
NOTA	Il dispositivo è in grado di limitare la I _{dc} allo 0,5% della corrente nominale					

2. Riferimenti dei laboratori che hanno eseguito le prove e dei relativi fascicoli di prova:	
Fascicoli di prova n. Test report number	180820112GZU-001
(Issued by) Emessi da	Intertek Testing Services Shenzhen Ltd.
Accreditamento Accreditation	CNAS L0220

3. Dichiarazione di conformità alle prescrizioni CEI0-21:2019-04
<p>Con la presente dichiarazione, resa ai sensi degli artt. 46 e 47 DPR 28 dicembre 2000, n. 445, consapevole delle responsabilità e delle sanzioni penali previste dall'art. 76 del citato DPR per false attestazioni e dichiarazioni mendaci, il sottoscritto Liangcai Wu residente in Bao'an, nel comune di Guangdong provincia di Shenzhen (Cina), in qualità di delegato del rappresentante legale della società Shenzhen Growatt New Energy technology Co., LTD con sede legale in 1st East & 3rd Floor of Building A, Building B, Jiayu Industrial Park, #28 GuangHui Road, LongTeng Community, Shiyang Street, Baoan District, Shenzhen, P.R.China, P.IVA 440300570039265, iscritta al registro delle imprese della pretura di Shenzhen (Cina), con Numero di registrazione 440306105229852</p> <p style="text-align: center;">DICHIARA</p> <p>che gli inverter Ibridi di propria costruzione di cui al precedente punto 1, sono conformi alle prescrizioni della norma CEI 0-21: 2019-04</p> <p>Si attesta inoltre che la produzione delle apparecchiature oggetto di questa dichiarazione avviene in regime di qualità secondo ISO 9001:2015 (UCS –Universal Certification Service Co., Ltd., certificato N° UKQ1809003R2 del 03/09/2021)</p>

Shenzhen Growatt New Energy technology Co., LTD (*)
Shenzhen, P.R. China , lì 31/10/2019

Firma del dichiarante
Liangcai Wu & Vice President

Certificate of Conformity

Certificate Number: CN-PV-190027

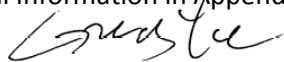
On the basis of the tests undertaken, the samples of the below product have been found to comply with the requirements of the referenced specification/standard at the time the tests were carried out. It does not imply that Intertek has performed any surveillance or control of the manufacture. The manufacturer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

Applicant Name & Address:	Shenzhen Growatt New Energy Technology Co.,Ltd 1st East & 3rd Floor of Building A, Building B, Jiayu Industrial Park, #28, GuangHui Road, LongTeng Community, Shiyan Street, Baoan District, Shenzhen, P.R.China
Product Description:	Accumulation system
Ratings & Principle Characteristics:	See appendix for more parameter details.
Models/Type References:	Inverter conversion device: SPH 4000TL3 BH, SPH 5000TL3 BH, SPH 6000TL3 BH, SPH 7000TL3 BH, SPH 8000TL3 BH, SPH 10000TL3 BH SPA 4000TL3 BH, SPA 5000TL3 BH, SPA 6000TL3 BH, SPA 7000TL3 BH, SPA 8000TL3 BH, SPA 10000TL3 BH Batteries and BMS - Battery Management System Battery model: H48050 Control model: SC1000-100S, SC0500-100S
Brand Name:	Growatt
Tested according to:	CEI 0-21:2019-04: Reference technical rules for the connection of active and passive users to the LV electrical Utilities
Certificate Issuing Office Name & Address:	Intertek Testing Services Ltd. Shanghai 2/F (West Side), No. 707, Zhangyang Road, Free Trade Experimental Area, Shanghai, P. R. China Accredited by CNAS in accordance with ISO/IEC 17065:2012
Test Report Number:	180820112GZU-001

Certification procedure: SMS-PV-OP-19

Product certification scheme type: Type test

Additional information in Appendix



Signature

Certification Manager: Grady Ye

Date: 12 October 2019



中国认可
产品
PRODUCT
CNAS C058-P

APPENDIX: Certificate of Conformity

This is an Appendix to Certificate of Conformity Number: CN-PV-190027

Model/Type reference	Inverter conversion device: SPH 4000TL3 BH, SPH 5000TL3 BH, SPH 6000TL3 BH, SPH 7000TL3 BH, SPH 8000TL3 BH, SPH 10000TL3 BH SPA 4000TL3 BH, SPA 5000TL3 BH, SPA 6000TL3 BH, SPA 7000TL3 BH, SPA 8000TL3 BH, SPA 10000TL3 BH Brands: Growatt Batteries and BMS - Battery Management System Battery model: H48050 Control model: SC1000-100S, SC0500-100S Brands: Pylontech
Inverter Firmware Version	YA1.0 (SPH series), YH1.0(SPA series)
Number of phases	Three-phase
Nominal Power	4000W (SPH 4000TL3 BH, SPA 4000TL3 BH) 5000W (SPH 5000TL3 BH, SPA 5000TL3 BH) 6000W (SPH 6000TL3 BH, SPA 6000TL3 BH) 7000W (SPH 7000TL3 BH, SPA 7000TL3 BH) 8000W (SPH 8000TL3 BH, SPA 8000TL3 BH) 10000W (SPH 10000TL3 BH, SPA 10000TL3 BH)
Type	Bidirectional
CUS (useful capacity of the storage system)	9.6KWh ~ 24KWh
Psn (nominal discharge power)	Same as nominal power
Pcn (nominal charge power)	Same as nominal power
Psmax (maximum discharge power) :	Same as nominal power
Pcmax (maximum charge power)	Same as nominal power
BMS Firmware Version	PowerCube_CMU_A
Battery Firmware Version	PowerCube_BMU_A

Battery		CUS (useful capacity of the storage system)	
Model	Manufacturer	Capacity of per battery module (kWh)	Number of Max modules recommended by the manufacturer
H48050	Shanghai PYLONTECH	2.4	10

Note: batteries are not integrated within the inverter, and shall be installed according to local regulation.

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-190027

Model	SPH 4000TL3 BH	SPH 5000 TL3 BH	SPH 6000 TL3 BH	SPH 7000 TL3 BH	SPH 8000 TL3 BH	SPH 10000 TL3 BH
Input data(DC)						
Max. DC voltage	1000V	1000V	1000V	1000V	1000V	1000V
MPP voltage range	160~1000V	160~1000V	160~1000V	160~1000V	160~1000V	160~1000V
Max. input current per MPP trackers	12A/12A	12A/12A	12A/12A	12A/12A	12A/12A	12A/12A
Max. short-circuit current per MPP trackers	15A/15A	15A/15A	15A/15A	15A/15A	15A/15A	15A/15A
Output data/Input (AC)						
AC nominal power	4000W	5000W	6000W	7000W	8000W	10000W
Max. AC apparent power	4000VA	5000VA	6000VA	7000VA	8000VA	10000VA
Nominal AC voltage	3W+N+PE , 230V/400V;					
AC grid frequency	50Hz;					
Max. output current	6.1A	7.6A	9.1A	10.6A	12.1A	15.2A
Power factor	0.8leading ~ 0.8lagging					
Stand alone(AC power)						
AC nominal output power	4000W	5000W	6000W	7000W	8000W	10000W
Max. AC apparent power	4000VA	5000 VA	6000 VA	7000 VA	8000 VA	10000 VA
Nominal AC voltage	3W+N+PE , 230V/400V;					
Nominal AC frequency	50Hz					
Max. output current	6.1A	7.6A	9.1A	10.6A	12.1A	15.2A
Battery data (DC)						
Battery voltage range	160~550V					
Max. charging / discharging current	25A					
Continuous charging / discharging power	4000W	5000W	6000W	7000W	8000W	10000W
Type of battery	lithium battery / Lead-acid battery					
Capacity of battery	5~50kWh					
Others						
Technology	Transformerless					
Protection degree	IP 65					
Operating temperature range	-25 °C ~ +60 °C					
Pollution degree	III					
Protective Class	Class I					

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Model	SPA 4000 TL3 BH	SPA 5000 TL3 BH	SPA 6000 TL3 BH	SPA 7000 TL3 BH	SPA 8000 TL3 BH	SPA 10000 TL3 BH
Output data(AC)						
AC nominal power	4000W	5000W	6000W	7000W	8000W	10000W
Max. AC apparent power	4000VA	5000VA	6000VA	7000VA	8000VA	10000VA
Nominal AC voltage	3W+N+PE , 230V/400V;					
AC grid frequency	50/60Hz;					
Max. output current	6.1A	7.6A	9.1A	10.6A	12.1A	15.2A
Power factor	0.8leading ~ 0.8lagging					
Stand alone(AC power)						
AC nominal output power	4000W	5000W	6000W	7000W	8000W	10000W
Max. AC apparent power	4000VA	5000 VA	6000 VA	7000 VA	8000 VA	10000 VA
Nominal AC voltage	3W+N+PE , 230V/400V;					
Nominal AC frequency	50/60Hz					
Max. output current	6.1A	7.6A	9.1A	10.6A	12.1A	15.2A
Battery data (DC)						
Battery voltage range	160~550V					
Max. charging / discharging current	25A					
Type of battery	lithium battery / Lead-acid battery					
Capacity of battery	5~50kWh					
Others						
Technology	Transformerless					
Protection degree	IP 65					
Operating temperature range	-25 °C ~ +60 °C With derating above 45 °C					
Pollution degree	III					
Protective Class	Class I					

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Verification of certificate with test report: 180820112GZU-001

TYPE OF APPARATUS:

(the static converters in systems with capacity up to 11.08 kW)

DISCONNECTION DEVICE	INTERFACE PROTECTION DEVICE	DEVICE FOR CONVERSION	ROTATING GENERATOR DEVICE
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	

Manufacturer: Shenzhen Growatt New Energy Technology Co.,Ltd

Apparatus type: Accumulation system

Model: Inverter conversion device:

SPH 4000TL3 BH, SPH 5000TL3 BH, SPH 6000TL3 BH,

SPH 7000TL3 BH, SPH 8000TL3 BH, SPH 10000TL3 BH

SPA 4000TL3 BH, SPA 5000TL3 BH, SPA 6000TL3 BH,

SPA 7000TL3 BH, SPA 8000TL3 BH, SPA 10000TL3 BH

Brands: Growatt

Batteries and BMS - Battery Management System

Battery model: H48050

Control model: SC1000-100S, SC0500-100S

Brands: Pylontech

Inverter Firmware Version: YA1.0 (SPH series), YH1.0(SPA series)

BMS Firmware Version: PowerCube_CMU_A

Battery Firmware Version: PowerCube_BMU_A

Number of phases: Three-phase

Nominal power: See certificate for each model

Type: Bidirectional

CUS (useful capacity of the storage system): 9.6KWh ~ 24KWh

Remark: The devices are capable to limit I_{dc} to 0.5% of the rated grid current

Having assessed the test report 180820112GZU-001 Issued by laboratory:

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

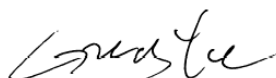
In compliant with ISO/IEC 17025:2017

Accreditation number: CNAS L0220

Having examined the ISO 9001 certificate of the manufacturer No: UKQ1809003R2 issued by:

UNVERSAL CERTIFICATION CENTRE CO., LTD

The indicated products above are complied with CEI 0-21:2019-04: Reference technical rules for the connection of active and passive users to the LV electrical Utilities



Signature

Name: Grady Ye

Date: 12 October 2019