

Test Verification of Conformity

Verification Number: 210909081GZU-VOC006

On the basis of the referenced test report(s), sample(s) tested of the below product have been found to comply with the standards harmonized with the regulation(s) listed on this verification at the time the tests were carried out. Other standards and Regulations may be relevant to the product. This verification is part of the full test report(s) and should be read in conjunction with it <them>.

Once compliance with all product relevant  mark regulations are verified, including any relevant e.g. risk assessment and production control, the manufacturer may indicate compliance by signing a Declaration of Conformity themselves and applying the mark to products identical to the tested sample(s).

Applicant Name & Address:	SHENZHEN GROWATT NEW ENERGY CO., LTD 4-13/F, Building A, Sino-German(Europe) Industrial Park, Hangcheng Ave, Bao' an District, Shenzhen, China
Product Description:	Hybrid inverter
Ratings & Principle Characteristics:	See Annex to Certificate of Conformity
Models/Type References:	Growatt SPH3000, Growatt SPH3600, Growatt SPH4000, Growatt SPH4600, Growatt SPH5000, Growatt SPH6000, SPH 3000TL BL-UP, SPH 3600TL BL-UP, SPH 4000TL BL-UP, SPH 4600TL BL-UP, SPH 5000TL BL-UP, SPH 6000TL BL-UP
Brand Name:	GROWATT
Relevant Standards/Regulations:	IEC/EN 62109-1:2010 (First Edition) Safety of Power Converter for use in Photovoltaic Power Systems Part 1: General requirements IEC/EN 62109-2:2011 Safety of Power Converter for use in Photovoltaic Power Systems Part 2: Particular requirements for inverters
Verification Issuing Office Name & Address:	Intertek Testing Services Ltd. Shanghai West Area, 2nd Floor, No. 707, Zhangyang Road China (Shanghai) Pilot Free Trade Zone, Shanghai, P. R. China
Date of Tests:	07 Jan 2021 to 19 Jul 2021
Test Report Number(s):	210107100GZU-001, 210107100GZU-002
Additional information in Appendix.	



Signature

Name: Tommy Zhong

Position: Technical Manager

Date: 30 Sep 2021

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APPENDIX: Test Verification of Conformity

This is an Appendix to Test Verification of Conformity Number: 210909081GZU-VOC006.

Model	Growatt SPH3000 SPH 3000TL BL-UP	Growatt SPH3600 SPH 3600TL BL-UP	Growatt SPH4000 SPH 4000TL BL-UP
PV Input data			
Max. PV Input Voltage	550V		
Max. PV current	2*13.5 d.c.A		
Max. PV Isc	2*16.9 d.c.A		
AC output/Input data			
Rated input / output power [W]	3000/3000	3000/3680(for Model Growatt SPH3600) 3680/3680(for model SPH 3600TL BL-UP)	3000/4000(for Model Growatt SPH4000) 4000/4000(for model SPH 4000TL BL-UP)
Rated Output apparent power	3000VA	3680VA	4000VA
Nominal voltage	230 a.c.V		
Max. input/output current	16/16 a.c.A		22/22 a.c.A
Nominal Frequency	50 Hz		
Power Factor range	0.8 Leading ~ 0.8 Lagging		
EPS output data			
Max. output power	3000VA (for model Growatt SPH3000, Growatt SPH3600, Growatt SPH4000, SPH 3000TL BL-UP); 3680VA (for model SPH 3600TL BL-UP) 4000VA (for model SPH 4000TL BL-UP)		
Nominal AC output voltage	230 a.c.A		
Nominal AC Frequency	50Hz		
Battery data			
Battery voltage range	42 – 59 d.c.V		
Max. charging and discharging current	66 d.c.A(for Growatt SPH3000, Growatt SPH3600, Growatt SPH4000, SPH 3000TL BL-UP); 75 d.c.A(only for SPH 3600TL BL-UP) 85 d.c.A (only for SPH 4000TL BL-UP)		
Type of battery	Lithium/Lead-acid		
Ingress Protection	IP65		
Protective Class	Class I		
Operating temperature range	-25°C - +60°C		
FW Version	RA1.0		



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Model	Growatt SPH4600 SPH 4600TL BL-UP	Growatt SPH5000 SPH 5000TL BL-UP	Growatt SPH6000 SPH 6000TL BL-UP
PV Input data			
Max. PV Input Voltage	550V		
Max. PV current	2*13.5 d.c.A		
Max. PV Isc	2*16.9 d.c.A		
AC output/Input data			
Rated input / output power [W]	3000/4600(for Model Growatt SPH4600) 4600/4600(for model SPH 4600TL BL-UP)	3000/5000(for Model Growatt SPH5000) 5000/5000(for model SPH 5000TL BL-UP)	3000/6000(for Model Growatt SPH6000) 6000/6000(for model SPH 6000TL BL-UP)
Rated Output apparent power	4600VA	5000VA	6000VA
Nominal voltage	230 a.c.V		
Max. input/output current	22/22 a.c.A		27/27 a.c.A
Nominal Frequency	50 Hz		
Power Factor range	0.8 Leading ~ 0.8 Lagging		
EPS output data			
Max. output power	3000VA (for model Growatt SPH4600, Growatt SPH5000, Growatt SPH6000); 4000VA (for model SPH 4600TL BL-UP, SPH 5000TL BL-UP, SPH 6000TL BL-UP)		
Nominal AC output voltage	230 a.c.A		
Nominal AC Frequency	50Hz		
Battery data			
Battery voltage range	42 – 59 d.c.V		
Max. charging and discharging current	66 d.c.A(only for Growatt SPH4600, Growatt SPH5000, Growatt SPH6000); 85 d.c.A(only for SPH 4600TL BL-UP, SPH 5000TL BL-UP, SPH 6000TL BL-UP)		
Type of battery	Lithium/Lead-acid		
Ingress Protection	IP65		
Protective Class	Class I		
Operating temperature range	-25°C - +60°C		
FW Version	RA1.0		



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