

# Certificate of Conformity

Certificate Number: CN-PV-210200

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.

<b>Applicant:</b>	Shenzhen Growatt New Energy Co., Ltd. 4-13/F, Building A, Sino-German(Europe) Industrial Park, Hangcheng Ave, Bao'an District, Shenzhen, China
<b>Product:</b>	Hybrid inverter
<b>Ratings &amp; Principle Characteristics:</b>	See appendix of Certificate of Conformity
<b>Model:</b>	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
<b>Brand Name&lt;s&gt;:</b>	GROWATT
<b>Tested according to:</b>	C10/11: ed.2.1, 01 Sep 2019 SPECIFIC TECHNICAL PRESCRIPTIONS REGARDING POWER-GENERATING PLANTS OPERATING IN PARALLEL TO THE DISTRIBUTION NETWORK Type approved for type A
<b>Certificate Issuing Office Name &amp; Address:</b>	Intertek Testing Services Ltd. Shanghai West Area, 2nd Floor, No. 707, Zhangyang Road China (Shanghai) Pilot Free Trade Zone, Shanghai, P. R. China
<b>Test Report No.&lt;s&gt;:</b>	191120143GZU-005 Revision 1: 25 Aug 2021

Additional information in Appendix.



**Signature**

**Certification Manager: Grady Ye**

**Date: 09 Sep. 2021**

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-210200

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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