

# Certificate of Conformity

Certificate Number: CN-PV-210204

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>	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>	NRS 097-2-1:2017 GRID INTERCONNECTION OF EMBEDDED GENERATION PART 2: SMALL-SCALE EMBEDDED GENERATION SECTION 1: UTILITY INTERFACE Type approval
<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>	190719102GZU-001 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-210204

Model	SPH 3000TL BL-UP	SPH 3600TL BL-UP	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			
Nominal input / output power	3000/3000W	3680/3680W	4000/4000W
Max. 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	50Hz		
Power Factor range	0.8 Leading ~ 0.8 Lagging		
UPS output data			
Max. output power	3000VA	3680VA	4000VA
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	75 d.c.A	85 d.c.A
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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## APPENDIX: Certificate of Conformity

This is an Appendix to Certificate of Conformity Number: CN-PV-210204

Model	SPH 4600TL BL-UP	SPH 5000TL BL-UP	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			
Nominal input / output power	4600/4600W	5000/5000W	6000/6000W
Max. 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	50Hz		
Power Factor range	0.8 Leading ~ 0.8 Lagging		
UPS output data			
Max. output power	4600VA	5000VA	6000VA
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	85 d.c.A		
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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