

Certificate of Conformity

Certificate Number: CN-PV-210189

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(s). The manufacturer(s) shall ensure that the manufacturing process assures compliance of the production units with the examined products mentioned in this certificate.

Applicant:	Shenzhen Growatt New Energy Co., Ltd 4-13/F,Building A,Sino-German(Europe) Industrial Park,Hangcheng Ave,Bao'an District,Shenzhen,China
Product:	Hybrid inverter / AC Coupled inverter
Ratings & Principle Characteristics:	See appendix of Certificate of Conformity
Model:	SPH 4000TL3 BH-UP, SPH 5000TL3 BH-UP, SPH 6000TL3 BH-UP, SPH 7000TL3 BH-UP, SPH 8000TL3 BH-UP, SPH 10000TL3 BH-UP, SPA 4000TL3 BH-UP, SPA 5000TL3 BH-UP, SPA 6000TL3 BH-UP, SPA 7000TL3 BH-UP, SPA 8000TL3 BH-UP, SPA 10000TL3 BH-UP
Brand Name:	GROWATT
Tested according to:	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
Certificate 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
Test Report No.<s>:	210121007GZU-001, 210121007GZU-002

Additional information in Appendix.



Signature

Certification Manager: Grady Ye

Date: 25 August 2021

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APPENDIX: Certificate of Conformity

This is an Appendix to Certificate of Conformity Number: CN-PV-210189

Model	SPH 4000 TL3 BH-UP	SPH 5000 TL3 BH-UP	SPH 6000 TL3 BH-UP	SPH 7000 TL3 BH-UP	SPH 8000TL3 BH-UP	SPH 10000 TL3 BH-UP
Input data(DC)						
Max. DC voltage	1000V	1000V	1000V	1000V	1000V	1000V
Max. input current per MPP trackers	13.5A*2	13.5A*2	13.5A*2	13.5A*2	13.5A*2	13.5A*2
Max. short-circuit current per MPP trackers	16.9A*2	16.9A*2	16.9A*2	16.9A*2	16.9A*2	16.9A*2
Input/Output data(AC)						
Nominal input/output power	6000/ 4000W	7500/ 5000W	9000/ 6000W	10500/ 7000W	12000/ 8000W	15000/ 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. input/output current	9.1/6.1A	11.4/7.6A	13.6/9.1A	15.9/10.6A	18.2/12.1A	22.7/15.2A
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	100~550V					
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	7.68-76.8kWh					
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					
Software version	YA1.0					

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Model	SPA 4000 TL3 BH-UP	SPA 5000 TL3 BH-UP	SPA 6000 TL3 BH-UP	SPA 7000 TL3 BH-UP	SPA 8000 TL3 BH-UP	SPA 10000 TL3 BH-UP
Output data(AC)						
Nominal input/output power	6000/ 4000W	7500/ 5000W	9000/ 6000W	10500/ 7000W	12000/ 8000W	15000/ 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. input/output current	9.1/6.1A	11.4/7.6A	13.6/9.1A	15.9/10.6A	18.2/12.1A	22.7/15.2A
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	100~550V					
Max. charging / discharging current	25A					
Type of battery	lithium battery / Lead-acid battery					
Capacity of battery	7.68-76.8kWh					
Others						
Technology	Transformerless					
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