

# Certificate of Conformity

#### Certificate Number: CN-PV-210211

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

Applicant: Product:	Shenzhen Growatt New Energy Co., Ltd 4-13/F,Building A,Sino-German(Europe) Industrial Park,Hangcheng Ave,Bao'an District,Shenzhen,China 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:	EN IEC 61000-6-3:2021/IEC 61000-6-3:2020 EN IEC 61000-6-1:2019/IEC 61000-6-1:2016 EN IEC 61000-3-2:2019/IEC 61000-3-2:2018+A1:2020 EN 61000-3-3:2013+A1:2019/IEC 61000-3-3:2013+A1:2017
Certificate Issuing Office Name & Address:	Intertek Testing Services Ltd. Shanghai West Area, 2nd Floor, No. 707, Zhangyang Road China (Shanghai) Pilot Free
Test Report No. <s>:</s>	Trade Zone, Shanghai, P. R. China 210121011GZU-001
Additional information in Appendix	C.

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Signature

Certification Manager: Grady Ye Date: 08 September 2021

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## **APPENDIX: Certificate of Conformity**

#### This is an Appendix to Certificate of Conformity Number: CN-PV-210211

Model Specifications	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
Start voltage	120V	120V	120V	120V	120V	120V
Nominal voltage	600V	600V	600V	600V	600V	600V
MPP voltage range	120~1000V	120~1000V	120~1000V	120~1000V	120~1000V	120~1000V
No. of MPP trackers	2	2	2	2	2	2
No. of PV strings per MPP	1	1	1	1	1	1
trackers Max. input current per MPP	13.5A*2	13.5A*2	13.5A*2	13.5A*2	13.5A*2	13.5A*2
trackers 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			50/6	0Hz;		
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			50/6	OHz		
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			25	5A		
Continuous charging / discharging power	4000W	5000W	6000W	7000W	8000W	10000W
Type of battery		lithi	um battery / L	ead-acid batte	ery	
Capacity of battery			7.68-76	5.8kWh		
Others						
Technology			Transfor	merless		
Protection degree			IP			
Operating temperature range				- +60 °C above 45 °C		
Pollution degree				I		
Protective Class			Cla	ss I		

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## **APPENDIX: Certificate of Conformity**

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)		i			i			
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							
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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