

# Certificate of Conformity

Certificate Number: CN-PV-210124

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. The manufacturer 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. 2F and 3F, Building 4, Jiayu Company Industrial Park, Xibianling, Shangyu Village, Shiyan Street, Bao'an District, Shenzhen, China
<b>Product:</b>	Hybrid inverter / AC Coupled inverter
<b>Ratings &amp; Principle Characteristics:</b>	See Appendix to Certificate of Conformity
<b>Models:</b>	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
<b>Brand Name:</b>	GROWATT
<b>Tested according to:</b>	DIN V VDE V 0126-1-1:2013.08
<b>Certificate Issuing Office Name &amp; Address:</b>	Intertek Testing Services Ltd. Shanghai West Area, 2 <sup>nd</sup> Floor, No. 707, Zhangyang Road China (Shanghai) Pilot Free Trade Zone, Shanghai, P. R. China
<b>Test Reports No:</b>	210121014GZU-001

Additional information in Appendix.



**Signature**

**Certification Manager: Grady Ye**

**Date: 01 June 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-210124

Model	SPH 4000 TL3 BH-UP	SPH 5000 TL3 BH-UP	SPH 6000 TL3 BH-UP	SPH 7000 TL3 BH-UP	SPH 8000 TL3 BH-UP	SPH 10000 TL3 BH-UP
<b>Input data(DC)</b>						
Max. recommended PV power (for module STC)	6000W	7500W	9000W	10500W	12000W	15000W
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 trackers	1	1	1	1	1	1
Max. input current per MPP trackers	13.5/13.5A	13.5/13.5A	13.5/13.5A	13.5/13.5A	13.5/13.5A	13.5/13.5A
Max. short-circuit current per MPP trackers	16.9A/16.9A	16.9A/16.9A	16.9A/16.9A	16.9A/16.9A	16.9A/16.9A	16.9A/16.9A
<b>Output / Input data(AC)</b>						
AC nominal power	4000W	5000W	6000W	7000W	8000W	10000W
Max. AC apparent power	4000VA	5000VA	6000VA	7000VA	8000VA	10000VA
Nominal AC voltage	3W+N+PE , 230V/400V;					
AC grid frequency	50 Hz;					
Max. output current	6.1A	7.6A	9.1A	10.6A	12.1A	15.2A
Power factor	0.8leading ~ 0.8lagging					

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-210124.

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					

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-210124.

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
<b>Output / Input data(AC)</b>						
AC nominal power	4000W	5000W	6000W	7000W	8000W	10000W
Max. AC apparent power	4000VA	5000VA	6000VA	7000VA	8000VA	10000VA
Nominal AC voltage	3W+N+PE , 230V/400V;					
AC grid frequency	50Hz;					
Max. output current	6.1A	7.6A	9.1A	10.6A	12.1A	15.2A
Power factor	0.8leading ~ 0.8lagging					
<b>Stand alone(AC power)</b>						
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
<b>Battery data ( DC )</b>						
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					
<b>Others</b>						
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					

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.