

# Certificate of Conformity


Certificate Number: CN-PVES-250020

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>Manufacturer:</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>Factory:</b>	Guangdong Growatt New Energy Co., Ltd. Growatt Industrial Park, No.17 Pingheng Road Pingtan Town, Huiyang District, Huizhou, Guangdong, China.
<b>Product:</b>	Hybrid Inverter
<b>Ratings &amp; Principle Characteristics:</b>	See appendix of Certificate of Conformity
<b>Model:</b>	WIT 4K-HU, WIT 5K-HU, WIT 6K-HU, WIT 8K-HU, WIT 10K-HU, WIT 12K-HU, WIT 15K-HU
<b>Brand Name&lt;s&gt;:</b>	GROWATT
<b>Product Complies with:</b>	Commission Regulation (EU) 2016/631 of 14 April 2016 (NC RfG) establishing a network code on the requirements for connecting generating units to the network (Journal of Laws UE L 112/1 of 27 April 2016); PSE:18 December 2018: General Application Requirements resulting from the Regulation of the EU Commission 2016/631 of April 14, 2016 establishing the network code on the requirements for connecting generating units to the grid - approved by the Decision of the President of the Energy Regulatory Office DRE.WOSE.7128.550. 2. 2018. ZJ of January 2, 2019; PTPiREE, 2021-04: Conditions and procedures for the use of certificates in the process of connecting power generation modules to power grids. Type approval for Type A PPMs Type 1a product certification scheme according to ISO/IEC 17067:2013 Certification procedure SMS-PV-OP-19 Intertek Testing Services Ltd. Shanghai West Area, 2 <sup>nd</sup> Floor, No. 707, Zhongyang Road China (Shanghai) Pilot Free Trade Zone, Shanghai, P. R. China Accredited by ACCREDIA in accordance with ISO/IEC 17065:2012
<b>Certificate Issuing Office Name &amp; Address:</b>	
<b>Test Report No.&lt;s&gt;:</b>	240920059GZU-001, 10 January 2025

Additional information in Appendix.

Signature



**Certification Manager: Grady Ye**

**Issue Date: 20 January 2025**

**Valid Until: 19 January 2030**



PRD N° 306B

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-PVES-250020

<b>Product Complies with:</b>	EN 50549-1:2019 Requirements for generating plants to be connected in parallel with distribution networks Part 1: Connection to a LV distribution network - Generating plants up to and including Type B
-------------------------------	---

The following functionalities have been assessed based on the rules for the use of certificate for Power Park Modules (PPMs), as specified in chapter 7 and 9 of the PTPIREE 2021-04. The functions denoted "Not Applicable" in the table of chapter 7 has not been included.

Parameter	NC RfG	PSE 2018-12	Type A	Assessment result
Frequency range	13.1(a)	13.1(a)(i)	x	Compliant
Rate of Change of Frequency (ROCOF) Withstand capability, df/dt	13.1(b)	13.1(b)	x	Compliant
Remote cessation of active power	13.6	13.6	x	Compliant
Limited Frequency Sensitive Mode – Over frequency (LFSM-O)	13.2	13.2(a).(b).(f)	x	Compliant

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-PVES-250020

### Ratings & Principle Characteristics:

Model	WIT 4K-HU	WIT 5K-HU	WIT 6K-HU
<b>PV Data</b>			
Max. PV voltage	1000 VDC		
PV voltage range	200-750 VDC		240-750 VDC
Nominal input voltage	600 VDC		
PV Isc	50 A		
Max. input current	40 A		
Max. PV power	6.4 kW	8 kW	9.6 kW
Number of MPP trackers	1		
<b>AC Data</b>			
Nominal output voltage	3W/N/PE 380/400 VAC		
Nominal output Frequency	50/60Hz		
Max. input/output power	8/4 kW	10/5 kW	12/6 kW
Max. input/output apparent power	8.8/4.4 kVA	11/5.5 kVA	13.2/6.6 kVA
Max. input/output current	13.4A /6.7A	16.7A /8.4A	20A /10A
Power factor range	1.0 leading - 1.0 lagging		
<b>Load Data</b>			
Nominal output voltage	3W/N/PE 380/400 VAC		
Nominal output Frequency	50/60Hz		
Max. output power	4 kW	5 kW	6 kW
Power factor range	1.0 leading - 1.0 lagging		
<b>GEN Data</b>			
Nominal output voltage	3W/N/PE 380/400 VAC		
Nominal output Frequency	50/60Hz		
Max. output power	8 kW	10 kW	12 kW
<b>Battery Data</b>			
Battery Type	Lithium-ion/VRLA		
Battery voltage range	40-60 VDC	42-60 VDC	
Max. charging and discharging current	110 A	125 A	150 A
<b>Other Data</b>			
Safety level	Class I		
Ingress Protection	IP66		
Operation ambient temperature	-30°C - +60°C (>45°C Derating)		
Software version	TO 1.0		

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-PVES-250020

Model	WIT 8K-HU	WIT 10K-HU
<b>PV Data</b>		
Max. PV voltage	1000 VDC	
PV voltage range	320-750 VDC	400-750 VDC
Nominal input voltage	600 VDC	
PV Isc	25 A*2	
Max. input current	20 A*2	
Max. PV power	12.8 kW	16 kW
Number of MPP trackers	2	
<b>AC Data</b>		
Nominal output voltage	3W/N/PE 380/400 VAC	
Nominal output Frequency	50/60Hz	
Max. input/output power	16/8 kW	20/10 kW
Max. input/output apparent power	17.6/8.8 kVA	22/11 kVA
Max. output current	26.6A /13.3A	33.3A /16.7A
Power factor range	1.0 leading - 1.0 lagging	
<b>Load Data</b>		
Nominal output voltage	3W/N/PE 380/400 VAC	
Nominal output Frequency	50/60Hz	
Max. output power	8 kW	10 kW
Power factor range	1.0 leading - 1.0 lagging	
<b>GEN Data</b>		
Nominal output voltage	3W/N/PE 380/400 VAC	
Nominal output Frequency	50/60Hz	
Max. output power	16 kW	20 kW
<b>Battery Data</b>		
Battery Type	Lithium-ion/VRLA	
Battery voltage range	42.6-60 VDC	48.4-60 VDC
Max. charging and discharging current	200 A	220 A
<b>Other Data</b>		
Safety level	Class I	
Ingress Protection	IP66	
Operation ambient temperature	-30°C - +60°C (>45°C Derating)	
Software version	TO 1.0	

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-PVES-250020

Model	WIT 12K-HU	WIT 15K-HU
<b>PV Data</b>		
Max. PV voltage	1000 VDC	
PV voltage range	320-750 VDC	400-750 VDC
Nominal input voltage	600 VDC	
PV Isc	25 A*3	
Max. input current	20 A*3	
Max. PV power	19.2 kW	24 kW
Number of MPP trackers	3	
<b>AC Data</b>		
Nominal output voltage	3W/N/PE 380/400 VAC	
Nominal output Frequency	50/60Hz	
Max. input/output power	24/12 kW	30/15 kW
Max. input/output apparent power	26.4/13.2 kVA	33/16.5 kVA
Max. input/output current	40A / 20A	50.1A / 25A
Power factor range	1.0 leading - 1.0 lagging	
<b>Load Data</b>		
Nominal output voltage	3W/N/PE 380/400 VAC	
Nominal output Frequency	50/60Hz	
Max. output power	12 kW	15 kW
Power factor range	1.0 leading - 1.0 lagging	
<b>GEN Data</b>		
Nominal output voltage	3W/N/PE 380/400 VAC	
Nominal output Frequency	50/60Hz	
Max. output power	24 kW	30 kW
<b>Battery Data</b>		
Battery Type	Lithium-ion/VRLA	
Battery voltage range	51-60 VDC	55-60 VDC
Max. charging and discharging current	250 A	290 A
<b>Other Data</b>		
Safety level	Class I	
Ingress Protection	IP66	
Operation ambient temperature	-30°C - +60°C (>45°C Derating)	
Software version	TO 1.0	

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.