

Certificate of Conformity

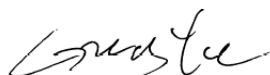
Certificate Number: CN-PVES-250020

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.

Applicant:	Shenzhen Growatt New Energy Co., Ltd 4-13/F, Building A, Sino-German (Europe) Industrial Park, Hangcheng Ave, Bao'an District, Shenzhen, China.
Manufacturer:	Shenzhen Growatt New Energy Co., Ltd 4-13/F, Building A, Sino-German (Europe) Industrial Park, Hangcheng Ave, Bao'an District, Shenzhen, China.
Factory:	Guangdong Growatt New Energy Co., Ltd. Growatt Industrial Park, No.17 Pingheng Road Pingtan Town, Huiyang District, Huizhou, Guangdong, China.
Product:	Hybrid Inverter
Ratings & Principle Characteristics:	See appendix of Certificate of Conformity
Model:	WIT 4K-HU, WIT 5K-HU, WIT 6K-HU, WIT 8K-HU, WIT 10K-HU, WIT 12K-HU, WIT 15K-HU
Brand Name<s>:	GROWATT
Product Complies with:	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 nd Floor, No. 707, Zhangyang Road China (Shanghai) Pilot Free Trade Zone, Shanghai, P. R. China Accredited by ACCREDIA in accordance with ISO/IEC 17065:2012
Certificate Issuing Office Name & Address:	
Test Report No.<s>:	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

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APPENDIX: Certificate of Conformity

This is an Appendix to Certificate of Conformity Number: CN-PVES-250020

Product Complies with:	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
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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

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Ratings & Principle Characteristics:

Model	WIT 4K-HU	WIT 5K-HU	WIT 6K-HU
PV Data			
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		
AC Data			
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		
Load Data			
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		
GEN Data			
Nominal output voltage	3W/N/PE 380/400 VAC		
Nominal output Frequency	50/60Hz		
Max. output power	8 kW	10 kW	12 kW
Battery Data			
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
Other Data			
Safety level	Class I		
Ingress Protection	IP66		
Operation ambient temperature	-30°C - +60°C (>45°C Derating)		
Software version	TO 1.0		

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Model	WIT 8K-HU	WIT 10K-HU
PV Data		
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	
AC Data		
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	
Load Data		
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	
GEN Data		
Nominal output voltage	3W/N/PE 380/400 VAC	
Nominal output Frequency	50/60Hz	
Max. output power	16 kW	20 kW
Battery Data		
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
Other Data		
Safety level	Class I	
Ingress Protection	IP66	
Operation ambient temperature	-30°C - +60°C (>45°C Derating)	
Software version	TO 1.0	

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Model	WIT 12K-HU	WIT 15K-HU
PV Data		
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	
AC Data		
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	
Load Data		
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	
GEN Data		
Nominal output voltage	3W/N/PE 380/400 VAC	
Nominal output Frequency	50/60Hz	
Max. output power	24 kW	30 kW
Battery Data		
Battery Type	Lithium-ion/VRLA	
Battery voltage range	51-60 VDC	55-60 VDC
Max. charging and discharging current	250 A	290 A
Other Data		
Safety level	Class I	
Ingress Protection	IP66	
Operation ambient temperature	-30°C - +60°C (>45°C Derating)	
Software version	TO 1.0	

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