

Certificate of Conformity

Certificate Number: CN-PVES-250028

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 See appendix of Certificate of Conformity

Characteristics:

Brand Name<s>:

MOD 3000TL3-HU, MOD 4000TL3-HU, MOD 5000TL3-HU, MOD 6000TL3-HU,

MOD 7000TL3-HU, MOD 8000TL3-HU, MOD 9000TL3-HU, MOD 10KTL3-HU, MOD 11KTL3-HU, MOD 12KTL3-HU, MOD 15KTL3-HU, MOD 15KTL3-HU.

CDOMATT

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;

 $\label{eq:ptpire} \mbox{PTPiREE, 2021-04: Conditions and procedures for the use of certificates in the process of the use of the$

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, 2nd 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

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Test Report No.<s>: 240621128GZU-001, 07 January 2025

Additional information in Appendix.

Certificate Issuing Office Name &

Signature

Address:

Certification Manager: Grady Ye

Date: 20 January 2025 Valid until: 19 January 2030



PRD N° 306B



This is an Appendix to Certificate of Conformity Number: CN-PVES-250028

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.

Capability	NC RfG	PSE 2018-12	Туре А	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)	х	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)	х	Compliant



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Model	MOD 3000TL3- HU	MOD 4000TL3- HU	MOD 5000TL3- HU	MOD 6000TL3- HU	
PV					
Max. DC input voltage		1000	OVDC		
MPPT voltage range		140 – 1	000VDC		
PV maximum current		20A,	/20A		
Max. PV Isc	7	25A,	/25A	1	
DC battery				/	
Compatible battery		APX 5.0-	30.0P-S2	0	
Operating voltage range	600VDC - 980VDC				
Max. operating current	25A	25A	25A	25A	
Max. discharge power	3kW	4kW	5kW	6kW	
Max. charge power	9kW	12kW	15kW	15kW	
AC parameter					
Rated input/output power	6kW/ 3kW	8kW/ 4kW	10kW/ 5kW	12kW/ 6kW	
Max. input/output apparent power	6kVA/ 3.3kVA	8kVA/ 4.4kVA	10kVA/ 5.5kVA	12kVA/ 6.6kVA	
Rated output voltage	220V/380VAC 230V/400VAC				
Rated output frequency	50/60 Hz				
Max. input/output current	9.1A/ 5A	12.1A/ 6.7A	15.2A/ 8.3A	18.2A/ 10A	
Rated power factor (with rated power)	>0.99				



This is an Appendix to Certificate of Conformity Number: CN-PVES-250028

Power factor range	0.8Leading - 0.8Lagging				
Type of grid connection	3W+N+PE/3W+PE				
AC output (backup)					
Rated output voltage	220/230VAC				
Nominal frequency	50Hz/60Hz				
Maximum output current	5.5A 7.3A 9.1A 10.				
Max. apparent power	3.6kVA	4.8kVA	6kVA	7.2kVA	
Power factor range	0.8Leading - 0.8Lagging				
Others	1	1	1	11	
Ingress protection	IP66				
Protection class	Class I				
Operating temperature range	-25°C - +60°C				
Software version	DO1.0				



TF-PV-OP-23d (20-January-2025)

APPENDIX: Certificate of Conformity

This is an Appendix to Certificate of Conformity Number: CN-PVES-250028

Model	MOD 7000TL3- HU	MOD 8000TL3- HU	MOD 9000TL3- HU	MOD 10KTL3-HU	
PV					
Max. DC input voltage	1000Vdc				
MPPT voltage range		140	– 1000VDC		
PV maximum current		20A/20A	1 2	20A/20A/20A	
Max. PV Isc	4	25A/25A		25A/25A/25A	
DC battery					
Compatible battery	- 0	APX !	5.0-30.0P-S2		
Operating voltage range	600VDC - 980VDC				
Max. operating current	25A				
Max. discharge power	7kW	8kW	9kW	10kW	
Max. charge power	15kW	15kW	15kW	15kW	
AC parameter			1 7		
Rated input/output power	14kW/ 7kW	16kW/ 8kW	18kW/ 9kW	20kW/ 10kW	
Max. input/output apparent power	14kVA/ 7.7kVA	16kVA/ 8.8kVA	18kVA/ 9.9kVA	20kVA/ 11kVA	
Rated output voltage	220V/380VAC 230V/400VAC				
Rated output frequency	50/60 Hz				
Max. input/output current	21.2A/ 11.7A	24.2A/ 13.3A	27.3A/ 15A	30.3A/ 16.7A	
Rated power factor (with rated power)	>0.99				



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Power factor range	0.8Leading - 0.8Lagging				
Type of grid connection	3W+N+PE/3W+PE				
AC output (backup)					
Rated output voltage		22	0/230VAC		
Nominal frequency		5	0Hz/60Hz		
Maximum output current	12.7A	18.2A			
Max. apparent power	8.4kVA	9.6kVA	10.8kVA	12kVA	
Power factor range	0.8Leading - 0.8Lagging				
Others		- 0 -		0.0	
Ingress protection	IP66				
Protection class	Class I				
Operating temperature range	-25°C - +60°C				
Software version	DO1.0				



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Model	MOD 11KTL3-HU	MOD 12KTL3-HU	MOD 13KTL3-HU	MOD 15KTL3-HU		
PV						
Max. DC input voltage		100	00VDC			
MPPT voltage range		140 –	1000VDC			
PV maximum current		20A/2	20A/20A			
Max. PV Isc	7	25A/2	25A/25A	1		
DC battery			1	/		
Compatible battery		APX 5.0)-30.0P-S2	0		
Operating voltage range		600VDC - 980VDC				
Max. operating current	1	25A				
Max. discharge power	11kW	11kW 12kW 13kW 15k				
Max. charge power	15kW	15kW	15kW	15kW		
AC parameter	1					
Rated input/output	22kW/	24kW/	26kW/	30kW/		
power	11kW	12kW	13kW	15kW		
Max. input/output	22kVA/	24kVA/	26kVA/	30kVA/		
apparent power	12.1kVA	13.2kVA	14.3kVA	16.5kVA		
Rated output voltage	220V/380VAC 230V/400VAC					
Rated output frequency	50/60 Hz					
Max. input/output current	33.3A/ 18.3A	36.4A/ 20A	39.4A/ 21.7A	45.5A/ 25A		
Rated power factor (with rated power)	>0.99					



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Power factor range	0.8Leading - 0.8Lagging					
Type of grid connection	3W+N+PE/3W+PE					
AC output (backup)						
Rated output voltage	220/230VAC					
Nominal frequency	50Hz/60Hz					
Maximum output current	20A 21.8A 23.6A 27.3A					
Max. apparent power	13.2kVA	14.4kVA	15.6kVA	18kVA		
Power factor range	0.8Leading - 0.8Lagging					
Others	- 1	- 1	10	11		
Ingress protection	IP66					
Protection class	Class I					
Operating temperature range	-25°C - +60°C					
Software version	DO1.0					