

Certificate of Conformity

Certificate Number: CN-PV-190047

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.

Applicant Name & Address: Shenzhen Growatt New Energy Technology CO.,Ltd

1st East & 3rd Floor of Building A, Building B, Jiayu Industrial Park, #28, GuangHui Road, LongTeng Community, Shiyan Street, Baoan District,

Shenzhen, P.R.China

Product Description: Hybrid Inverter

Ratings & Principle See Annex to Certificate of Conformity

Characteristics:

Models/Type References:

MIN 2500TL-XH, MIN 3000TL-XH, MIN 3600TL-XH, MIN 4200TL-XH,

MIN 4600TL-XH, MIN 5000TL-XH, MIN 6000TL-XH

Brand Name: Growatt

Specification/Standard: 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

Compliant with COMMISSION REGULATION (EU) 2016/631 (NC RfG)

Type approval for type B

Certificate Issuing Office Name

& Address:

Intertek Testing Services Ltd. Shanghai

2/F (West Side), No. 707, Zhangyang Road, Free Trade Experimental Area,

Shanghai, P. R. China

Test Report Number: 190829065GZU-001

Additional information in Appendix.

Signature

Name: Grady Ye Position: Certifier

Date: 06 November 2019

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-190047.

Ratings & Principle Characteristics:

Model	MIN 2500TL- XH	MIN 3000TL- XH	MIN 3600TL- XH	MIN 4200TL-XH	
Max.PV voltage	500 d.c.V		550 d.c.V		
PV voltage range	80-500 d.c.V		80-550 d.c.V		
PV Isc	16 d.c.A*2				
Max.input current	12.5 d.c.A*2				
Max. DC voltage	480 d.c.V				
DC voltage range	350-480 d.c.V				
Max. DC current	10 d.c.A				
Max.output power	2500W	3000W	3600W	4200W	
Max.apparent power	2500VA	3000VA	3600VA	4200VA	
Nominal output voltage	230 a.c.V				
Max.output current	11.3 a.c.A	13.6 a.c.A	16 a.c.A	19 a.c.A	
Nominal output Frequency	50Hz				
Power factor range	0.8Leading – 0.8 lagging				
Safety level	Class I				
Ingress Protection	IP 65				
Operation Ambient Temperature	-25°C - +60°C				
Software Version	AL 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-PV-190047.

Ratings & Principle Characteristics:

ModelMIN 4600TL-XHMIN 5000TL-XHMIN 6000TL-XHMax.PV voltage550 d.c.VPV voltage range80-550 d.c.VPV Isc16 d.c.A*2Max.input current12.5 d.c.A*2Max. DC voltage480 d.c.VDC voltage range350-480 d.c.VMax. DC current10 d.c.AMax.output power4600W5000WMax.apparent power4600VA5000VANominal output voltage230 a.c.VMax.output current20.9 a.c.A22.7 a.c.ANominal output Frequency50HzPower factor range0.8Leading - 0.8 laggingSafety levelClass IIngress ProtectionIP 65Operation Ambient Temperature-25°C - +60°C						
PV voltage range PV lsc 16 d.c.A*2 Max.input current 12.5 d.c.A*2 Max. DC voltage 480 d.c.V DC voltage range 350-480 d.c.V Max. DC current 10 d.c.A Max.output power 4600W 5000W 6000W Max.apparent power 4600VA 5000VA 6000VA Nominal output voltage Max.output current 20.9 a.c.A 22.7 a.c.A 27.2 a.c.A Nominal output Frequency Power factor range 0.8Leading – 0.8 lagging Safety level Ingress Protection IP 65 Operation Ambient	Model	MIN 4600TL-XH	MIN 5000TL-XH	MIN 6000TL-XH		
PV Isc 16 d.c.A*2 Max.input current 12.5 d.c.A*2 Max. DC voltage 480 d.c.V DC voltage range 350-480 d.c.V Max. DC current 10 d.c.A Max.output power 4600W 5000W 6000W Max.apparent power 4600VA 5000VA 6000VA Nominal output voltage 230 a.c.V Max.output 20.9 a.c.A 22.7 a.c.A 27.2 a.c.A Nominal output Frequency 50Hz Power factor range 0.8 Leading – 0.8 lagging Safety level Class I Ingress Protection IP 65 Operation Ambient	Max.PV voltage	550 d.c.V				
Max. input current Max. DC voltage DC voltage range 350-480 d.c.V Max. DC current 10 d.c.A Max.output power 4600W 5000W Max.apparent power Nominal output voltage Max.output current 20.9 a.c.A 22.7 a.c.A 27.2 a.c.A Nominal output Frequency Power factor range Safety level Ingress Protection Operation Ambient	PV voltage range	80-550 d.c.V				
Max. DC voltage DC voltage range 350-480 d.c.V Max. DC current 10 d.c.A Max.output power 4600W 5000W Max.apparent power Nominal output voltage Max.output current 20.9 a.c.A 22.7 a.c.A 27.2 a.c.A Nominal output Frequency Power factor range Safety level Ingress Protection Operation Ambient	PV Isc	16 d.c.A*2				
DC voltage range Max. DC current 10 d.c.A Max.output power 4600W 5000W 6000W Max.apparent power 4600VA 5000VA 6000VA Nominal output voltage Max.output current 20.9 a.c.A 22.7 a.c.A 27.2 a.c.A Nominal output Frequency Power factor range 0.8Leading – 0.8 lagging Safety level Ingress Protection Operation Ambient	Max.input current	12.5 d.c.A*2				
Max. DC current Max.output power 4600W 5000W Max.apparent power 4600VA 5000VA 6000VA Nominal output voltage Max.output current 20.9 a.c.A 22.7 a.c.A 27.2 a.c.A Nominal output Frequency Power factor range 0.8Leading – 0.8 lagging Safety level Ingress Protection IP 65 Operation Ambient	Max. DC voltage	480 d.c.V				
Max.output power 4600W 5000W 6000W Max.apparent power 4600VA 5000VA 6000VA Nominal output voltage 230 a.c.V Max.output 20.9 a.c.A 22.7 a.c.A 27.2 a.c.A Nominal output Frequency Power factor range 0.8Leading – 0.8 lagging Safety level Ingress Protection IP 65 Operation Ambient 225°C - +60°C	DC voltage range	350-480 d.c.V				
Max.apparent power Nominal output voltage Max.output current Nominal output Frequency Power factor range Safety level Ingress Protection Operation Ambient A600VA 5000VA 6000VA 230 a.c.V 22.7 a.c.A 27.2 a.c.A 27.2 a.c.A Class I IP 65	Max. DC current	10 d.c.A				
power Nominal output voltage Max.output current Nominal output Frequency Power factor range Safety level Ingress Protection Operation Ambient 230 a.c.V 230 a.c.V 22.7 a.c.A 27.2 a.c.A 27.2 a.c.A 27.2 a.c.A 17.2 a.c.A 27.2 a.c.A 17.2 a.c.A 27.2 a.c.A	Max.output power	4600W	5000W	6000W		
voltage Max.output current Nominal output Frequency Power factor range Safety level Ingress Protection Operation Ambient 20.9 a.c.A 22.7 a.c.A 27.2 a.c.A 27.2 a.c.A 27.2 a.c.A 17.2 a.c.A 27.2 a.c.A 27.2 a.c.A 19.65		4600VA	5000VA	6000VA		
Current 20.9 a.c.A 22.7 a.c.A 27.2 a.c.A Nominal output Frequency Power factor range 0.8 Leading – 0.8 lagging Safety level Class I Ingress Protection Operation Ambient	·	230 a.c.V				
Frequency Power factor range O.8Leading – 0.8 lagging Safety level Class I Ingress Protection IP 65 Operation Ambient	· ·	20.9 a.c.A	22.7 a.c.A	27.2 a.c.A		
Safety level Class I Ingress Protection IP 65 Operation Ambient		50Hz				
Ingress Protection IP 65 Operation Ambient	Power factor range	0.8Leading – 0.8 lagging				
Operation Ambient	Safety level	Class I				
-75% - +60%	Ingress Protection	IP 65				
	Operation Ambient Temperature	-25°C - +60°C				
Software version AL 1.0	Software version	AL 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.