

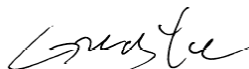
# Certificate of Conformity

Certificate Number: CN-PV-190022

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 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
<b>Product:</b>	PV Grid inverter
<b>Ratings &amp; Principle Characteristics:</b>	See appendix of Certificate of Conformity
<b>Model:</b>	MAC 50KTL3-X LV, MAC 60KTL3-X LV
<b>Brand Name:</b>	Growatt
<b>Tested according to:</b>	IEC 60068-2-1:2007, Environmental testing – Part 2-1: Tests- Test A: Cold IEC 60068-2-2:2007, Environmental testing – Part 2-2: Tests- Test B: Dry heat IEC 60068-2-14:2009, Environmental testing – Part 2-14: Tests- Test N: Change of temperature IEC 60068-2-30:2005, Environmental testing – Part 2-30: Tests- Test Db: Damp heat, cyclic (12h +12h cycle) IEC 61683: 1999, Photovoltaic systems – Power conditioners – Procedure for measuring efficiency
<b>Certificate Issuing Office Name &amp; Address:</b>	Intertek Testing Services Ltd. Shanghai 2/F (West Side), No. 707, Zhangyang Road, Free Trade Experimental Area, Shanghai, P. R. China
<b>Test Report No.:</b>	190820066GZU-001

Additional information in Appendix.



**Signature**

**Certification Manager: Grady Ye**

**Date: 27 September 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-190022

### Ratings & Principle Characteristics:

Model	MAC 50KTL3-X LV	MAC 60KTL3-X LV
Max.PV voltage	1100Vdc	
PV voltage range	200V – 1000Vdc	
Max.input current	50/37.5/37.5A	50A*3
PV Isc	55A*3	
Nominal output voltage	3W/N/PE, 230/400Vac	
Nominal output Frequency	50/60Hz	
Max.output current	80.5A	96.6A
Max.output power	50.0KW	60.0KW
Max.apparent power	55.5KVA	66.6KVA
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	TK1.0	

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.