

Test Verification of Conformity

Verification Number: 2501B1311SHA-V1

On the basis of the tests undertaken, the sample<s> of the below product has been tested by an accredited 3rd party laboratory in accordance to the referenced specification<s>/standard<s> at the time the tests were carried out. This verification is part of the full test report<s> and should be read in conjunction with it <them>.

This document can be used in support of a claim in meeting relevant < EU Low Voltage Directive (LVD) (2014/35/EU)>legislation and mandatory Conformity Marking. And in accordance with EU / UK law, the claim is the sole obligation of the Manufacturer/ Importer.

Applicant Name & Address:	Afore New Energy Technology (Shanghai) Co., Ltd. Building 7, No.333 Wanfang Rd, Minhang District, Shanghai, China. 201112
Product Description:	PV Grid interactive inverter
Ratings & Principle Characteristics:	See Appendix(Specifications table)
Models/Type References:	BNT017KTA, BNT020KTA, BNT025KTA, BNT030KTA, BNT036KTA, BNT030KTL, BNT036KTL, BNT040KTL, BNT050KTL, BNT060KTL.
Brand Names:	Afore
Specification<s>/Standards:	IEC/EN 62109 1:2010 IEC/EN 62109-2:2011
Verification Issuing Office Name & Address:	Intertek Testing Services (Shanghai FTZ) Co., Ltd. Building No.86, 1198 Qinzhou Road (North), Shanghai 200233, China
Date of Tests:	2023-06-28 to 2023-07-17 and 2025-01-14 to 2025-01-20
Test Report Number(s):	2501B1311SHA-001/002
Additional information in Appendix.	

Signature



Name: Max Jin

Position: General Manager

Date: 2025-01-22

This Verification 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 Verification. Only the Client is authorized to permit copying or distribution of this Verification. 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. The observations and test/inspection results referenced in this Verification are relevant only to the sample tested/inspected. This Verification by itself does not imply that the material, product, or service is or has ever been under an Intertek certification program.

APPENDIX: Test Verification of Conformity

This is an Appendix to Test Verification of Conformity Number: 2501B1311SHA-V1

Manufacture Name & Address: Same as applicant

Specifications table					
Model	BNT017KT A	BNT020KT A	BNT025KT A	BNT030KT A	BNT036KT A
PV input					
P pv Max(kW)	25.5	30	37.5	45	54
Vmax PV (Vdc) (absolute Max.)	750	750	750	750	750
Isc PV (absolute Max.) (A)	48 x2	48x3	48x3	48x4	48x4
Number MPP trackers	2	3	3	4	4
Number input strings	2/3	2/2/2	2/2/3	2/2/2/2	2/2/2/2
Max. PV input current (A)	38x 2	38 x3	40x3	38 x4	38 x4
MPPT voltage range (Vdc)	200-700	200-700	200-700	200-700	200-700
Vdc range @ full power (Vdc)	310-600	320-600	300-600	300-600	300-600
AC Grid (output)					
Normal AC Voltage (VAC)	3P+PE/3P 133/230				
Frequency (Hz)	50				
Normal AC Current (A)	42.7	50.2	62.7	75.2	90.4
Max. cont. output current (A)	48	60	80	96	96
Normal Power (kW)	17	20	25	30	36
Rated Apparent Power (kVA)	17	20	25	30	36
Max. cont. Power (kW)	17	20	25	30	36
Max. cont. Apparent Power (kVA)	17	20	25	30	36
Power factor(adjustable)	1.0(-0.8~ +0.8)				
Others					
Protective class	Class I				
Ingress protection (IP)	IP66				
Temperature (°C)	-25°C to +60°C (Derating 45°C)				
Inverter Isolation	Non-isolated				
Overvoltage category	OVC III (AC Main), OVC II (PV)				
Software version	V06				

This Verification 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 Verification. Only the Client is authorized to permit copying or distribution of this Verification. 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. The observations and test/inspection results referenced in this Verification are relevant only to the sample tested/inspected. This Verification by itself does not imply that the material, product, or service is or has ever been under an Intertek certification program.

APPENDIX: Test Verification of Conformity

This is an Appendix to Test Verification of Conformity Number: 2501B1311SHA-V1

Specifications table					
Model	BNT030KT L	BNT036KT L	BNT040KT L	BNT050KT L	BNT060KT L
PV input					
P _{pv} Max(kW)	45	54	60	75	90
V _{max} PV (Vdc) (absolute Max.)	1100	1100	1100	1100	1100
I _{sc} PV (absolute Max.) (A)	48 x 2	48 x 3	48 x 3	48 x 3	48 x 4
Max. PV input current / strings (A)	38 x 2	38 x 3	38 x 3	40 x 3	38 x 4
Number MPP trackers	2	3	3	3	4
Number input strings	2/3	2/2/2	2/2/2	2/2/3	2/2/2/2
MPPT voltage range (Vdc)	200-1000	200-1000	200-1000	200-1000	200-1000
Vdc range @ full power (Vdc)	500-850	500-850	500-850	500-850	500-850
AC Grid output					
Normal AC Voltage (VAC)	3P+N+PE/3P+PE 230/400				
Frequency (Hz)	50				
Normal AC Current (A)	43.5	52.2	58	72.5	87
Max. cont. output current (A)	48	60	65	80	96
Normal Power (kW)	30	36	40	50	60
Rated Apparent Power (kVA)	30	36	40	50	60
Max. cont. Power (kW)	30	36	40	50	60
Max. cont. Apparent Power (kVA)	30	36	40	50	60
Power factor	1 (-0.8~+0.8 adjustable)				
Others					
Ingress protection (IP)	IP66				
Protective class	Class I				
Temperature (°C)	-25°C to +60°C (Derating 45°C)				
Inverter Isolation	Non-isolated				
Overvoltage category	OVC III (AC Main), OVC II (PV)				
Software Version	V06				

Signature



Name: Max Jin

Position: General Manager

Date: 2025-01-22

This Verification 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 Verification. Only the Client is authorized to permit copying or distribution of this Verification. 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. The observations and test/inspection results referenced in this Verification are relevant only to the sample tested/inspected. This Verification by itself does not imply that the material, product, or service is or has ever been under an Intertek certification program.