

# Test Verification of Conformity

Verification Number: 2503B0870SHA-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>.

Applicant Name & Address:	Afore New Energy Technology (Shanghai) Co., Ltd. Building 7, No.333 Wanfang Road, Minhang District, Shanghai 201112, China
Product Description:	Utility Interactive Inverter(Non-Isolated Inverter)
Ratings & Principle Characteristics:	See APPENDIX for details
Models/Type References:	BNT followed by 003, 004, 005, 006, 008, 010, 012 or 015; followed by KTA. BNT followed by 003, 004, 005, 006, 008, 010, 012, 013, 015, 017, 020 or 025; followed by KTB.
Brand Name<s>:	Afore
Specification<s>/Standard<s>:	CFR 47 Part 15 (2023) ANSI C63.4 (2014)+A1 (2017)
Verification Issuing Office Name & Address:	Intertek Testing Services (Shanghai FTZ) Co., Ltd. Building No.86, 1198 Qinzhou Road (North), Caohejing Development Zone, Shanghai 200233, China
Date of Tests:	2023-06-28 to 2023-07-17, 2024-04-25 to 2024-05-14
Test Report Number<s>:	2503B0870SHA-001

Signature



Name: Max Jin

Position: General Manager

Date: 2025-04-08

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## APPENDIX: Test Verification of Conformity

This is an Appendix to Test Verification of Conformity Number: 2503B0870SHA-V1.

Specifications table				
Model	BNT003KTB	BNT004KTB	BNT005KTB	BNT006KTB
PV input				
P <sub>pv</sub> Max(kW)	5.1	6	7.5	9
V <sub>max</sub> PV (Vdc) (absolute Max.)	1100	1100	1100	1100
I <sub>sc</sub> PV (absolute Max.) (A)	25 x 2	25 x 2	25 x 2	25 x 2
Number MPP trackers	2	2	2	2
Number input strings	1/1	1/1	1/1	1/1
Max. PV input current (A)	15 x 2	15 x 2	15 x 2	15 x 2
MPPT voltage range (Vdc)	150-1000	150-1000	150-1000	150-1000
Vdc range @ full power (Vdc)	200-850	200-850	200-850	250-850
AC Grid (output)				
Normal AC Voltage (VAC)	3P+N+PE/3P+PE, 277/480			
Frequency (Hz)	60			
Normal AC Current (A)	3.7	4.9	6.1	7.3
Max. cont. output current (A)	5	6	7	9
Normal Power (kW)	3	4	5	6
Rated Apparent Power (kVA)	3	4	5	6
Max. cont. Power (kW)	3	4	5	6
Max. cont. Apparent Power (kVA)	3	4	5	6
Power factor(adjustable)	1.0( -0.8~ +0.8)			
Others				
Protective class	Class I			
Ingress protection (IP)	NEMA 4X			
Temperature (°C)	-25°C to +60°C (Derating 45°C)			
Inverter Isolation	Non-isolated			
Overvoltage category	OVC III (AC Main), OVC II (PV)			

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Specifications table				
Model	BNT008KTB	BNT010KTB	BNT012KTB	BNT013KTB
<b>PV input</b>				
P <sub>pv</sub> Max(kW)	12	15	18	19.5
V <sub>max</sub> PV (Vdc) (absolute Max.)	1100	1100	1100	1100
I <sub>sc</sub> PV (absolute Max.) (A)	25 x 2	25 x 2	25 x 2	25 x 2
Number MPP trackers	2	2	2	2
Number input strings	1/1	1/1	1/1	1/1
Max. PV input current (A)	15 x 2	15 x 2	15 x 2	15 x 2
MPPT voltage range (Vdc)	150-1000	150-1000	150-1000	150-1000
Vdc range @ full power (Vdc)	300-850	500-850	500-850	500-850
<b>AC Grid (output)</b>				
Normal AC Voltage (VAC)	3P+N+PE/3P+PE, 277/480			
Frequency (Hz)	60			
Normal AC Current (A)	9.7	12.1	14.5	15.7
Max. cont. output current (A)	11	14	16	18
Normal Power (kW)	8	10	12	13
Rated Apparent Power (kVA)	8	10	12	13
Max. cont. Power (kW)	8	10	12	13
Max. cont. Apparent Power (kVA)	8	10	12	13
Power factor(adjustable)	1.0( -0.8~ +0.8)			
<b>Others</b>				
Protective class	Class I			
Ingress protection (IP)	NEMA 4X			
Temperature (°C)	-25°C to +60°C (Derating 45°C)			
Inverter Isolation	Non-isolated			
Overvoltage category	OVC III (AC Main), OVC II (PV)			

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Specifications table				
Model	BNT015KTB	BNT017KTB	BNT020KTB	BNT025KTB
<b>PV input</b>				
P <sub>pv</sub> Max(kW)	22.5	25.5	30	37.5
V <sub>max</sub> PV (Vdc) (absolute Max.)	1100	1100	1100	1100
I <sub>sc</sub> PV (absolute Max.) (A)	30 + 48	48 x 2	48 x 2	48 x 2
Number MPP trackers	2	2	2	2
Number input strings	1/2	2/2	2/2	2/2
Max. PV input current (A)	20 + 32	32 x 2	32 x 2	32 x 2
MPPT voltage range (Vdc)	150-1000	150-1000	150-1000	150-1000
Vdc range @ full power (Vdc)	500-850	500-850	500-850	500-850
<b>AC Grid (output)</b>				
Normal AC Voltage (VAC)	3P+N+PE/3P+PE, 277/480			
Frequency (Hz)	60			
Normal AC Current (A)	18.1	20.5	24.1	30.1
Max. cont. output current (A)	20	23	27	34
Normal Power (kW)	15	17	20	25
Rated Apparent Power (kVA)	15	17	20	25
Max. cont. Power (kW)	15	17	20	25
Max. cont. Apparent Power (kVA)	15	17	20	25
Power factor(adjustable)	1.0( -0.8~ +0.8)			
<b>Others</b>				
Protective class	Class I			
Ingress protection (IP)	NEMA 4X			
Temperature (°C)	-25°C to +60°C (Derating 45°C)			
Inverter Isolation	Non-isolated			
Overvoltage category	OVC III (AC Main), OVC II (PV)			

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Specifications table				
Model	BNT003KTA	BNT004KTA	BNT005KTA	BNT006KTA
PV input				
P <sub>pv</sub> Max(W)	5100	6000	7500	9000
V <sub>max</sub> PV (Vdc) (absolute Max.)	750	750	750	750
I <sub>sc</sub> PV (absolute Max.) (A)	25x 2	25x 2	25x 2	25x 2
Number MPP trackers	2	2	2	2
Number input strings	1/1	1/1	1/1	1/1
Max. PV input current (A)	15 x 2	15 x 2	15 x 2	15 x 2
MPPT voltage range (Vdc)	150-600	150-600	150-600	150-600
Vdc range @ full power (Vdc)	220-600	220-600	220-600	220-600
AC Grid (output)				
Normal AC Voltage (VAC)	3P+PE/3P, 127/220			
Frequency (Hz)	60			
Normal AC Current (A)	7.9	10.5	13.2	15.8
Max. cont. output current (A)	10.5	13.5	17.0	21.5
Normal Power (W)	3000	4000	5000	6000
Rated Apparent Power (VA)	3000	4000	5000	6000
Max. cont. Power (W)	3000	4000	5000	6000
Max. cont. Apparent Power (VA)	3000	4000	5000	6000
Power factor(adjustable)	1.0( -0.8~ +0.8)			
Others				
Protective class	Class I			
Ingress protection (IP)	NEMA 4X			
Temperature (°C)	-25°C to +60°C (Derating 45°C)			
Inverter Isolation	Non-isolated			
Overvoltage category	OVC III (AC Main), OVC II (PV)			

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Specifications table				
Model	BNT008KTA	BNT010KTA	BNT012KTA	BNT015KTA
PV input				
P <sub>pv</sub> Max(W)	12000	15000	18000	22500
V <sub>max</sub> PV (Vdc) (absolute Max.)	750	750	750	750
I <sub>sc</sub> PV (absolute Max.) (A)	30+48	48 x 2	48 x 2	48 x2
Number MPP trackers	2	2	2	2
Number input strings	1/2	2/2	2/2	2/2
Max. PV input current (A)	20+32	32x 2	32x 2	32x 2
MPPT voltage range (Vdc)	150-600	150-600	150-600	150-600
Vdc range @ full power (Vdc)	200-600	200-600	250-600	300-600
AC Grid (output)				
Normal AC Voltage (VAC)	3P+PE/3P, 127/220			
Frequency (Hz)	60			
Normal AC Current (A)	21	26.3	31.5	39.4
Max. cont. output current (A)	27	30	32	40
Normal Power (W)	8000	10000	12000	15000
Rated Apparent Power (VA)	8000	10000	12000	15000
Max. cont. Power (W)	8000	10000	12000	15000
Max. cont. Apparent Power (VA)	8000	10000	12000	15000
Power factor(adjustable)	1.0( -0.8~ +0.8)			
Others				
Protective class	Class I			
Ingress protection (IP)	NEMA 4X			
Temperature (°C)	-25°C to +60°C (Derating 45°C)			
Inverter Isolation	Non-isolated			
Overvoltage category	OVC III (AC Main), OVC II (PV)			

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