



PV String Inverter PV Storage Inverter



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About Us

Afore is a leading PV inverter provider from China, with more than ten years dedicated experience in PV inverter R&D and manufacturing, Afore inverters have been installed in Europe, Australia, China, Indian, Japan, North America and South America, meeting the needs of global users.

We provide single and three-phase high-efficiency PV string inverters for a capacity of 1kW to 60kW, storage inverters and all-in-one storage products. All of our inverters are integrated with smart monitoring system.

We offer not just good products, but also high-efficient local support to our partners and users throughout the inverter life span. Make sure the customers receive reliable returns by choosing Afore!



2010

Afore New Energy Technology (Shanghai) Co. Ltd. was established.

2011

Afore inverter was installed in China's first residential solar PV system.

2012

Afore inverter showed up in Secrets of PV War, one episode of a large studio TV program Dialogue on CCTV-2.

2013

Afore was identified as high-tech enterprise by Shanghai government and becomes a member of Shanghai Solar Energy Society.

2014

Sales amount got continuous growth in Europe, Asia, Australia and other regions.

2015

The first light-weighted design three-phase PV string inverter (10 - 30kW) .

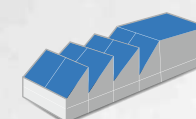
Contents



Single-phase String PV Inverter

Residential System

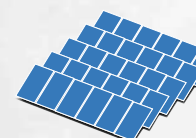
HNS1000TL-1, HNS1500TL-1, HNS2000TL-1, HNS2500TL-1, HNS3000TL-1, HNS3000TL, HNS3600TL, HNS4000TL, HNS5000TL, HNS6000TL, HNS7000TL, HNS8000TL, HNS9000TL, HNS10000TL



Three-phase String PV Inverter

Residential & Small Commercial System

BNT003KTL, BNT004KTL, BNT005KTL, BNT006KTL, BNT008KTL, BNT010KTL, BNT012KTL, BNT015KTL, BNT017KTL, BNT020KTL, BNT025KTL



Three-phase String PV Inverter

Commercial System and Power Plants

BNT030KTL, BNT036KTL, BNT040KTL, BNT050KTL, BNT060KTL



Hybrid Storage Inverter

Residential Storage System

AF3k-SL, AF3.6k-SL, AF4k-SL, AF4.6k-SL, AF5k-SL, AF5.5k-SL, AF6k-SL, AF3k-SH, AF3.6k-SH, AF4k-SH, AF4.6k-SH, AF5k-SH, AF5.5k-SH, AF6k-SH,

AF3K-DH, AF3.6K-DH, AF4K-DH, AF4.6K-DH, AF5K-DH, AF5.5K-DH, AF6K-DH, AF7K-DH, AF7.6K-DH, AF8K-DH, AF8.6K-DH, AF9.6K-DH

Battery Bank, All-in-one Solution



Monitoring Module

Monitoring Module, Monitoring Services, Monitoring Interface



49.5kw Fukuoka ,Japan



49.5kw Hiroshima, Japan



1.5MW Jiangsu,China



15kw Perth, Australia



15kw Perth, Australia



800kw Dongtai, China



2.0kw Dorchester, UK



2.0MW Jiangsu,China

0.8MW Dongtai, China



1.5MW Jiangsu,China



49.5kw Fukuoka ,Japan



4.0kw Cambridge, UK



1.3MW Dongtai, China



50kw Poland

2016

Successful launched 6.0-8.0kW single-phase PV inverters, continues to expand market share.

2017

Three phase 50-60kw inverters are launched, which have the highest water-proofing level IP68 fan in the industry.

2018

The 5th Generation Inverters and Hybrid Inverter (3-5kW) launched.

2019

Single-phase low-voltage hybrid storage inverter launched.

2020

The 6th Generation Inverters and single-phase high-voltage hybrid storage inverter launched.

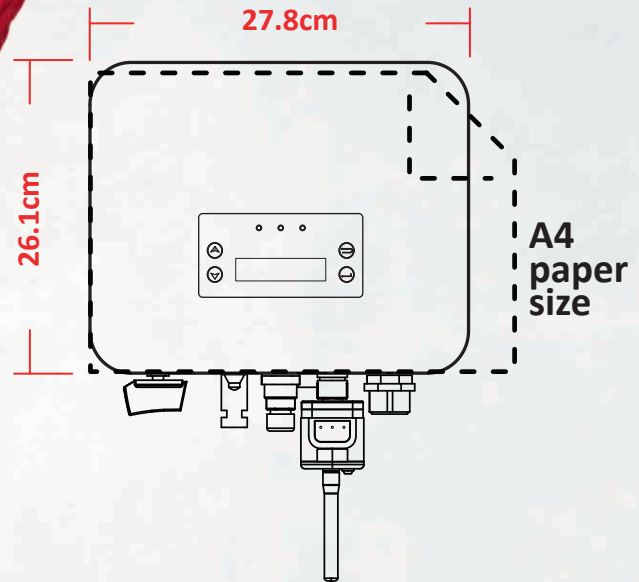
2021

ATON series three phase inverter 3-25kW and US Hybrid Storage Inverter 3-9.6kW launched.

Residential HNS series

HNS-TL1

1-3 kW



The Afore HNS Series Single-phase inverters are designed for residential PV system applications, rating from 1kW to 3kW. All models have unibody housings with aluminum structure which is anodized, increasing durability and effectively prevents corrosion. The unibody housing can ensure efficient heat dissipation, which significantly improves the reliability and extends the life of the inverters.

The inverter menu is activated by sensor touch buttons. Communication implements are via the Wi-Fi module (can be changed to Ethernet / GPRS). Check the system status anytime and anywhere via online portal or APP.



ANTI-FLOW
Anti-Feed-in Function



PV OVERSIZE
Max. 1.5 time
PV Oversize Capacity



PROTECTION
Multiple intelligent
Protections



SMART
Smart IV Curve Scanning



Wi-Fi
Wi-Fi Standard
Ethernet/GPRS Optional



CONFIGURATION
Quick & Easy
Config. via Wi-Fi



MODBUS
MODBUS
Communication Ready

MPPT efficiency > 99.9%



No fans design

Compact and light body design



Quick and easy installation

Active and reactive power compensation, adjust power factor



AC output 1.1x continuous operation

PV Input Data	HNS1000TL-1	HNS1500TL-1	HNS2000TL-1	HNS2500TL-1	HNS3000TL-1
Max. DC Power (W)	1500	2250	3000	3750	4200
Max. DC Voltage (V)	500	500	500	500	500
MPPT Voltage Range (V)	50-500	50-500	50-500	50-500	50-500
MPPT Full Power Voltage Range (V)	70-500	110-500	145-500	180-500	220-500
Rated Input Voltage (V)	360				
Start-up Voltage (V)	50				
Max. Input Current (A)	14				
Max. Short Current (A)	18				
No. of MPP Tracker / No. of PV String	1/1				
Input Connector Type	MC4				

AC Output Data	HNS1000TL-1	HNS1500TL-1	HNS2000TL-1	HNS2500TL-1	HNS3000TL-1
Max. Output Power (W)	1100	1650	2200	2750	3300
Nominal Output Power (W)	1000	1500	2000	2500	3000
Max. Output Current (A)	6	9	12	13	15
Nominal Output Voltage (V)	L/N/PE, 220Vac, 230Vac, 240Vac				
Grid Voltage Range	180Vac-276Vac (According to local standard)				
Nominal Output Frequency (Hz)	50/60				
Grid Frequency Range	45-55Hz/54-66Hz (According to local standard)				
Output Power Factor	1 default (adjustable from 0.8 leading to 0.8 lagging)				
Output Current THD	<3%				

Efficiency	HNS1000TL-1	HNS1500TL-1	HNS2000TL-1	HNS2500TL-1	HNS3000TL-1
Max. Efficiency	97.50%	97.80%	98.10%	98.10%	98.13%
Euro Efficiency	96.60%	96.70%	96.80%	97.23%	97.56%

Protection	HNS1000TL-1	HNS1500TL-1	HNS2000TL-1	HNS2500TL-1	HNS3000TL-1
PV Reverse Polarity Protection	YES				
PV Insulation Resistance Detection	YES				
AC Short Circuit Protection	YES				
AC Over Current Protection	YES				
AC Over Voltage Protection	YES				
Anti-Islanding Protection	YES				
Residual Current Detection	YES				
Over Temperature Protection	YES				
Integrated DC switch	YES				
Surge Protection	Integrated (Type III)				
Smart IV Curve Scanning	YES				
Quick Arc Fault Circuit Interruption	Optional				

General Data	HNS1000TL-1	HNS1500TL-1	HNS2000TL-1	HNS2500TL-1	HNS3000TL-1
Dimensions (H x W x D, mm)	260 x 280 x 116				
Weight (kg)	6				
Protection Degree	IP65				
Enclosure Material	Aluminum				
Ambient Temperature Range (°C)	-25 - +60				
Humidity Range	0-100%				
Topology	Transformerless				
Communication Interface	RS485 / WiFi / Wire Ethernet / GPRS (optional)				
Cooling Concept	Convection				
Noise Emission (db)	<21				
Night Power Consumption (W)	<0.2		<1		
Max. Operation Altitude (m)	4000				

Certifications and Standards	HNS1000TL-1	HNS1500TL-1	HNS2000TL-1	HNS2500TL-1	HNS3000TL-1
EMC Standard	EN/IEC 61000-6-2, EN/IEC 61000-6-3, EN61000-3-2, EN61000-3-3, EN61000-3-11, EN61000-3-12				
Safety Standard	IEC 60068, UL1741, EN62109				
Grid-connection	IEEE1547, CSA C22, EN50549, VDE4105, VDE0126, RD1699, ABNT NBR16149 & 16150, AS4777.2, NB/T32004, G98/G99, IEC61727				

Residential HNS series

HNS-TL

3-6 kW



The Afore HNS Series Single-phase inverters are designed for residential PV system applications, rating from 3kW to 6kW. All models have unibody housings with aluminum structure which is anodized, increasing durability and effectively prevents corrosion. Equipped with external inductors, the unibody housings can ensure efficient heat dissipation, which significantly improves the reliability and extends the life of the inverters.

The inverter menu is activated by sensor touch buttons. Communication implements are via the Wi-Fi module (can be changed to Ethernet / GPRS). Check the system status anytime and anywhere via online portal or APP.



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Wi-Fi Standard
Ethernet/GPRS Optional



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MODBUS
MODBUS
Communication Ready

MPPT efficiency > 99.9%



Two MPPT design



Active and reactive power compensation, adjust power factor



No fans design



Quick and easy installation



High-quality power output and low THDI

PV Input Data	HNS3000TL	HNS3600TL	HNS4000TL	HNS5000TL	HNS6000TL
Max. DC Power (W)	4500	5400	6000	7000	8400
Max. DC Voltage (V)	600	600	600	600	600
MPPT Voltage Range (V)	70-550	70-550	70-550	70-550	70-550
MPPT Full Power Voltage Range (V)	110-550	130-550	145-550	180-550	220-550
Rated Input Voltage (V)	360				
Start-up Voltage (V)	70				
Max. Input Current (A)	14 x 2				
Max. Short Current (A)	18 x 2				
No. of MPP Tracker / No. of PV String	2/2				
Input Connector Type	MC4				

AC Output Data	HNS3000TL	HNS3600TL	HNS4000TL	HNS5000TL	HNS6000TL
Max. Output Power (W)	3300	3960	4400	5500	6600
Nominal Output Power (W)	3000	3600	4000	5000	6000
Max. Output Current (A)	15	17.5	20	24	28.7
Nominal Output Voltage (V)	L/N/PE, 220Vac, 230Vac, 240Vac				
Grid Voltage Range	180Vac-276Vac (According to local standard)				
Nominal Output Frequency (Hz)	50/60				
Grid Frequency Range	45-55Hz/54-66Hz (According to local standard)				
Output Power Factor	1 default (adjustable from 0.8 leading to 0.8 lagging)				
Output Current THD	<3%				

Efficiency	HNS3000TL	HNS3600TL	HNS4000TL	HNS5000TL	HNS6000TL
Max. Efficiency	98.20%	98.20%	98.20%	98.20%	98.20%
Euro Efficiency	97.80%	97.82%	97.85%	97.90%	97.92%

Protection	HNS3000TL	HNS3600TL	HNS4000TL	HNS5000TL	HNS6000TL
PV Reverse Polarity Protection				YES	
PV Insulation Resistance Detection				YES	
AC Short Circuit Protection				YES	
AC Over Current Protection				YES	
AC Over Voltage Protection				YES	
Anti-Islanding Protection				YES	
Residual Current Detection				YES	
Over Temperature Protection				YES	
Integrated DC switch				YES	
Surge Protection				Integrated (Type III)	
Smart IV Curve Scanning				YES	
Quick Arc Fault Circuit Interruption				Optional	

General Data	HNS3000TL	HNS3600TL	HNS4000TL	HNS5000TL	HNS6000TL
Dimensions (H x W x D, mm)	370 x 350 x 142				
Weight (kg)	11				
Protection Degree	IP65				
Enclosure Material	Aluminum				
Ambient Temperature Range (°C)	-25 - +60				
Humidity Range	0-100%				
Topology	Transformerless				
Communication Interface	RS485 / WiFi / Wire Ethernet / GPRS (optional)				
Cooling Concept	Convection				
Noise Emission (db)	<28				
Night Power Consumption (W)	<1				
Max. Operation Altitude (m)	4000				

Certifications and Standards	HNS3000TL	HNS3600TL	HNS4000TL	HNS5000TL	HNS6000TL
EMC Standard	EN/IEC 61000-6-2, EN/IEC 61000-6-3, EN61000-3-2, EN61000-3-3, EN61000-3-11, EN61000-3-12				
Safety Standard	IEC 60068, UL1741, EN62109				
Grid-connection	IEEE1547, CSA C22, EN50549, VDE4105, VDE0126, RD1699, ABNT NBR16149 & 16150, AS4777.2, NB/T32004, G98/G99, IEC61727				

Residential HNS series

HNS-TL

7-10 kW



The Afore HNS Series Single-phase inverters are designed for residential PV system applications, rating from 7kW to 10kW. All models have unibody housings with aluminum structure which is anodized, increasing durability and effectively prevents corrosion. Equipped with external inductors, the unibody housings can ensure efficient heat dissipation, which significantly improves the reliability and extends the life of the inverters.

The inverter menu is activated by sensor touch buttons. Communication implements are via the Wi-Fi module (can be changed to Ethernet / GPRS). Check the system status anytime and anywhere via online portal or APP.



ANTI-FLOW
Anti-Feed-in Function



PV OVERSIZE
Max. 1.5 time
PV Oversize Capacity



PROTECTION
Multiple intelligent
Protections



SMART
Smart IV Curve Scanning



Wi-Fi
Wi-Fi Standard
Ethernet/GPRS Optional



CONFIGURATION
Quick & Easy
Config. via Wi-Fi



MODBUS
MODBUS
Communication Ready

MPPT efficiency > 99.9%



Two MPPT design



Active and reactive power compensation, adjust power factor



No fans design



Quick and easy installation



High-quality power output and low THDI



PV Input Data	HNS7000TL	HNS8000TL	HNS9000TL	HNS10000TL
Max. DC Power (W)	9800	11200	12600	14000
Max. DC Voltage (V)	600			
MPPT Voltage Range (V)	70-550			
MPPT Full Power Voltage Range (V)	220-550			
Rated Input Voltage (V)	360			
Start-up Voltage (V)	70			
Max. Input Current (A)	14+26		26+26	
Max. Short Current (A)	18+35		35+35	
No. of MPP Tracker / No. of PV String	2/3		2/4	
Input Connector Type	MC4			

AC Output Data	HNS7000TL	HNS8000TL	HNS9000TL	HNS10000TL
Max. Output Power (W)	7700	8800	9900	11000
Nominal Output Power (W)	7000	8000	9000	10000
Max. Output Current (A)	33.6	38.3	45	50
Nominal Output Voltage (V)	L/N/PE, 220Vac, 230Vac, 240Vac			
Grid Voltage Range	180Vac-276Vac (According to local standard)			
Nominal Output Frequency (Hz)	50/60			
Grid Frequency Range	45-55Hz/54-66Hz (According to local standard)			
Output Power Factor	1 default (adjustable from 0.8 leading to 0.8 lagging)			
Output Current THD	<3%			

Efficiency	HNS7000TL	HNS8000TL	HNS9000TL	HNS10000TL
Max. Efficiency	98.20%	98.20%	98.32%	98.40%
Euro Efficiency	97.95%	98.00%	98.00%	98.10%

Protection	HNS7000TL	HNS8000TL	HNS9000TL	HNS10000TL
PV Reverse Polarity Protection				YES
PV Insulation Resistance Detection				YES
AC Short Circuit Protection				YES
AC Over Current Protection				YES
AC Over Voltage Protection				YES
Anti-Islanding Protection				YES
Residual Current Detection				YES
Over Temperature Protection				YES
Integrated DC switch				YES
Surge Protection				Integrated (Type III)
Smart IV Curve Scanning				YES
Quick Arc Fault Circuit Interruption				Optional

General Data	HNS7000TL	HNS8000TL	HNS9000TL	HNS10000TL
Dimensions (H x W x D, mm)	510 x 370 x 167			
Weight (kg)	17		19	
Protection Degree	IP65			
Enclosure Material	Aluminum			
Ambient Temperature Range (°C)	-25 - +60			
Humidity Range	0-100%			
Topology	Transformerless			
Communication Interface	RS485 / WiFi / Wire Ethernet / GPRS (optional)			
Cooling Concept	Convection			
Noise Emission (db)	<40			
Night Power Consumption (W)	<1			
Max. Operation Altitude (m)	4000			

Certifications and Standards	HNS7000TL	HNS8000TL	HNS9000TL	HNS10000TL
EMC Standard	EN/IEC 61000-6-2, EN/IEC 61000-6-3, EN61000-3-2, EN61000-3-3, EN61000-3-11, EN61000-3-12			
Safety Standard	IEC 60068, UL1741, EN62109			
Grid-connection	IEEE1547, CSA C22, EN50549, VDE4105, VDE0126, RD1699, ABNT NBR16149 & 16150, AS4777.2, NB/T32004, G98/G99, IEC61727			

Commercial & Power Plants BNT series

BNT

3-25 kW

ATON

Series

Smart | Safety | Efficient



The Afore BNT Series Three-phase string inverters are designed for residential and small commercial PV system applications, rating from 3kW to 25kW. All models have unibody housings with aluminum structure which is anodized, increasing durability and effectively prevents corrosion. Equipped with external inductors, the unibody housings can ensure efficient heat dissipation, which significantly improves the reliability and extends the life of the inverters.

Communication implements are via the Wi-Fi module (can be changed to Ethernet / GPRS). Check the system status anytime and anywhere via online portal or APP.

- Quick Arc Fault circuit interruption (Optional)
- WiFi standard
- Compact design
- Multiple intelligent protections
- Compatible with bifacial modules
- String level monitoring



MPPT Range
Wide MPPT Range



PV OVERSIZE
1.5 Times PV Oversize



DC 1100V
Max. DC 1100V



UNIBODY
One-piece
Aluminum Housing



PROTECTION
Build-in SPD Type II
(Type II Optional)



SMART
Smart IV Curve Scanning



UPDATE
Remote Firmware Update

PV Input Data	BNT003KTL	BNT004KTL	BNT005KTL	BNT006KTL	BNT008KTL	BNT010KTL
Max. DC Power (W)	5100	6000	7500	9000	12000	15000
Max. DC Voltage (V)	1100					
MPPT Voltage Range (V)	150 -1000					
MPPT Full Power Voltage Range (V)	200 - 850		250 - 850		300 - 850	500 - 850
Rated Input Voltage (V)	620					
Start-up Voltage (V)	150					
Max. Input Current (A)	15 x 2					
Max. Short Current (A)	25 x 2					
No. of MPP Tracker / No. of PV String	2/2					
Input Connector Type	MC4					

AC Output Data	BNT003KTL	BNT004KTL	BNT005KTL	BNT006KTL	BNT008KTL	BNT010KTL
Max. Output Power (W)	3300	4400	5500	6600	8800	11000
Nominal Output Power (W)	3000	4000	5000	6000	8000	10000
Max. Output Current (A)	5.3	7	8.5	10.5	13.5	17
Nominal Output Voltage (V)	3P+N+PE /3P+PE 230/400					
Grid Voltage Range	260-519 (according to local standard)					
Nominal Output Frequency (Hz)	50/60					
Grid Frequency Range	45-55/55-65(according to local standard)					
Output Power Factor	1 default (adjustable from 0.8 leading to 0.8 lagging)					
Output Current THD	<3%					

Efficiency	BNT003KTL	BNT004KTL	BNT005KTL	BNT006KTL	BNT008KTL	BNT010KTL
Max. Efficiency	98.30%			98.70%		
Euro Efficiency	97.61%	97.65%	98.00%	98.05%		98.23%

Protection	BNT003KTL	BNT004KTL	BNT005KTL	BNT006KTL	BNT008KTL	BNT010KTL
PV Reverse Polarity Protection	YES					
PV Insulation Resistance Detection	YES					
AC Short Circuit Protection	YES					
AC Over Current Protection	YES					
AC Over Voltage Protection	YES					
Anti-Islanding Protection	YES					
Residual Current Detection	YES					
Over Temperature Protection	YES					
Integrated DC switch	YES					
Surge Protection	Integrated (Type II)					
Smart IV Curve Scanning	YES					
Quick Arc Fault Circuit Interruption	Optional					

General Data	BNT003KTL	BNT004KTL	BNT005KTL	BNT006KTL	BNT008KTL	BNT010KTL
Dimensions (H x W x D, mm)	510 x 370 x 167					
Weight (kg)	17					
Protection Degree	IP65					
Enclosure Material	Aluminum					
Ambient Temperature Range (°C)	-25 - +60					
Humidity Range	0-100%					
Topology	Transformerless					
Communication Interface	RS485 / WiFi / Wire Ethernet / GPRS					
Cooling Concept	Convection					
Noise Emission (db)	<30					
Night Power Consumption (W)	<1					
Max. Operation Altitude (m)	≤4000					

Certifications and Standards	BNT003KTL	BNT004KTL	BNT005KTL	BNT006KTL	BNT008KTL	BNT010KTL
EMC Standard	EN/IEC 61000-6-2, EN/IEC 61000-6-3, EN61000-3-2, EN61000-3-3, EN61000-3-11, EN61000-3-12					
Safety Standard	IEC 60068, UL1741, EN62109					
Grid-connection	IEEE1547, CSA C22, EN50549, VDE4105, VDE0126, RD1699, ABNT NBR16149 & 16150, AS4777.2, NB/T32004, G98/G99, IEC61727					

PV Input Data	BNT012KTL	BNT013KTL	BNT015KTL	BNT017KTL	BNT020KTL	BNT025KTL
Max. DC Power (W)	18000	19500	22500	25500	30000	37500
Max. DC Voltage (V)	1100					
MPPT Voltage Range (V)	150 -1000					
MPPT Full Power Voltage Range (V)	500 - 850					
Rated Input Voltage (V)	620					
Start-up Voltage (V)	150					
Max. Input Current (A)	15 + 26			26 x 2		
Max. Short Current (A)	25 + 48			48 x 2		
No. of MPP Tracker / No. of PV String	2/3			2/4		
Input Connector Type	MC4					

AC Output Data	BNT012KTL	BNT013KTL	BNT015KTL	BNT017KTL	BNT020KTL	BNT025KTL
Max. Output Power (W)	13200	14300	16500	18700	22000	27500
Nominal Output Power (W)	12000	13000	15000	17000	20000	25000
Max. Output Current (A)	21.5	22	27	30	32	40
Nominal Output Voltage (V)	3P+N+PE /3P+PE 230/400					
Grid Voltage Range	260-519 (according to local standard)					
Nominal Output Frequency (Hz)	50/60					
Grid Frequency Range	45-55/55-65(according to local standard)					
Output Power Factor	1 default (adjustable from 0.8 leading to 0.8 lagging)					
Output Current THD	<3%					

Efficiency	BNT012KTL	BNT013KTL	BNT015KTL	BNT017KTL	BNT020KTL	BNT025KTL
Max. Efficiency	98.70%			98.75%		
Euro Efficiency	98.23%			98.35%		

Protection	BNT012KTL	BNT013KTL	BNT015KTL	BNT017KTL	BNT020KTL	BNT025KTL
PV Reverse Polarity Protection	YES					
PV Insulation Resistance Detection	YES					
AC Short Circuit Protection	YES					
AC Over Current Protection	YES					
AC Over Voltage Protection	YES					
Anti-Islanding Protection	YES					
Residual Current Detection	YES					
Over Temperature Protection	YES					
Integrated DC switch	YES					
Surge Protection	Integrated (Type II)					
Smart IV Curve Scanning	YES					
Quick Arc Fault Circuit Interruption	Optional					

General Data	BNT012KTL	BNT013KTL	BNT015KTL	BNT017KTL	BNT020KTL	BNT025KTL
Dimensions (H x W x D, mm)	510 x 370 x 167					
Weight (kg)	19			21		
Protection Degree	IP65					
Enclosure Material	Aluminum					
Ambient Temperature Range (°C)	-25 - +60					
Humidity Range	0-100%					
Topology	Transformerless					
Communication Interface	RS485 / WiFi / Wire Ethernet / GPRS					
Cooling Concept	Intelligent fan cooling					
Noise Emission (db)	<40					<51
Night Power Consumption (W)	<1					
Max. Operation Altitude (m)	≤4000					

Certifications and Standards	BNT012KTL	BNT013KTL	BNT015KTL	BNT017KTL	BNT020KTL	BNT025KTL
EMC Standard	EN/IEC 61000-6-2, EN/IEC 61000-6-3, EN61000-3-2, EN61000-3-3, EN61000-3-11, EN61000-3-12					
Safety Standard	IEC 60068, UL1741, EN62109					
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Commercial & Power Plants BNT series

BNT

30-40 kW



The Afore BNT Series Three-phase string inverters are designed for commercial and power plant PV system applications, rating from 25kW to 40kW. All models with aluminum housings which is anodized, increasing durability and effectively prevents corrosion. Equipped with external inductors, ensure efficient heat dissipation, which significantly improves the reliability and extends the life of the inverters.

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Anti-Feed-in Function



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Max. 1.5 time
PV Oversize Input Capacity



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Multiple Intelligent
Protections



AL BODY
Aluminum Housing



Wi-Fi
Wi-Fi Standard,
Ethernet/GPRS Optional



CONFIGURATION
Quick & Easy
Config. via Wi-Fi



MODBUS
MODBUS
Communication Ready

MPPT efficiency > 99.9%



Intelligent Temperature Control System



Active and reactive power compensation, adjust power factor



IP 68 Cooling Fan



Type III DC & AC lightning protection



AC output 1.1x continuous operation

PV Input Data	BNT030KTL	BNT036KTL	BNT040KTL
Max. DC Power (W)	42000	54000	56000
Max. DC Voltage (V)		1000	
MPPT Voltage Range (V)		200-950	
MPPT Full Power Voltage Range (V)		500-850	
Rated Input Voltage (V)		620	
Start-up Voltage (V)		200	
Max. Input Current (A)	22 x3	36 x 2	40 x 2
Max. Short Current (A)	28 x3	45 x 2	50 x 2
No. of MPP Tracker / No. of PV String	3/6	2/8	2/8
Input Connector Type		MC4	

AC Output Data	BNT030KTL	BNT036KTL	BNT040KTL
Max. Output Power (W)	33000	39600	44000
Nominal Output Power (W)	30000	36000	40000
Max. Output Current (A)	48	56	61
Nominal Output Voltage (V)	3P+N+PE /3P+PE 230/400		
Grid Voltage Range	260-519 (according to local standard)		
Nominal Output Frequency (Hz)	50/60		
Grid Frequency Range	45-55/55-65(according to local standard)		
Output Power Factor	1 default (adjustable from 0.8 leading to 0.8 lagging)		
Output Current THD	<3%		

Efficiency	BNT030KTL	BNT036KTL	BNT040KTL
Max. Efficiency	98.50 %	98.65%	98.65 %
Euro Efficiency	98.10 %	98.20%	98.25 %

Protection	BNT030KTL	BNT036KTL	BNT040KTL
PV Reverse Polarity Protection		YES	
PV Insulation Resistance Detection		YES	
AC Short Circuit Protection		YES	
AC Over Current Protection		YES	
AC Over Voltage Protection		YES	
Anti-Islanding Protection		YES	
Residual Current Detection		YES	
Over Temperature Protection		YES	
Integrated DC switch		YES	
Surge Protection	Integrated (Type III)		

General Data	BNT030KTL	BNT036KTL	BNT040KTL
Dimensions (H x W x D, mm)	610 x 450 x 222	780 x 500 x 230	
Weight (kg)	32	55	
Protection Degree	IP65		
Enclosure Material	Aluminum		
Ambient Temperature Range (°C)	-25 - +60		
Humidity Range	0-100%		
Topology	Transformerless		
Communication Interface	RS485 / WiFi / Wire Ethernet / GPRS (optional)		
Cooling Concept	Intelligent Fan Cooling		
Noise Emission (db)	<51		
Night Power Consumption (W)	<1		
Max. Operation Altitude (m)	≤4000		

Certifications and Standards	BNT030KTL	BNT036KTL	BNT040KTL
EMC Standard	EN/IEC 61000-6-2, EN/IEC 61000-6-3, EN61000-3-2, EN61000-3-3, EN61000-3-11, EN61000-3-12		
Safety Standard	IEC 60068, UL1741, EN62109		
Grid-connection	IEEE1547, CSA C22, EN50549, VDE4105, VDE0126, RD1699, ABNT NBR16149 & 16150, AS4777.2, NB/T32004, G98/G99, IEC61727		

Commercial & Power Plants BNT series

BNT

50-60 kW



The Afore BNT Series Three-phase string inverters are designed for commercial and power plant PV system applications, rating from 50kW to 60kW. All models with aluminum housings which is anodized, increasing durability and effectively prevents corrosion. Equipped with external inductors, ensure efficient heat dissipation, which significantly improves the reliability and extends the life of the inverters.

The inverter menu is activated by sensor touch buttons. Communication implements are via the Wi-Fi module (can be changed to Ethernet / GPRS). Check the system status anytime and anywhere via online portal or APP.



ANTI-FLOW
Anti-Feed-in Function



PV OVERSIZE
Max. 1.5 time
PV Oversize Input Capacity



PROTECTION
Multiple Intelligent
Protections



AL BODY
Aluminum Housing



Wi-Fi
Wi-Fi Standard,
Ethernet/GPRS Optional



CONFIGURATION
Quick & Easy
Config. via Wi-Fi



MODBUS
MODBUS
Communication Ready

MPPT efficiency > 99.9%



Intelligent Temperature Control System



Active and reactive power compensation, adjust power factor



IP 68 Cooling Fan



Type II DC & AC lightning protection



AC output 1.1x continuous operation

PV Input Data	BNT050KTL	BNT060KTL
Max. DC Power (W)	75000	84000
Max. DC Voltage (V)		1000
MPPT Voltage Range (V)		200-950
MPPT Full Power Voltage Range (V)		500-950
Rated Input Voltage (V)		620
Start-up Voltage (V)		200
Max. Input Current (A)	36 x 3	40 x 3
Max. Short Current (A)	45 x 3	50 x 3
No. of MPP Tracker / No. of PV String		3 /12
Input Connector Type		MC4

AC Output Data	BNT050KTL	BNT060KTL
Max. Output Power (W)	55000	66000
Nominal Output Power (W)	50000	60000
Max. Output Current (A)	75	90
Nominal Output Voltage (V)		3P+N+PE /3P+PE 230/400
Grid Voltage Range		260-519 (according to local standard)
Nominal Output Frequency (Hz)		50/60
Grid Frequency Range		45-55/55-65 (according to local standard)
Output Power Factor		1 default (adjustable from 0.8 leading to 0.8 lagging)
Output Current THD		<3%

Efficiency	BNT050KTL	BNT060KTL
Max. Efficiency	98.80%	99.00%
Euro Efficiency	98.45%	98.50%

Protection	BNT050KTL	BNT060KTL
PV Reverse Polarity Protection		YES
PV Insulation Resistance Detection		YES
AC Short Circuit Protection		YES
AC Over Current Protection		YES
AC Over Voltage Protection		YES
Anti-Islanding Protection		YES
Residual Current Detection		YES
Over Temperature Protection		YES
Integrated DC switch		YES
Surge Protection		Integrated (Type II)

General Data	BNT050KTL	BNT060KTL
Dimensions (H x W x D, mm)		590 x 850 x 285
Weight (kg)		79
Protection Degree		IP65
Enclosure Material		Aluminum
Ambient Temperature Range (°C)		-25 - +60
Humidity Range		0-100%
Topology		Transformerless
Communication Interface		RS485 / WiFi / Wire Ethernet / GPRS (optional)
Cooling Concept		Intelligent Fan Cooling
Noise Emission (db)		55
Night Power Consumption (W)		<1
Max. Operation Altitude (m)		≤4000

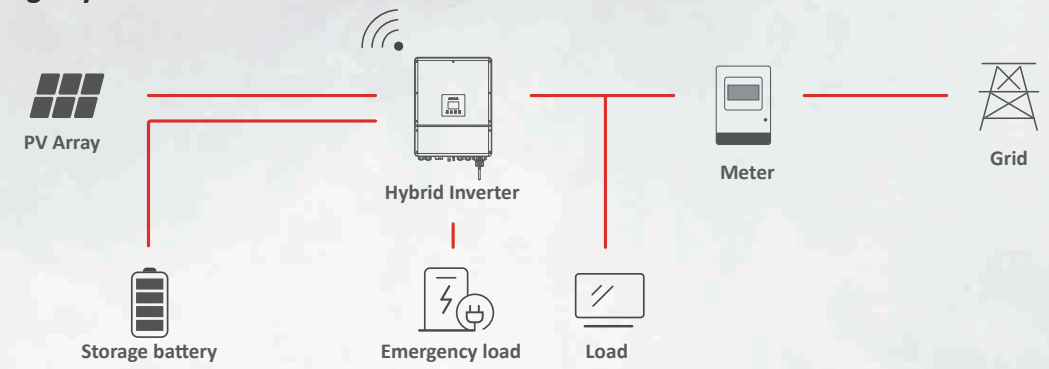
Certifications and Standards	BNT050KTL	BNT060KTL
EMC Standard	EN/IEC 61000-6-2, EN/IEC 61000-6-3, EN61000-3-2, EN61000-3-3, EN61000-3-11, EN61000-3-12	
Safety Standard	IEC 60068, UL1741, EN62109	
Grid-connection	IEEE1547, CSA C22, EN50549, VDE4105, VDE0126, RD1699, ABNT NBR16149 & 16150, AS4777.2, NB/T32004, G98/G99, IEC61727	

Hybrid Storage Inverter

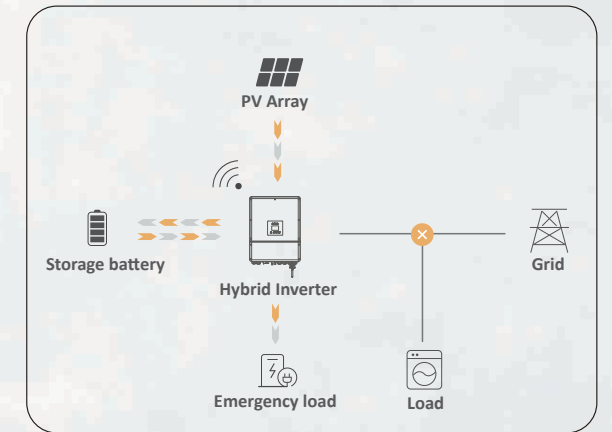
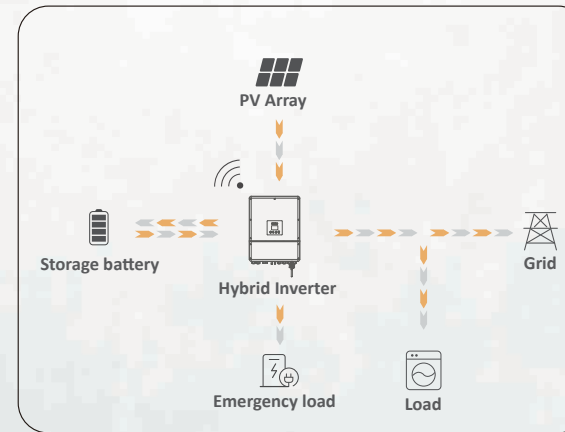
3-6 kW



For New Storage System:



Optimizing Self-Consumption (on-grid) + Emergency Power Supply(off-grid)



The Afore HNS Storage Series bi-directional energy storage inverter can be used for both on-grid and off-grid PV systems.

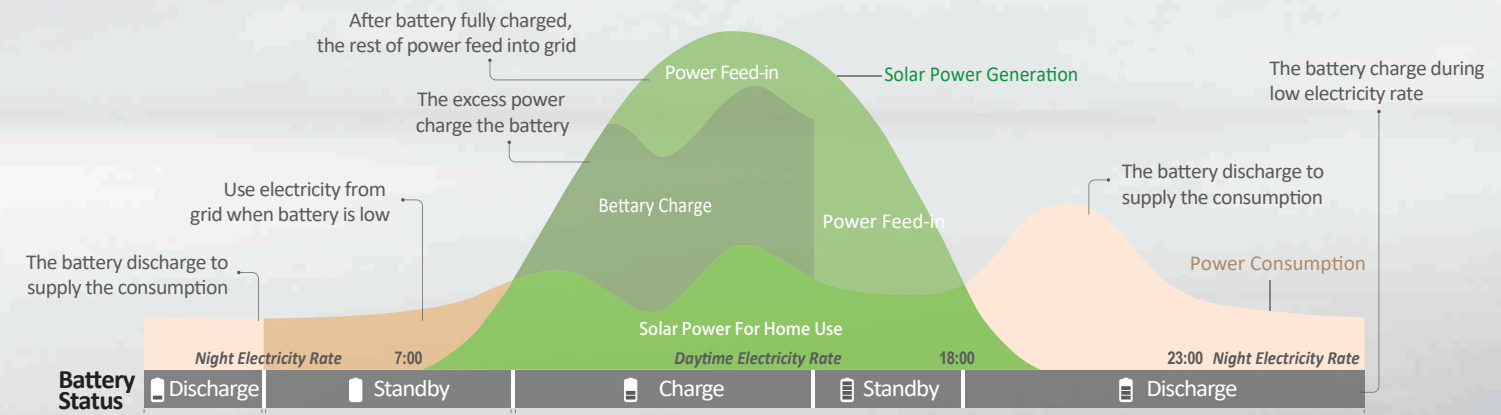
The storage inverter increases energy independence for homeowners. To optimize self-consumption, the battery automatically charged and discharged on the basis of customized setting. Significantly reduce the amount of energy purchased from public grid.

Communication implements via the Wi-Fi module (Ethernet / GPRS). Check the system status anytime and anywhere via online portal or APP, no additional software required.

Optimizing Self-Consumption Mode

With home energy storage installed, home owners may also be able to change from a flat rate electricity tariff to a time-of-use tariff. For the areas and regions, where peak shaving can be applied.

 ANTI-FLOW <small>Anti-Feed-in Function</small>	 10ms UPS FUNCTION <small>Switch Time < 10ms</small>	 3-STAGES <small>Smart Charging</small>	 PROTECTION <small>Multiple Intelligent Protections</small>	 CONFIGURATION <small>Quick & Easy Config. via Wi-Fi</small>	 IP 65 <small>IP 65 Water-resistant & Dustproof</small>
Plug & Play, Easy Maintenance 			No Fan Design 		
Compact Size & Easy installation 			Time base Charging & Discharging Setting 		



Solar Input	AF3k-SL	AF3.6k-SL	AF4k-SL	AF4.6k-SL	AF5k-SL	AF5.5k-SL	AF6k-SL
Max. DC Input Power (W)	6600	7600	8000	8600	9000	9600	10000
Rated DC Input Voltage (V)	360						
DC Input Voltage Range (V)	60-580						
MPPT Voltage Range (V)	50-550						
Start-up Voltage (V)	60						
Max. DC Input Current (A)	20 x 2						
Nr. of MPPT Tracker	2						
Storage Battery	AF3k-SL	AF3.6k-SL	AF4k-SL	AF4.6k-SL	AF5k-SL	AF5.5k-SL	AF6k-SL
Battery Nominal Voltage (V)	48						
Battery Voltage Range (V)	40-60						
Max. Charge/Discharge Current (A)	66						
Max. Charge/Discharge Power (W)	3000	3600					
Charging Curve	3 Stages						
Compatible Battery Type	Lithium-ion,Lead-Acid etc.						
Emergency Power Supply(EPS Mode)	AF3k-SL	AF3.6k-SL	AF4k-SL	AF4.6k-SL	AF5k-SL	AF5.5k-SL	AF6k-SL
EPS Nominal Output Power (VA)	3000	3600	4000	4600	5000	5500	6000
EPS Nominal Output Voltage (V)	230						
EPS Nominal Output Frequency (Hz)	50/60						
EPS Nominal Output Current (A)	13	16	17.5	20	22	24	26
Peak Output Power (W,s)	3600w,30s	4000w,30s	4600w,30s	5000w,30s	5500w,30s	6000w,30s	6500w,30s
THD(Voltage)	<5%						
Switching Time (s)	<0.01						
AC Output	AF3k-SL	AF3.6k-SL	AF4k-SL	AF4.6k-SL	AF5k-SL	AF5.5k-SL	AF6k-SL
Nominal AC Output Power (VA)	3000	3600	4000	4600	5000	5500	6000
Nominal AC Output Current (A)	13	16	17.5	20	22	24	26
Max. AC Output Current (A)	15	18.5	20	23	25.5	27.5	30
Nominal AC Voltage (V)	230						
Nominal AC Frequency (Hz)	50 / 60						
Output Power Factor	Adjustable 0.9 overexcited to 0.9 underexcited						
THD(Current)	<3%						
Efficiency	AF3k-SL	AF3.6k-SL	AF4k-SL	AF4.6k-SL	AF5k-SL	AF5.5k-SL	AF6k-SL
Europe Efficiency	97.5%						
Max. Efficiency	97.9%						
Battery Charge/Discharge Efficiency	94.5%						
Protection	AF3k-SL	AF3.6k-SL	AF4k-SL	AF4.6k-SL	AF5k-SL	AF5.5k-SL	AF6k-SL
Reverse Polarity Protection	Yes						
Over Current/Voltage Protection	Yes						
Anti-Islanding Protection	Yes						
AC Short Circuit Protection	Yes						
Leakage Current Detection	Yes						
Ground Fault Monitoring	Yes						
Grid Monitoring	Yes						
Protection Degree	IP65 / NEMA4X						
General Data	AF3k-SL	AF3.6k-SL	AF4k-SL	AF4.6k-SL	AF5k-SL	AF5.5k-SL	AF6k-SL
Dimensions (H x W x D, mm)	572.5 x 450 x 176						
Weight (kg)	22						
Topology	Tranformerless(solar), HF(Battery)						
Cooling Concept	Natural Convection						
Relatively Humidity	0-100%						
Operating Temperature Range (°C)	-25-60						
Operating Altitude (m)	< 2000						
Noise Emission (dB)	< 25						
Standby Consumption (W)	< 5						
Display & Communication Interfaces	LCD, LED, RS485, Wi-Fi, CAN						
Certification & Approvals	G98, G99, NRS097, EN50549-1, C10/11, EN62109, IEC61000						

Solar Input	AF3k-SH	AF3.6k-SH	AF4k-SH	AF4.6k-SH	AF5k-SH	AF5.5k-SH	AF6k-SH
Max. DC Input Power (W)	6600	8000	8000	10000	10000	10000	10000
Rated DC Input Voltage (V)	360						
DC Input Voltage Range (V)	60-580						
MPPT Voltage Range (V)	50-550						
Start-up Voltage (V)	60						
Max. DC Input Current (A)	20 x 2						
Nr. of MPPT Tracker	2						
Storage Battery	AF3k-SH	AF3.6k-SH	AF4k-SH	AF4.6k-SH	AF5k-SH	AF5.5k-SH	AF6k-SH
Battery Nominal Voltage (V)	288						
Battery Voltage Range (V)	85-360						
Max. Charge/Discharge Current (A)	30						
Max. Charge/Discharge Power (W)	6000/3000	7000/3600	8000/4000	9000/4600	10000/5000	10000/5500	10000/6000
Charging Curve	3 Stages						
Compatible Battery Type	Lithium-ion,Lead-Acid etc.						
Emergency Power Supply(EPS Mode)	AF3k-SH	AF3.6k-SH	AF4k-SH	AF4.6k-SH	AF5k-SH	AF5.5k-SH	AF6k-SH
EPS Nominal Output Power (W)	3000	3600	4000	4600	5000	5500	6000
EPS Nominal Output Voltage (V)	230						
EPS Nominal Output Frequency (Hz)	50/60						
EPS Nominal Output Current (A)	13	16	17.5	20	22	24	26
Peak Output Power	3600w,30s	4000w,30s	4600w,30s	5000w,30s	5500w,30s	6000w,30s	6500w,30s
THD(Voltage)	<5%						
Switching Time (s)	<0.01						
AC Output	AF3k-SH	AF3.6k-SH	AF4k-SH	AF4.6k-SH	AF5k-SH	AF5.5k-SH	AF6k-SH
Nominal AC Output Power (VA)	3000	3600	4000	4600	5000	5500	6000
Nominal AC Output Current (A)	13	16	17.5	20	22	24	26
Max. AC Output Current (A)	15	18.5	20	23	25.5	27.5	30
Nominal AC Voltage (V)	230						
Nominal AC Frequency (Hz)	50 / 60						
Output Power Factor	Adjustable 0.9 overexcited to 0.9 underexcited						
THD(Current)	<3%						
Efficiency	AF3k-SH	AF3.6k-SH	AF4k-SH	AF4.6k-SH	AF5k-SH	AF5.5k-SH	AF6k-SH
Europe Efficiency	97.5%						
Max. Efficiency	97.9%						
Battery Charge/Discharge Efficiency	94.5%						
Protection	AF3k-SH	AF3.6k-SH	AF4k-SH	AF4.6k-SH	AF5k-SH	AF5.5k-SH	AF6k-SH
Reverse Polarity Protection	Yes						
Over Current/Voltage Protection	Yes						
Anti-Islanding Protection	Yes						
AC Short Circuit Protection	Yes						
Leakage Current Detection	Yes						
Ground Fault Monitoring	Yes						
Grid Monitoring	Yes						
Protection Degree	IP65 / NEMA4X						
General Data	AF3k-SH	AF3.6k-SH	AF4k-SH	AF4.6k-SH	AF5k-SH	AF5.5k-SH	AF6k-SH
Dimensions (H x W x D, mm)	572.5 x 450 x 176						
Weight (kg)	22						
Topology	Tranformerless(solar), HF(Battery)						
Cooling Concept	Natural Convection						
Relatively Humidity	0-100%						
Operating Temperature Range (°C)	-25-60						
Operating Altitude (m)	< 2000						
Noise Emission (dB)	< 25						
Standby Consumption (W)	< 5						
Display & Communication Interfaces	LCD, LED, RS485, Wi-Fi, CAN						
Certification & Approvals	G98, G99, NRS097, EN50549-1, C10/11, EN62109, IEC61000						

US Hybrid Storage Inverter

3-9.6 kW



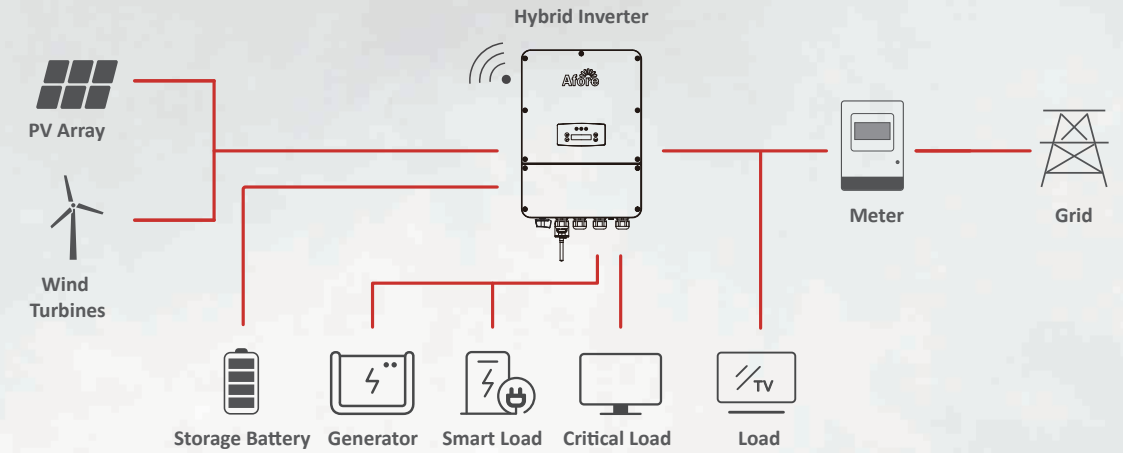
The Afore AF Series storage Inverters are designed to increase energy independence for homeowners. The power range is from 3.0kW to 9.6kW, compatible with high voltage (80-495V) batteries.

Energy management is based on time-of-use and demand charge rate structures, significantly reduce the amount of energy purchased from public grid.

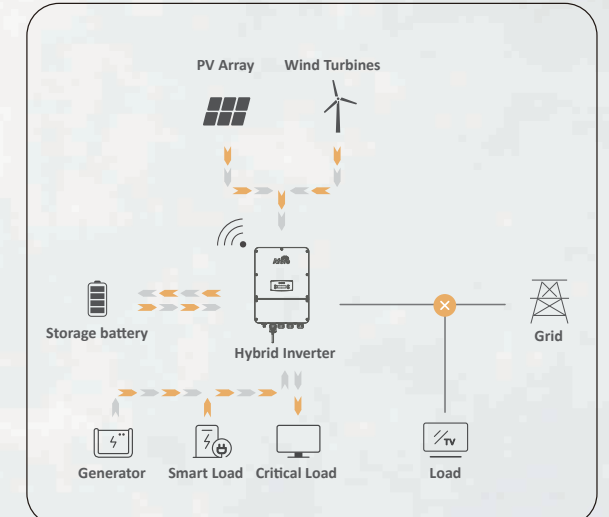
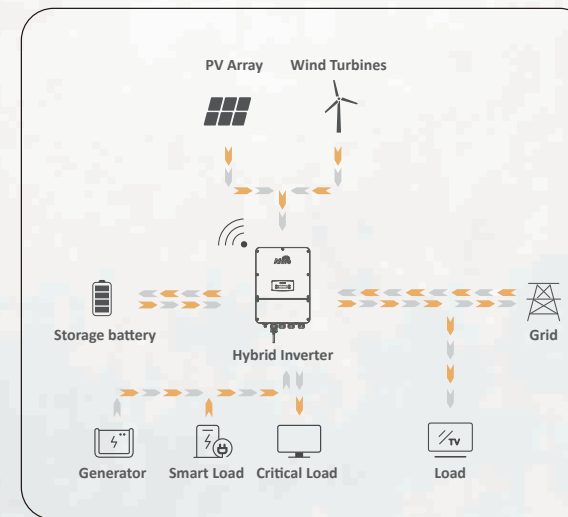
Thanks for the UPS function (switch time < 10ms), enables the crucial loads power on during outages. Additionally, under the backup operation mode, the inverter provides you up to 150% peak output overloading.

The AF Series storage inverters meet the US safety regulations, integrated with Arc Fault Circuit Interrupter (AFCI) and Rapid Shutdown.

For New Storage System:



Optimizing Self-Consumption (on-grid) + Emergency Power Supply(off-grid)



Optimizing Self-Consumption Mode

With home energy storage installed, home owners may also be able to change from a flat rate electricity tariff to a time-of-use tariff. For the areas and regions, where peak shaving can be applied.

- Max. 1.5

PV OVERSIZE
1.5 Times PV Oversize
- 3 MPPT

MPPT CHANNELS
Up to 3 MPPT Channels
- <10 ms

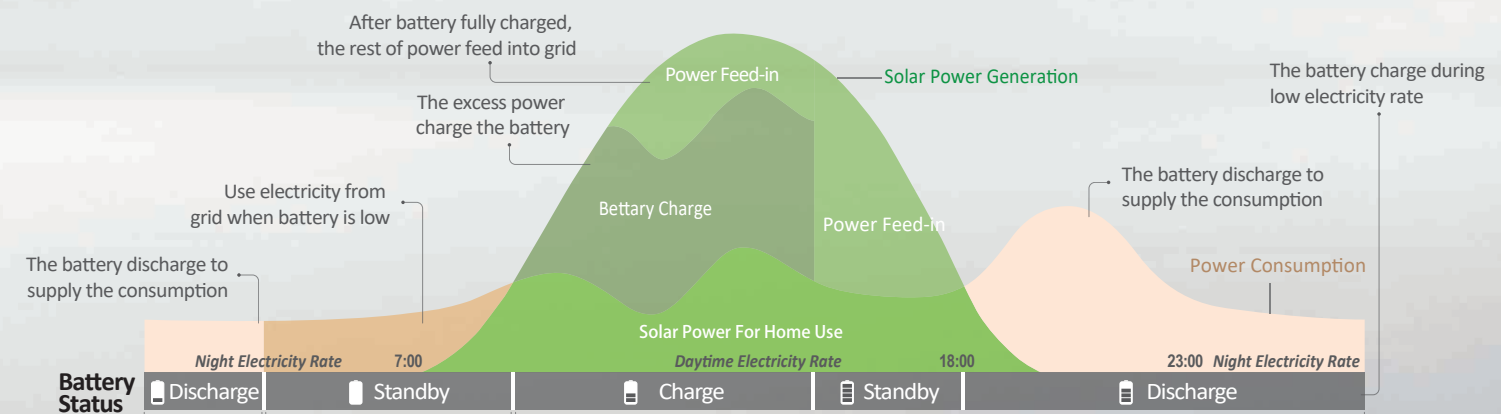
UPS FUNCTION
Switch Time < 10ms
- PARALLEL

PARALLEL
Max.6 Parallel Stacking
- MULTIPLE INPUTS

MULTIPLE INPUTS
Support Generator &Wind Turbines
- SPLIT-PHASE

SPLIT-PHASE
Support Split-phase (120/240Vac) Grid

- Support for Time-of-use Optimization
- Configurable Operation Modes
- AFCI & Rapid Shutdown Ready
- Build in Anti-feed-in Function
- Compact Size and Easy Installation
- Smart Monitoring & Remote Firmware Upgrade



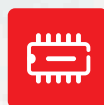
PV Input	AF3K-DH	AF3.6K-DH	AF4K-DH	AF4.6K-DH	AF5K-DH	AF5.5K-DH
Max. Input Power (kW)	4.5	5.4	6.0	6.9	7.5	8.3
Max. PV Voltage (V)	600					
MPPT Range (V)	80 - 550					
Normal Voltage (V)	360					
Startup Voltage (V)	100					
Max. Input Current (A)	15.5 x 2					
Max. Short Current (A)	26.0 x 2					
Battery						
Max. Charge/Discharge Power (kW)	4.5 / 4.5	5.4 / 5.4	6.0 / 6.0	6.9 / 6.9	7.5 / 7.5	8.3 / 8.3
Max. Charge/Discharge Current (A)	50					
Battery Normal Voltage (V)	230					
Battery Voltage Range (V)	80 - 495					
Battery Type	Li-ion / Lead-acid					
AC Grid						
Max. Continuous Power (kVA)	3.0	3.6	4.0	4.6	5.0	5.5
Max. Continuous Current (A)	12.5 / 14.5	15.0 / 17.5	17.0 / 19.5	19.5 / 22.5	21.0 / 24	23.0 / 26.5
Nominal Grid Voltage (V)	211 to 264 @ 240 / 183 to 229 @ 208					
Nominal Grid Frequency (Hz)	60					
Output Power Factor	1 default (adjustable from 0.8 leading to 0.8 lagging)					
Current THD (%)	< 3					
Gen Input&AC Back-up	AF3K-DH	AF3.6K-DH	AF4K-DH	AF4.6K-DH	AF5K-DH	AF5.5K-DH
Max. Continuous Current (A)	12.5 / 14.5	15.0 / 17.5	17.0 / 19.5	19.5 / 22.5	21.0 / 24.0	23.0 / 26.5
Max. Continuous Power (kVA)	3.0	3.6	4.0	4.6	5.0	5.5
Max. Peak Current (A) (10min)	18.8 / 21.7	22.5 / 26.0	25 / 28.9	28.8 / 33.2	31.3 / 36.1	34.6 / 39.9
Max. Peak Power (kVA) (10min)	4.5 / 4.5	5.4 / 5.4	6.0 / 6.0	6.9 / 6.9	7.5 / 7.5	8.3 / 8.3
Nominal AC Voltage L-L (V)	240 / 208					
Nominal AC Voltage L-O (V)	120 / 104					
Nominal AC Frequency L-O (Hz)	60					
Switching Time (ms)	< 10					
Voltage THD (%)	< 3					
Efficiency						
CEC Efficiency (%)	97.0					
Max. Efficiency (%)	97.6					
PV to Bat. Efficiency (%)	98.1					
Bat. between AC Efficiency (%)	96.8					
Protection	AF3K-DH	AF3.6K-DH	AF4K-DH	AF4.6K-DH	AF5K-DH	AF5.5K-DH
PV Reverse Polarity Protection	Yes					
Bat. Reverse Polarity Protection	Yes					
Over Current/Voltage Protection	Yes					
Anti-Islanding Protection	Yes					
AC Short Circuit Protection	Yes					
Residual Current Detection	Yes					
Ground Fault Monitoring	Yes					
Insulation Resister Detection	Yes					
PV Arc Detection	Yes					
Rapid Shut Down	Yes					
Protection Degree	IP65 / NEMA4X					
General Data	AF3K-DH	AF3.6K-DH	AF4K-DH	AF4.6K-DH	AF5K-DH	AF5.5K-DH
Dimensions (H x W x D)	560 x 400 x 229 mm / 22.0 x 15.7 x 9.0 in					
Weight	25 kgs / 55 lbs					
Topology	Transformerless					
Cooling	Natural Convection					
Relatively Humidity	0 - 100 %					
Operating Temperature Range	- 25 - 60 °C / - 77 - 140 °F					
Operating Altitude	< 4000 m / < 13123 ft					
Noise Emission (dB)	< 25					
Standby Consumption (W)	< 10					
Mounting	Wall Bracket					
Communication with RSD	SUNSPEC					
Display & Communication Interfaces	LCD, LED, RS485, CAN, Wi-Fi, 4G					
Certification & Approvals	UL 1741 SA, UL 1741, UL1699B, UL 1998, IEEEE1547, IEEEE1547A, IEEEE1547.1, CSA 22.2 No.107, Rule21, HECO Rule 14					
EMC	FCC part15 CLASS B					

PV Input	AF6K-DH	AF7K-DH	AF7.6K-DH	AF8K-DH	AF8.6K-DH	AF9.6K-DH
Max. Input Power (kW)	9.0	10.5	11.4	12.0	12.9	15.0
Max. PV Voltage (V)	600					
MPPT Range (V)	80 - 550					
Normal Voltage (V)	360					
Startup Voltage (V)	100					
Max. Input Current (A)	15.5 x 2	15.5 x 3				
Max. Short Current (A)	26.0 x 2	26.0 x 3				
Battery						
Max. Charge/Discharge Power (kW)	9.0 / 9.0	10.5 / 10.3	11.4 / 10.3	11.5 / 10.3	11.5 / 10.3	11.5 / 10.3
Max. Charge/Discharge Current (A)	50					
Battery Normal Voltage (V)	230					
Battery Voltage Range (V)	80 - 495					
Battery Type	Li-ion / Lead-acid					
AC Grid						
Max. Continuous Power (kVA)	6.0	7.0	7.6	8.0	8.6	9.6
Max. Continuous Current (A)	25.0 / 29.0	29.5 / 34.0	32.0 / 36.5	33.5 / 38.5	36.0 / 41.5	40.0 / 46.5
Nominal Grid Voltage (V)	211 to 264 @ 240 / 183 to 229 @ 208					
Nominal Grid Frequency (Hz)	60					
Output Power Factor	1 default (adjustable from 0.8 leading to 0.8 lagging)					
Current THD (%)	< 3					
Gen Input&AC Back-up	AF6K-DH	AF7K-DH	AF7.6K-DH	AF8K-DH	AF8.6K-DH	AF9.6K-DH
Max. Continuous Current (A)	25.0 / 29.0	29.5 / 34.0	32.0 / 36.5	33.5 / 38.5	36.0 / 41.5	40.0 / 46.5
Max. Continuous Power (kVA)	6.0	7.0	7.6	8.0	8.6	9.6
Max. Peak Current (A) (10min)	37.5 / 43.3	43.8 / 49.5	47.5 / 49.5	47.9 / 49.5	47.9 / 49.5	47.9 / 49.5
Max. Peak Power (kVA) (10min)	9.0 / 9.0	10.5 / 10.3	11.4 / 10.3	11.5 / 10.3	11.5 / 10.3	11.5 / 10.3
Nominal AC Voltage L-L (V)	240 / 208					
Nominal AC Voltage L-O (V)	120 / 104					
Nominal AC Frequency L-O (Hz)	60					
Switching Time (ms)	< 10					
Voltage THD (%)	< 3					
Efficiency						
CEC Efficiency (%)	97.0					
Max. Efficiency (%)	97.6					
PV to Bat. Efficiency (%)	98.1					
Bat. between AC Efficiency (%)	96.8					
Protection	AF6K-DH	AF7K-DH	AF7.6K-DH	AF8K-DH	AF8.6K-DH	AF9.6K-DH
PV Reverse Polarity Protection	Yes					
Bat. Reverse Polarity Protection	Yes					
Over Current/Voltage Protection	Yes					
Anti-Islanding Protection	Yes					
AC Short Circuit Protection	Yes					
Residual Current Detection	Yes					
Ground Fault Monitoring	Yes					
Insulation Resister Detection	Yes					
PV Arc Detection	Yes					
Rapid Shut Down	Yes					
Protection Degree	IP65 / NEMA4X					
General Data	AF6K-DH	AF7K-DH	AF7.6K-DH	AF8K-DH	AF8.6K-DH	AF9.6K-DH
Dimensions (H x W x D)	560 x 400 x 229 mm / 22.0 x 15.7 x 9.0 in					
Weight	25 kgs / 55 lbs					
Topology	Transformerless					
Cooling	Natural Convection	Intelligent Fan				
Relatively Humidity	0 - 100 %					
Operating Temperature Range	- 25 - 60 °C / - 77 - 140 °F					
Operating Altitude	< 4000 m / < 13123 ft					
Noise Emission (dB)	< 25	< 40				
Standby Consumption (W)	< 10					
Mounting	Wall Bracket					
Communication with RSD	SUNSPEC					
Display & Communication Interfaces	LCD, LED, RS485, CAN, Wi-Fi, 4G					
Certification & Approvals	UL 1741 SA, UL 1741, UL1699B, UL 1998, IEEEE1547, IEEEE1547A, IEEEE1547.1, CSA 22.2 No.107, Rule21, HECO Rule 14					
EMC	FCC part15 CLASS B					

Battery Bank & All-in-one Solution



10 Years Lifetime



BMS Build-in



Modular Expansion

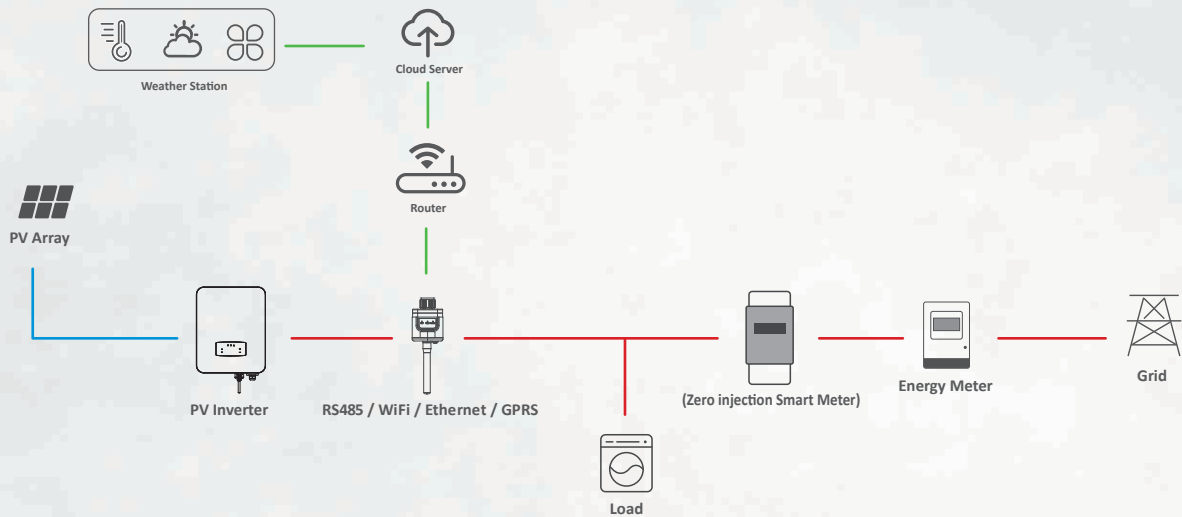


LiFePO₄

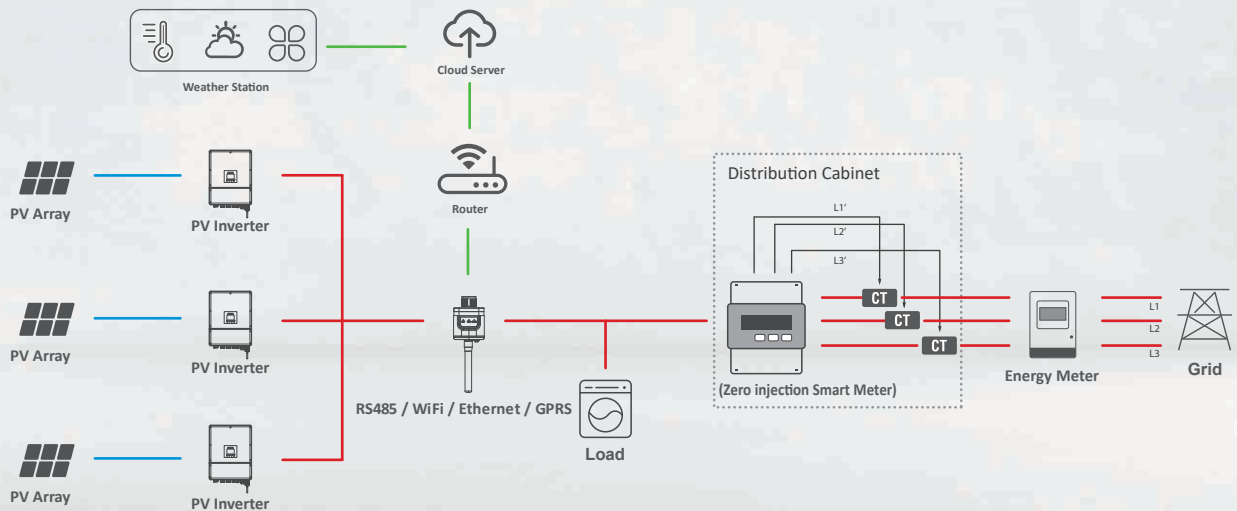
	Battery Bank
Capacity Energy (kWh)	2.8
Capacity (Ah)	55
Suggested SOC	10% - 95%
Usable Capacity (kWh)	2.4
Nominal Voltage (V)	51.2
Operation Voltage (V)	46.4 - 57.6
Maximum Charging/ Discharging Current (A)	70 / 70
Installation	Indoor and Outdoor
Life Cycling (0.5C 25°C)	5000 cycles
Operation Temperature (°C)	0 ~ 45
Storage Temperature (°C)	-20 ~ 45
Weight (Kg)	28
Dimensions (mm)	420 x 420 x 207
Communication	RS485, Bluetooth optional
Certifications	MSDS, UN38.3, RoHS, IEC62619, UL

PV System Monitoring Solution

Single Inverter Monitoring Solution



Multiply Inverters Monitoring Solution



Monitoring Device & Solution



Failure alarm



PV sytem
information push



Multiple systems
in one account



Cloud data
synchronization



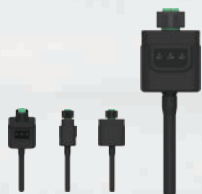
PC browser
Andriod and IOS



Real-time/ Historical
data monitoring and
analysis



System Income
Calculation



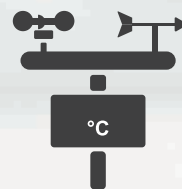
Wi-Fi / Ethernet / GPRS Data Sticker



Power Plant Data Logger



Zero injection Smart Meter(optional)



Weather Station