



PV String Inverter PV Storage Inverter



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About Us

Afore is a leading PV inverter provider from China, with more than thirteen 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 110kW, storage inverters (single phase 1-6kW, three phase 3-30kW, split phase 3-9.6kW, AC coupled) 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!

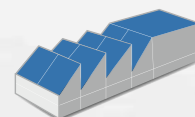
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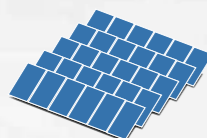
Single Phase 1-3kW, Single Phase 3-6kW, Single Phase 7-10kW



Three Phase PV String Inverter

Residential & Small Commercial System

Three Phase 3-25kW



Three Phase PV String Inverter

Commercial System and Power Plants

Three Phase 30kW, Three Phase 36-60kW, Three Phase 70-110kW

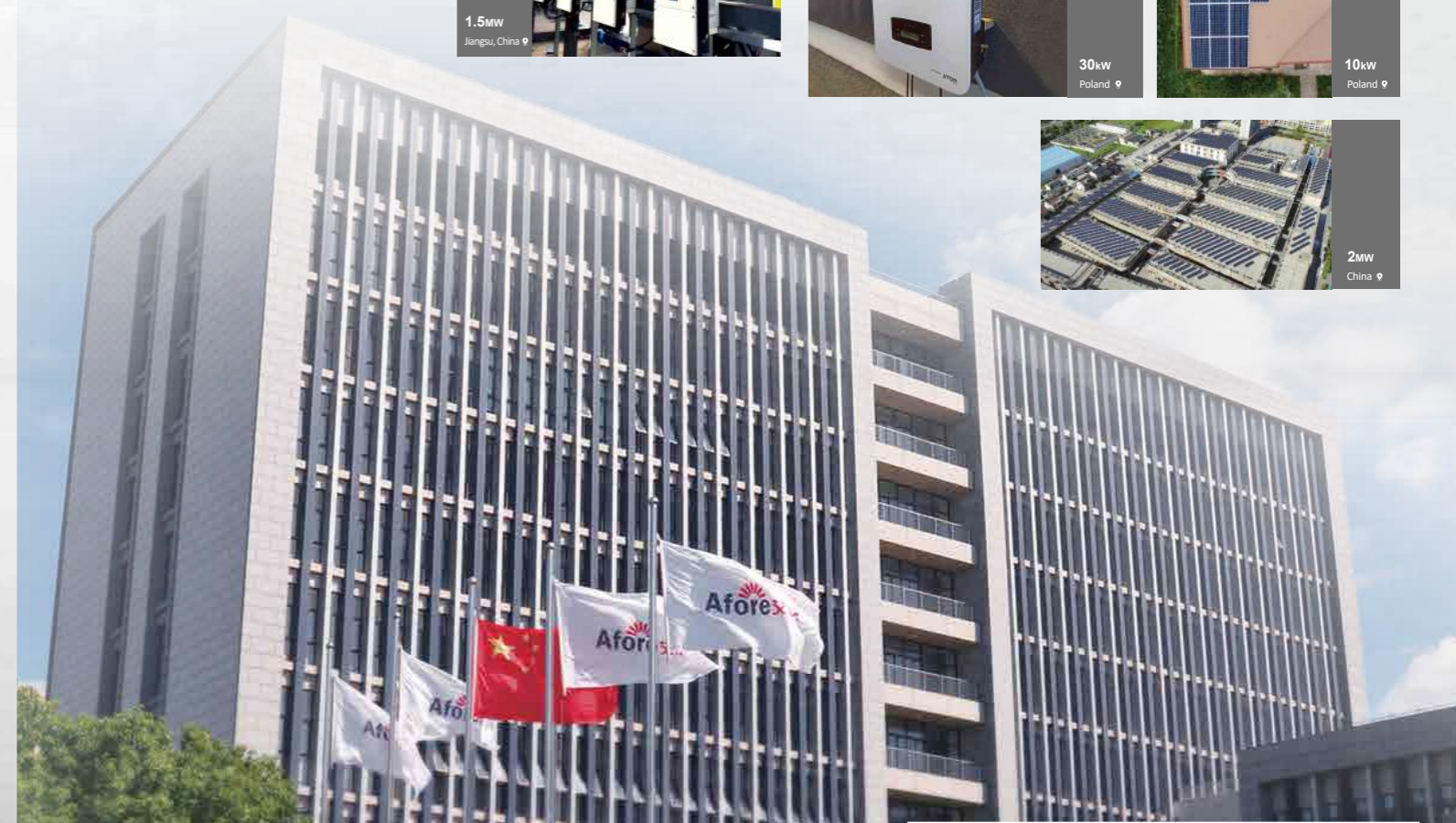
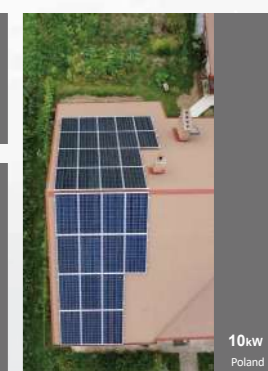


Hybrid Storage Inverter

Residential and Commercial Storage System

Single Phase Hybrid Inverter 1-6kW
Three Phase Hybrid Inverter 3-30kW
Three Phase Hybrid Inverter 3-12kW Plus Series
AC Coupled Inverter 1-4.6kW
Split Phase Hybrid Inverter 3-9.6kW

Global project case



Single Phase PV String Inverter

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

Max. 1.5

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 (W x H x D, mm)	280 x 260 x 116				
Weight (kg)	6				
Protection Degree	IP65				
Enclosure Material	Aluminum				
Ambient Temperature Range (°C)	-25 to 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, IEC61727				

Single Phase PV String Inverter

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.



ANTI-FLOW
Anti-Feed-in Function

Max. 1.5

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



Two MPPT design



Quick and easy installation



Active and reactive power compensation, adjust power factor



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 (W x H x D, mm)	358 x 360 x 142				
Weight (kg)	10				
Protection Degree	IP65				
Enclosure Material	Aluminum				
Ambient Temperature Range (°C)	-25 to 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				

Single Phase PV String Inverter

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

Max. 1.5

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



Two MPPT design



Quick and easy installation



Active and reactive power compensation, adjust power factor



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 (W x H x D, mm)	370 x 510 x 192		370 x 535 x 192	
Weight (kg)	17		18	
Protection Degree	IP65			
Enclosure Material	Aluminum			
Ambient Temperature Range (°C)	-25 to 60			
Humidity Range	0-100%			
Topology	Transformerless			
Communication Interface	RS485 / WiFi / Wire Ethernet / GPRS (optional)			
Cooling Concept	Convection		Intelligent fan cooling	
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			

Three Phase PV String Inverter

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

Max. 1.5

PV OVERSIZE
1.5 Times PV Oversize

Max. 1100V

DC 1100V
Max. DC 1100V



UNIBODY
One-piece
Aluminum Housing



PROTECTION
Build-in SPD Type II



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 (VA)	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	260Vac-519Vac (according to local standard)					
Nominal Output Frequency (Hz)	50/60					
Grid Frequency Range	45-55Hz/55-65Hz(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 (W x H x D, mm)	370 x 510 x 167			370 x 510 x 192		
Weight (kg)	16			16		
Protection Degree	IP65					
Enclosure Material	Aluminum					
Ambient Temperature Range (°C)	-25 to 60					
Humidity Range	0 - 100%					
Topology	Transformerless					
Communication Interface	RS485 / WiFi / Wire Ethernet / GPRS (optional)					
Cooling Concept	Convection		Intelligent fan cooling			
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 x 2		20 + 32		32 x 2	
Max. Short Current (A)	25 x 2		30 + 48		48 x 2	
No. of MPP Tracker / No. of PV String	2/2		2/3		2/4	
Input Connector Type	MC4					

AC Output Data	BNT012KTL	BNT013KTL	BNT015KTL	BNT017KTL	BNT020KTL	BNT025KTL
Max. Output Power (VA)	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	260Vac-519Vac (according to local standard)					
Nominal Output Frequency (Hz)	50/60					
Grid Frequency Range	45-55Hz/55-65Hz(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 (W x H x D, mm)	370 x 510 x 192			370 x 535 x 192		
Weight (kg)	16	17		19		
Protection Degree	IP65					
Enclosure Material	Aluminum					
Ambient Temperature Range (°C)	-25 to 60					
Humidity Range	0 - 100%					
Topology	Transformerless					
Communication Interface	RS485 / WiFi / Wire Ethernet / GPRS (optional)					
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					
Grid-connection	IEEE1547, CSA C22, EN50549, VDE4105, VDE0126, RD1699, ABNT NBR16149 & 16150, AS4777.2, NB/T32004, G98/G99, IEC61727					

Three Phase PV String Inverter

30-60 kW



The Afore BNT Series Three-phase string inverters are designed for commercial and power plant PV system applications, rating from 30kW 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.

Max. 20A String Current Up To 20A	Max. 1.5 PV OVERSIZE Max. 1.5 Time PV Oversize Input	PROTECTION Multiple Intelligent Protections	ANTI-FLOW Anti-Feed-in Function	Wi-Fi Wi-Fi Standard, Ethernet/GPRS Optional	CONFIGURATION Quick & Easy Config. via Wi-Fi	MODBUS MODBUS Communication Ready
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- MPPT efficiency > 99.9%
- IP 68 Cooling Fan
- Intelligent Temperature Control System
- Type II DC & AC lightning protection
- Active and reactive power compensation, adjust power factor
- AC output 1.1x continuous operation

PV Input Data	BNT030KTL	BNT036KTL	BNT040KTL	BNT050KTL	BNT060KTL
Max. DC Power (W)	45000	54000	60000	75000	90000
Max. DC Voltage (V)	1100				
MPPT Voltage Range (V)	200-1000				
MPPT Full Power Voltage Range (V)	500-850				
Rated Input Voltage (V)	620				
Start-up Voltage (V)	200				
Max. Input Current (A)	38x2	38x3	40x3	38x4	
Max. Short Current (A)	48x2	48x3	48x3	48x4	
No. of MPP Tracker / No. of PV String	2/5	3/6	3/7	4/8	
Input Connector Type	MC4				

AC Output Data	BNT030KTL	BNT036KTL	BNT040KTL	BNT050KTL	BNT060KTL
Max. Output Power (VA)	33000	39600	44000	55000	66000
Nominal Output Power (W)	30000	36000	40000	50000	60000
Max. Output Current (A)	48	60	65	80	96
Nominal Output Voltage (V)	3P+N+PE /3P+PE 230/400				
Grid Voltage Range	260Vac-519Vac (according to local standard)				
Nominal Output Frequency (Hz)	50/60				
Grid Frequency Range	45-55Hz/55-65Hz (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	BNT050KTL	BNT060KTL
Max. Efficiency	98.50%	98.65%	98.65%	98.80%	99.00%
Euro Efficiency	98.10%	98.20%	98.25%	98.45%	98.50%

Protection	BNT030KTL	BNT036KTL	BNT040KTL	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)				
Smart IV Curve Scanning	YES				
Quick Arc Fault Circuit Interruption	Optional				

General Data	BNT030KTL	BNT036KTL	BNT040KTL	BNT050KTL	BNT060KTL
Dimensions (W x H x D, mm)	450 x 485 x 210	710 x 470 x 236			
Weight (kg)	26	44			51
Protection Degree	IP65				
Enclosure Material	Aluminum				
Ambient Temperature Range (°C)	-25 to 60				
Humidity Range	0-100%				
Topology	Transformerless				
Communication Interface	RS485 / WiFi / Wire Ethernet / GPRS (optional)				
Cooling Concept	Intelligent Fan Cooling				
Noise Emission (db)	<51			<55	
Night Power Consumption (W)	<1				
Max. Operation Altitude (m)	≤4000				

Certifications and Standards	BNT030KTL	BNT036KTL	BNT040KTL	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				

Three Phase PV String Inverter

70-110 kW



The Afore BNT Series Three-phase string inverters are designed for commercial and power plant PV system applications, rating from 70kW to 110kW. 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.

Max. 38A

MAX. 38A
String Current Up To 38A

>1.5

PV OVERSIZE
>1.5 Time
PV Oversize Input



PROTECTION
Multiple Intelligent
Protections



ANTI-FLOW
Anti-Feed-in Function



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

Arc Fault Circuit Interrupter (AFCI) (Optional)

IP 68 Cooling Fan

Type II DC & AC lightning protection

AC output 1.1x continuous operation

Compatible with 210 Solar Panel

PV Input Data	BNT070KTL	BNT075KTL	BNT080KTL	BNT090KTL	BNT100KTL	BNT110KTL
Max. DC Power (W)	105000	112500	120000	135000	150000	165000
Max. DC Voltage (V)	1100					
MPPT Voltage Range (V)	200 - 1000					
MPPT Full Power Voltage Range (V)	500 - 850					
Rated Input Voltage (V)	620					
Start-up Voltage (V)	200					
Max. Input Current (A)	38 x 6					
Max. Short Current (A)	48 x 6					
No. of MPP Tracker / No. of PV String	6/12					
Input Connector Type	MC4					

AC Output Data	BNT070KTL	BNT075KTL	BNT080KTL	BNT090KTL	BNT100KTL	BNT110KTL
Max. Output Power (VA)	77000	82500	88000	99000	110000	110000
Nominal Output Power (W)	70000	75000	80000	90000	100000	110000
Max. Output Current (A)	111	120	127	143	158	158
Nominal Output Voltage (V)	3P+N+PE /3P+PE 230/400					
Grid Voltage Range	260Vac-519Vac (according to local standard)					
Nominal Output Frequency (Hz)	50/60					
Grid Frequency Range	45-55Hz/55-66Hz(according to local standard)					
Output Power Factor	1 default (adjustable from 0.8 leading to 0.8 lagging)					
Output Current THD	<3%					

Efficiency	BNT070KTL	BNT075KTL	BNT080KTL	BNT090KTL	BNT100KTL	BNT110KTL
Max. Efficiency	99.00%					
Euro Efficiency	98.30%			98.40%		

Protection	BNT070KTL	BNT075KTL	BNT080KTL	BNT090KTL	BNT100KTL	BNT110KTL
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	BNT070KTL	BNT075KTL	BNT080KTL	BNT090KTL	BNT100KTL	BNT110KTL
Dimensions (W x H x D, mm)				979 x 610 x 310		
Weight (kg)	72			76		
Protection Degree				IP65		
Enclosure Material				Aluminum		
Ambient Temperature Range (°C)				-25 to 60		
Humidity Range				0-100%		
Topology				Transformerless		
Communication Interface				RS485 / WiFi / Wire Ethernet / GPRS (optional)		
Cooling Concept				Intelligent fan cooling		
Noise Emission (db)	<55			<60		
Night Power Consumption (W)				<1		
Max. Operation Altitude (m)				≤4000		

Certifications and Standards	BNT070KTL	BNT075KTL	BNT080KTL	BNT090KTL	BNT100KTL	BNT110KTL
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					

Single Phase Hybrid Storage Inverter

1-6 kW for Low Voltage Battery



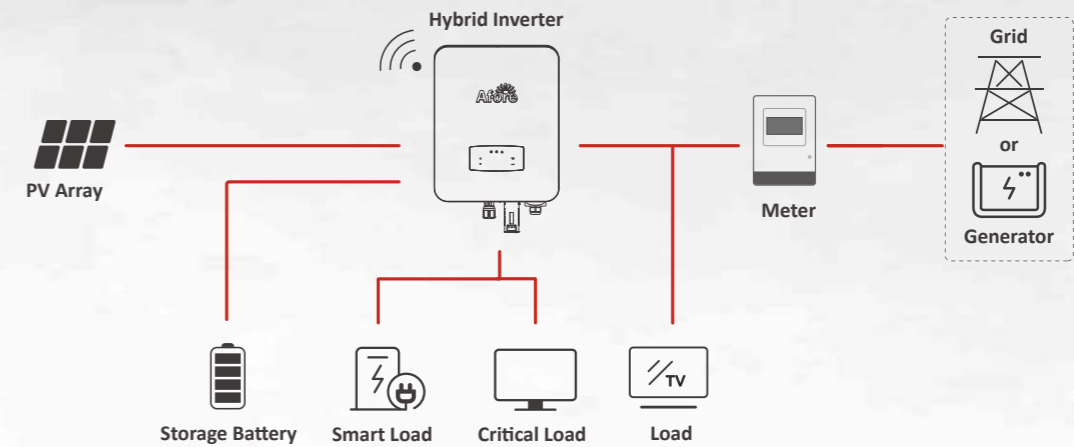
The Afore AF low voltage Series storage Inverters are designed to increase energy independence for homeowners. The power range is from 1kW to 6kW, compatible with low voltage (40-60V) batteries.

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

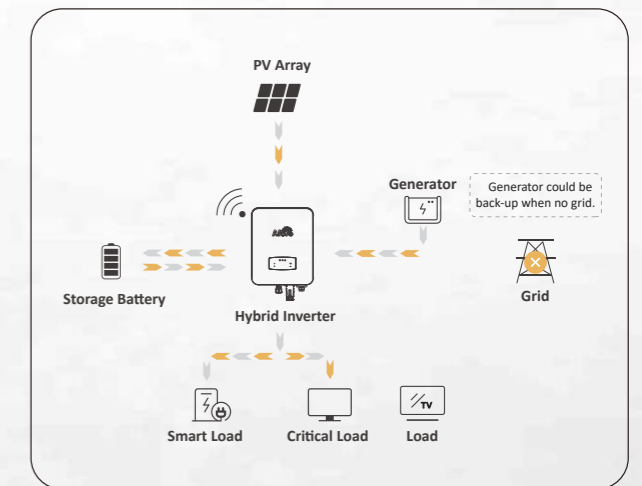
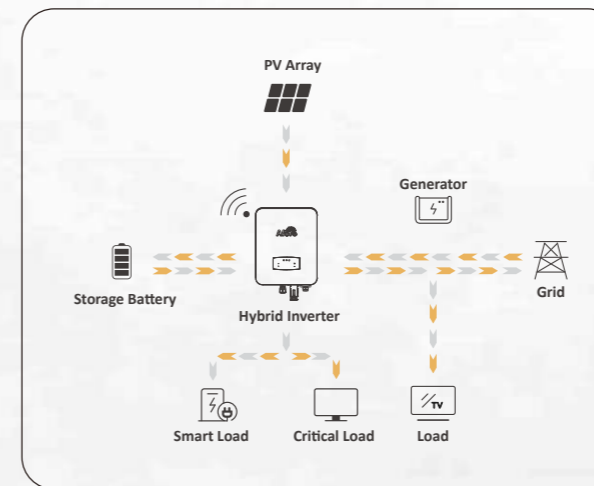
Thanks for the UPS function (switch time < 10ms), enables the crucial loads power on during outages. Additionally, under the backup operation mode, the inverter provides you up to 150% peak output overloading.

The AF low voltage Series storage inverters integrated with Arc Fault Circuit Interrupter (AFCI) and Rapid Shutdown.

For New Storage System:

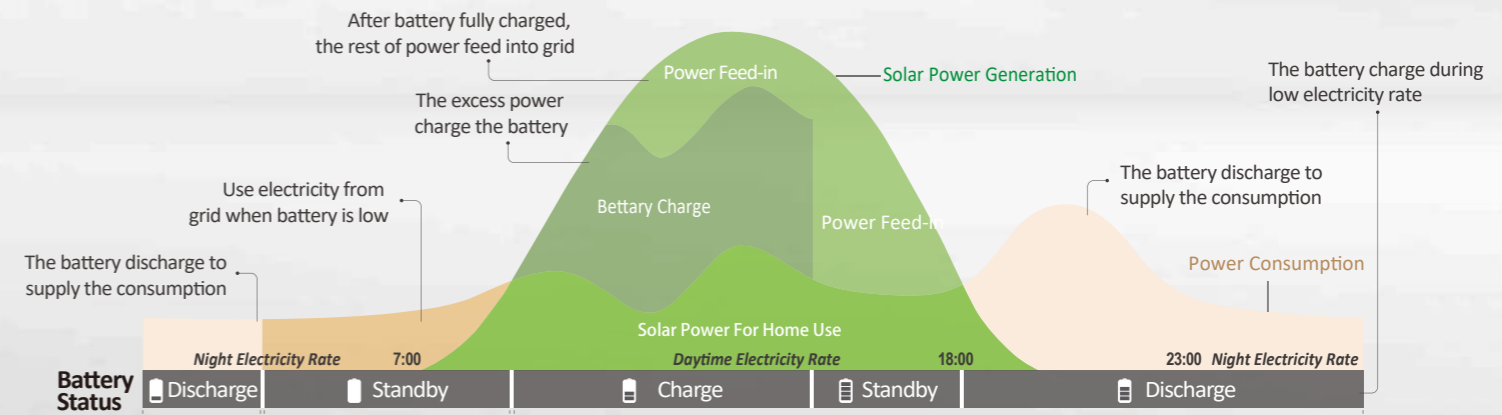


Optimizing Self-Consumption (on-grid) + Emergency Power Supply(off-grid)



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

2 MPPT

MPPT CHANNELS
Up to 2 MPPT Channels

<10 ms

UPS FUNCTION
Switch Time < 10ms

PARALLEL

PARALLEL
Max.6 Parallel Stacking

INPUT

INPUT
Support Generator

Support for Time-of-use Optimization

Configurable Operation Modes

Arc Fault Circuit Interrupter (AFCI) (Optional)

Build in Anti-feed-in Function

Compact Size and Easy Installation

Smart Monitoring & Remote Firmware Upgrade

PV Input	AF1K-SL-1	AF1.5K-SL-1	AF2K-SL-1	AF2.5K-SL-1	AF3K-SL-1	AF3.6K-SL-1
Max. Input Power (kW)	1.5	2.3	3.0	3.8	4.5	5.4
Max. PV Voltage (V)	550					
MPPT Range (V)	80 - 500					
Full MPPT Range (V)	80 - 500	90 - 500	120 - 500	150 - 500	170 - 500	210 - 500
Normal Voltage (V)	360					
Startup Voltage (V)	100					
Max. Input Current (A)	18.5 x 1					
Max. Short Current (A)	26 x 1					
No. of MPP Tracker / No. of PV String	1 / 1					
Battery Port						
Max. Charge/Discharge Power (kW)	1.0	1.5	2.0	2.5	3.0	3.6
Max. Charge/Discharge Current (A)	25	40	50	63	80	80
Battery Normal Voltage (V)	51.2					
Battery Voltage Range (V)	40 - 60					
Battery Type	Li-ion / Lead-acid etc.					
AC Grid						
Max Continuous Current (A)	5.0	7.0	10.0	12.0	14.0	17.0
Max Continuous Power (kVA)	1.0	1.5	2.0	2.5	3.0	3.6
Nominal Grid Current(A)	4.6 / 4.4	6.9 / 6.6	9.1 / 8.7	11.4 / 10.9	13.7 / 13.1	16.4 / 15.7
Nominal Grid Voltage (V)	198 to 242 @ 220 / 207 to 253 @ 230					
Nominal Grid Frequency (Hz)	50 / 60					
Power Factor	0.999 (Adjustable from 0.8 overexcited to 0.8 underexcited)					
Current THD (%)	< 3					
AC Load Output	AF1K-SL-1	AF1.5K-SL-1	AF2K-SL-1	AF2.5K-SL-1	AF3K-SL-1	AF3.6K-SL-1
Max Continuous Current (A)	5.0	7.0	10.0	12.0	14.0	17.0
Max Continuous Power (kVA)	1.0	1.5	2.0	2.5	3.0	3.6
Max Peak Current (A) (10min)	6.9 / 6.6	10.5 / 10.0	13.7 / 13.1	17.3 / 16.6	20.5 / 19.6	24.6 / 23.5
Max Peak Power (kVA) (10min)	1.5	2.3	3.0	3.8	4.5	5.4
Nominal AC Current (A)	4.6 / 4.4	6.9 / 6.6	9.1 / 8.7	11.4 / 10.9	13.7 / 13.1	16.4 / 15.7
Nominal AC Voltage L-N (V)	220 / 230					
Nominal AC Frequency (Hz)	50 / 60					
Switching Time (s)	Seamless					
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	AF1K-SL-1	AF1.5K-SL-1	AF2K-SL-1	AF2.5K-SL-1	AF3K-SL-1	AF3.6K-SL-1
PV 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					
Enclosure Protect Level	IP65 / NEMA4X					
General Data	AF1K-SL-1	AF1.5K-SL-1	AF2K-SL-1	AF2.5K-SL-1	AF3K-SL-1	AF3.6K-SL-1
Dimensions (W x H x D, mm)	370 x 513 x 192					
Weight (kg)	17					
Topology	Transformerless					
Cooling	Intelligent Fan					
Relatively Humidity	0 - 100 %					
Operating Temperature Range (°C)	- 25 to 60					
Operating Altitude (m)	< 4000					
Noise Emission (dB)	< 25					
Standby Consumption (W)	< 10					
Mounting	Wall Bracket					
Communication with RSD	SUNSPEC					
Display & Communication Interfaces	LCD, LED, RS485, CAN, Wi-Fi, GPRS, 4G					
Certification & Approvals	NRS097, G98, EN50549-1, C10/C11, AS4777.2, VDE-AR-N4105, VDE0126, IEC62109-1, IEC62109-2					
EMC	EN61000-6-2, EN61000-6-3					

PV Input	AF3K-SL	AF3.6K-SL	AF4K-SL	AF4.6K-SL	AF5K-SL	AF5.5K-SL	AF6K-SL
Max. Input Power (kW)	4.5	5.4	6.0	6.9	7.5	8.3	9.0
Max. PV Voltage (V)	550						
MPPT Range (V)	80 - 500						
Full MPPT Range (V)	90 - 500	110 - 500	120 - 500	130 - 500	150 - 500	160 - 500	170 - 500
Normal Voltage (V)	360						
Startup Voltage (V)	100						
Max. Input Current (A)	18.5 x 2						
Max. Short Current (A)	26 x 2						
No. of MPP Tracker / No. of PV String	2 / 2						
Battery Port							
Max. Charge/Discharge Power (kW)	3.0	3.6	4.0	4.6	4.8	4.8	4.8
Max. Charge/Discharge Current (A)	80						
Battery Normal Voltage (V)	51.2						
Battery Voltage Range (V)	40 - 60						
Battery Type	Li-ion / Lead-acid etc.						
AC Grid							
Max Continuous Current (A)	14.0	17.0	19.0	22.0	23.0	26.0	28.0
Max Continuous Power (kVA)	3.0	3.6	4.0	4.6	5.0	5.5	6.0
Nominal Grid Current(A)	13.7 / 13.1	16.4 / 15.7	18.2 / 17.4	21.0 / 20.0	22.8 / 21.8	25.0 / 24.0	27.3 / 26.1
Nominal Grid Voltage (V)	198 to 242 @ 220 / 207 to 253 @ 230						
Nominal Grid Frequency (Hz)	50 / 60						
Power Factor	0.999 (Adjustable from 0.8 overexcited to 0.8 underexcited)						
Current THD (%)	< 3						
AC Load Output	AF3K-SL	AF3.6K-SL	AF4K-SL	AF4.6K-SL	AF5K-SL	AF5.5K-SL	AF6K-SL
Max Continuous Current (A)	14.0	17.0	19.0	22.0	23.0	26.0	28.0
Max Continuous Power (kVA)	3.0	3.6	4.0	4.6	5.0	5.5	6.0
Max Peak Current (A) (10min)	20.5 / 19.6	24.6 / 23.5	27.3 / 26.1	31.4 / 30	34.1 / 32.7	37.8 / 36.1	41.0 / 39.2
Max Peak Power (kVA) (10min)	4.5	5.4	6.0	6.9	7.5	8.3	9.0
Nominal AC Current (A)	13.7 / 13.1	16.4 / 15.7	18.2 / 17.4	21.0 / 20.0	22.8 / 21.8	25.0 / 24.0	27.3 / 26.1
Nominal AC Voltage L-N (V)	220 / 230						
Nominal AC Frequency (Hz)	50 / 60						
Switching Time (s)	Seamless						
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-SL	AF3.6K-SL	AF4K-SL	AF4.6K-SL	AF5K-SL	AF6K-SL	AF6K-SL
PV 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						
Enclosure Protect Level	IP65 / NEMA4X						
General Data	AF3K-SL	AF3.6K-SL	AF4K-SL	AF4.6K-SL	AF5K-SL	AF6K-SL	AF6K-SL
Dimensions (W x H x D, mm)	370 x 513 x 192						
Weight (kg)	17						
Topology	Transformerless						
Cooling	Intelligent Fan						
Relatively Humidity	0 - 100 %						
Operating Temperature Range (°C)	- 25 to 60						
Operating Altitude (m)	< 4000						
Noise Emission (dB)	< 25						
Standby Consumption (W)	< 10						
Mounting	Wall Bracket						
Communication with RSD	SUNSPEC						
Display & Communication Interfaces	LCD, LED, RS485, CAN, Wi-Fi, GPRS, 4G						
Certification & Approvals	NRS097, G98/G99, EN50549-1, C10/C11, AS4777.2, VDE-AR-N4105, VDE0126, IEC62109-1, IEC62109-2						
EMC	EN61000-6-2, EN61000-6-3						

Wall Mounted Energy Storage Battery

AF5000W-L1



Support capacity selection 5kWh / 10kWh / 15kWh / 20kWh...



Expansion Flexibility
5kWh modular design,
support 1-4 battery in parallel.



Easy Installation
Wall mounted or floor mounted,
saving installation time and cost.



Safe & Reliable
Lithium Iron Phosphate
(LFP) cell only. BMS built in.



Environment Adaptability
Wider temperature range:
-10°C~55°C. IP65 protection class.



LONG LIFESPAN
15-20 years designed lifespan, more
than 6000 cycles (0.5C, 25°C).

Model	AF5000W-L1
Capacity	102Ah
Nomial Capacity	5.22kWh
Voltage	51.2V
Charge Voltage	57.6V
Discharge Voltage Range	45-57V
Max. Charging Current	40A
Battery Type	LiFePO4
Max. Discharging Current	75A
Max. Output Power	3840W
DOD	90%
Modules Connection	1-4 in parallel
Communication	CAN.RS485
Cycle Life	≥6000@25°C, 0.5C
Storage Temperature	-20°C~+35°C
Working Temp Range	Charge: 0°C~+55°C Discharge: -10°C~+55°C
Net Weight	48.5kg/106lb
Gross Weight	52.5kg/115lb
Product Dimension (W x H x D)	536.3 x 464 x 180.5mm
Package Dimension (W x H x D)	592 x 522 x 252mm

Three Phase Hybrid Storage Inverter

3-30 kW



The Afore AF Series three phase storage inverters are designed to increase energy independence for homeowners and commercial users. The power range is from 3.0kW to 30kW, compatible with high voltage (150-800V) 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.



WIDE RANGE
Voltage Range
(150-800V)



100% UNBALANCE
Support Unbalance Load

Max. 1.5

PV OVERSIZE
1.5 Times PV Oversize

Max. 40A

MAX. 40A_{dc}
String Current Up To 40A

<10 ms

UPS FUNCTION
Switch Time < 10ms



INPUT
Support Generator

Support for Time-of-use Optimization

Configurable Operation Modes

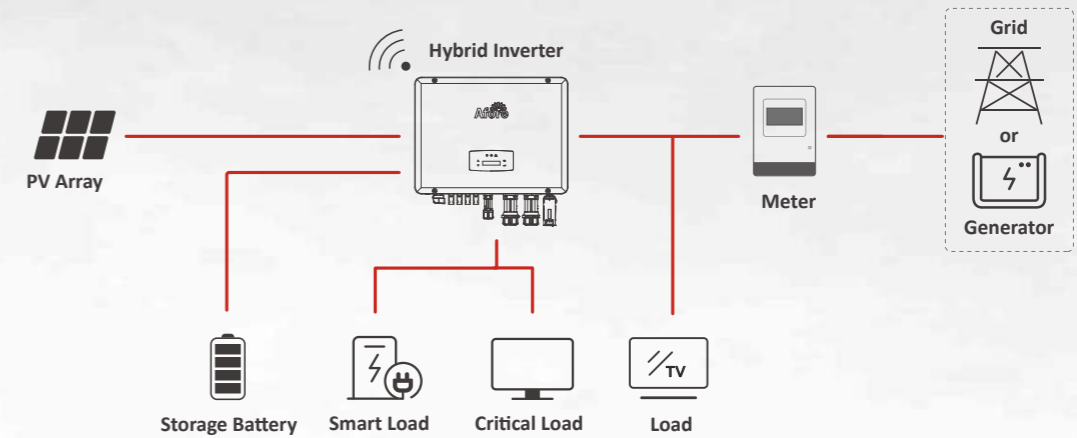
AFCI (Optional) & Rapid Shutdown Ready

Build in Anti-feed-in Function

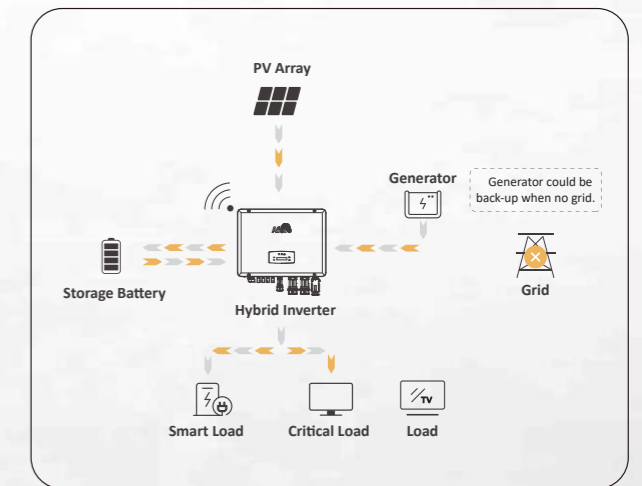
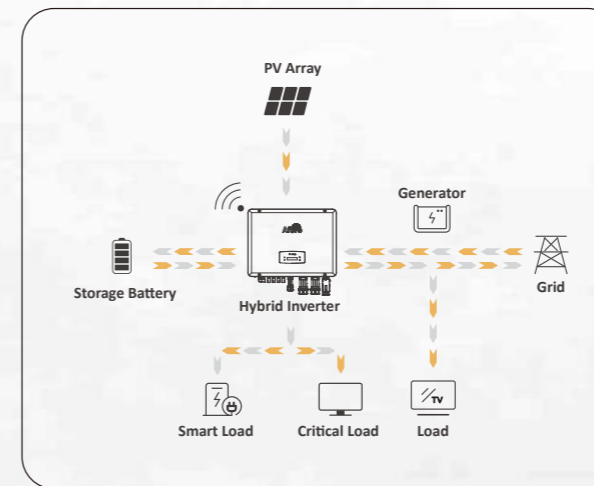
100% unbalanced output, each phase;
200% unbalanced output, each phase (Below 10kW)

Smart Monitoring & Remote Firmware Upgrade

For New Storage System:

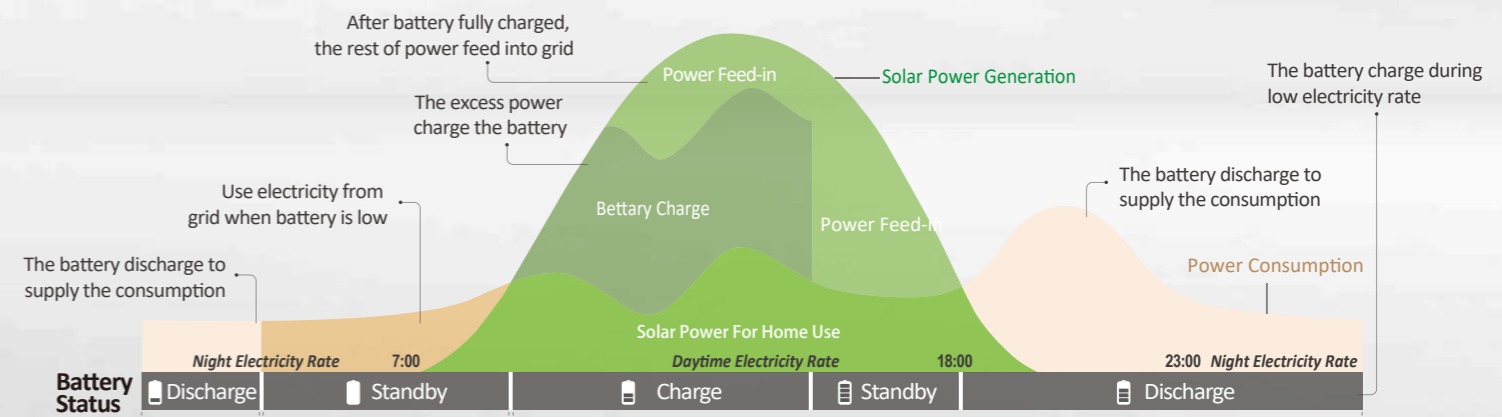


Optimizing Self-Consumption (on-grid) + Emergency Power Supply (off-grid)



Optimizing Self-Consumption Mode

With energy storage system installed, users 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.



PV Input	AF3K-TH	AF4K-TH	AF5K-TH	AF6K-TH	AF8K-TH	AF10K-TH
Max. DC Input Power (kW)	5	6	7.5	9	12	15
Max. PV Voltage (V)	1000					
Rated DC Input Voltage (V)	620					
DC Input Voltage Range (V)	150-1000					
MPPT Voltage Range (V)	150-850					
Full MPPT Range(V)	200-850		250-850		300-850	500-850
Start-up Voltage (V)	160					
Max. DC Input Current (A)	20x2					
Max. Short Current(A)	30x2					
No. of MPPT Tracker / Strings	2/2					
Battery Port						
Battery Nominal Voltage (V)	200	200	200	250	300	400
Battery Voltage Range (V)	150-800					
Max. Charge/Discharge Current (A)	30					
Max. Charge/Discharge Power (kW)	3	4	5	6	8	10
Charging Curve	3 Stages					
Compatible Battery Type	Li-ion battery					
AC Grid	AF3K-TH	AF4K-TH	AF5K-TH	AF6K-TH	AF8K-TH	AF10K-TH
Nominal AC Output Power (kW)	3	4	5	6	8	10
Max. AC Input/Output Power (kVA)	4.5 / 3.3	6 / 4.4	7.5 / 5.5	9 / 6.6	12 / 8.8	15 / 11
Max. AC Output Current (A)	5.3	7	8.5	10.5	13.5	17
Nominal AC Voltage (V)	230/400					
Nominal AC Frequency (Hz)	50/60					
Power Factor	1 (-0.8-0.8) adjustable					
Current THD (%)	<3%					
AC Load Output (Back-up)						
Nominal Output Power (VA)	3000	4000	5000	6000	8000	10000
Nominal Output Voltage (V)	230/400					
Nominal Output Frequency (Hz)	50/60					
Nominal Output Current (A)	4.4	5.8	7.3	8.7	11.6	14.5
Peak Output Power	3300VA, 60s	4400VA, 60s	5500VA, 60s	6600VA, 60s	8800VA, 60s	11000VA, 60s
THDV (with linear load)	<3%					
Switching Time (ms)	<10					
Efficiency	AF3K-TH	AF4K-TH	AF5K-TH	AF6K-TH	AF8K-TH	AF10K-TH
Europe Efficiency	97.50%					
Max. Efficiency	98.00%			98.20%		
Battery Charge/Discharge Efficiency	98.00%					
Protection						
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					
Enclosure Protect Level	IP65					
General Data	AF3K-TH	AF4K-TH	AF5K-TH	AF6K-TH	AF8K-TH	AF10K-TH
Dimensions (W x H x D, mm)	370 x 497 x 192 mm					
Weight (kg)	20.8kg					
Topology	Transformerless					
Cooling Concept	Natural Convection			Intelligent Fan		
Relatively Humidity	0-100%					
Operating Temperature Range (°C)	-25 to 60 °C					
Operating Altitude (m)	<4000					
Noise Emission (dB)	<30					
Standby Consumption (W)	<5					
Display & Communication Interfaces	LCD, LED, RS485, CAN, Wi-Fi, GPRS, 4G					
Certification & Approvals	NRS097, G98/G99, EN50549-1, C10/C11, AS4777.2, VDE-AR-N4105, VDE0126, IEC62109-1, IEC62109-2					
EMC	EN61000-6-2, EN61000-6-3					

PV Input	AF12K-TH	AF15K-TH	AF17K-TH	AF20K-TH	AF25K-TH	AF30K-TH
Max. DC Input Power (kW)	18	22.5	25.5	30	37.5	45
Max. PV Voltage (V)	1000					
Rated DC Input Voltage (V)	620					
DC Input Voltage Range (V)	150-1000					
MPPT Voltage Range (V)	150-850					
Full MPPT Range(V)	500-850					
Start-up Voltage (V)	160					
Max. DC Input Current (A)	20x2	20+32	32x2	40x2		
Max. Short Current(A)	30x2	30+48	48x2	60x2		
No. of MPPT Tracker / Strings	2/2	2/3	2/4	2/4		
Battery Port						
Battery Nominal Voltage (V)	450	500	400	500	500	550
Battery Voltage Range (V)	150-800					
Max. Charge/Discharge Current (A)	30	50	50	50	60	60
Max. Charge/Discharge Power (kW)	12	15	17	20	25	30
Charging Curve	3 Stages					
Compatible Battery Type	Li-ion battery					
AC Grid	AF12K-TH	AF15K-TH	AF17K-TH	AF20K-TH	AF25K-TH	AF30K-TH
Nominal AC Output Power (kW)	12	15	17	20	25	30
Max. AC Input/Output Power (kVA)	18 / 13.2	22.5 / 16.5	25.5 / 18.7	30 / 22	37.5 / 27.5	45 / 33
Max. AC Output Current (A)	21.5	27	30	32	40	48
Nominal AC Voltage (V)	230/400					
Nominal AC Frequency (Hz)	50/60					
Power Factor	1 (-0.8-0.8) adjustable					
Current THD (%)	<3%					
AC Load Output (Back-up)						
Nominal Output Power (VA)	12000	15000	17000	20000	25000	30000
Nominal Output Voltage (V)	230/400					
Nominal Output Frequency (Hz)	50/60					
Nominal Output Current (A)	17.4	21.8	24.7	29	36.3	43.5
Peak Output Power	13200VA, 60s	16500VA, 60s	18700VA, 60s	22000VA, 60s	27500VA, 60s	33000VA, 60s
THDV (with linear load)	<3%					
Switching Time (ms)	<10					
Efficiency	AF12K-TH	AF15K-TH	AF17K-TH	AF20K-TH	AF25K-TH	AF30K-TH
Europe Efficiency	97.50%		97.80%		98.00%	98.10%
Max. Efficiency	98.30%				98.50%	
Battery Charge/Discharge Efficiency	98.00%					
Protection						
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					
Enclosure Protect Level	IP65					
General Data	AF12K-TH	AF15K-TH	AF17K-TH	AF20K-TH	AF25K-TH	AF30K-TH
Dimensions (W x H x D, mm)	370 x 497 x 192 mm			558 x 535 x 260 mm		
Weight (kg)	20.8kg	29kg		36kg		
Topology	Transformerless					
Cooling Concept	Intelligent Fan					
Relatively Humidity	0-100%					
Operating Temperature Range (°C)	-25 to 60 °C					
Operating Altitude (m)	<4000					
Noise Emission (dB)	<30	<40				
Standby Consumption (W)	<5					
Display & Communication Interfaces	LCD, LED, RS485, CAN, Wi-Fi, GPRS, 4G					
Certification & Approvals	NRS097, G98/G99, EN50549-1, C10/C11, AS4777.2, VDE-AR-N4105, VDE0126, IEC62109-1, IEC62109-2					
EMC	EN61000-6-2, EN61000-6-3					

Three Phase Hybrid Storage Inverter

3-12 kW Plus Series

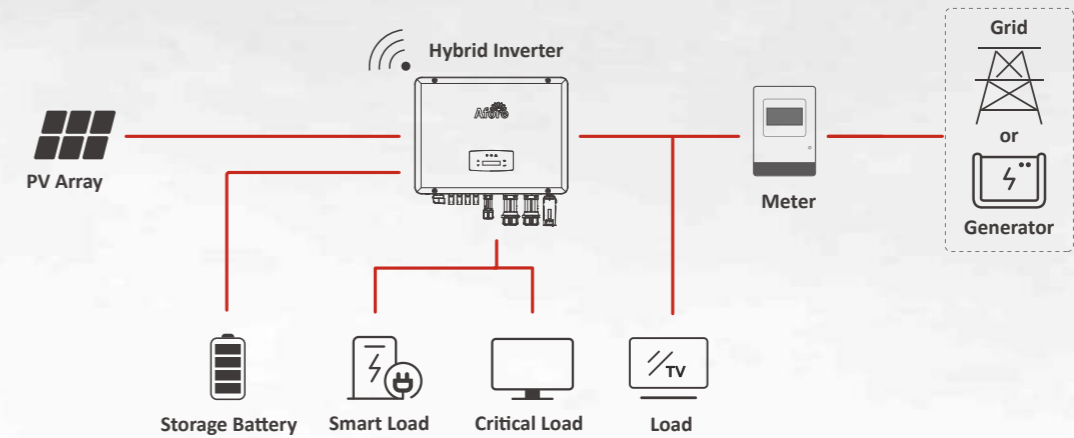


The Afore three phase storage inverters plus series are designed to increase energy independence for homeowners and commercial users. The power range is from 3.0kW to 12kW, compatible with high voltage (80-600V) batteries.

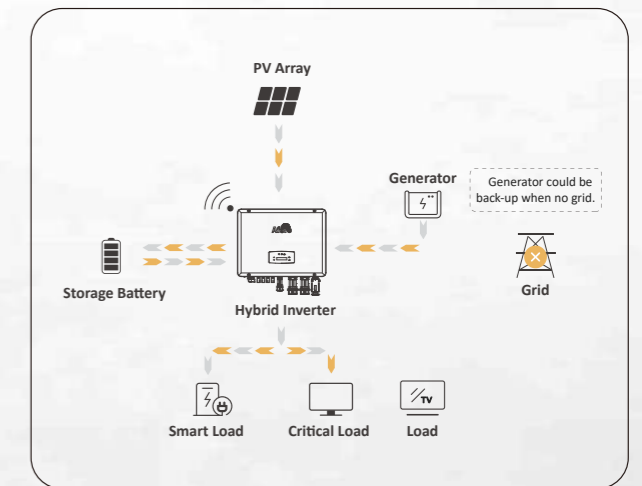
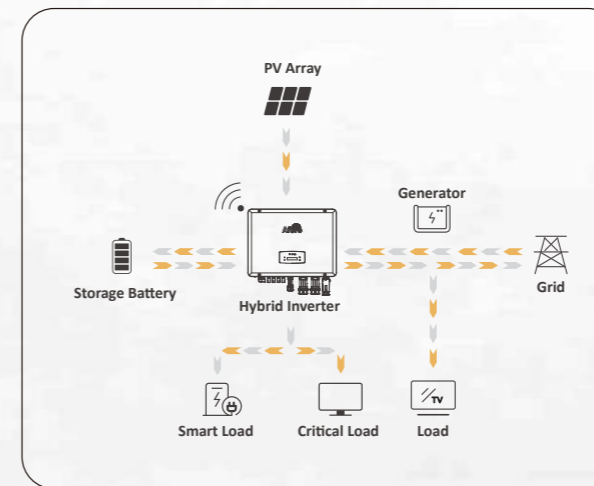
Energy management is based on time-of-use and demand charge rate structures, significantly reduce the amount of energy purchased from public grid.

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.

For New Storage System:

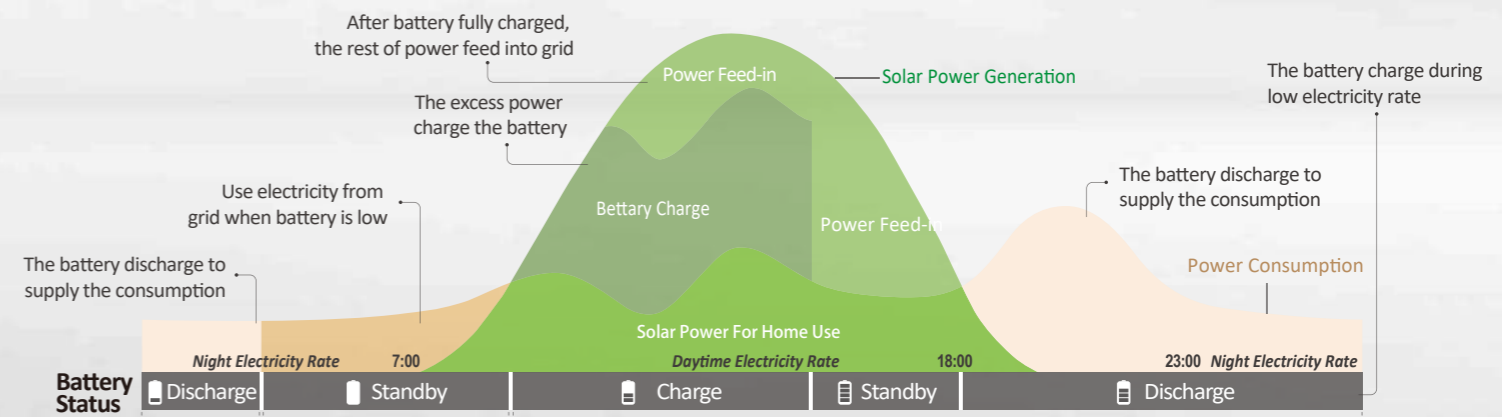


Optimizing Self-Consumption (on-grid) + Emergency Power Supply (off-grid)

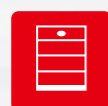


Optimizing Self-Consumption Mode

With energy storage system installed, users 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.



MIN. 80V
Battery Voltage
Minimum 80V



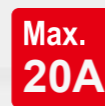
MAX. 50A
Max. Charge/
Discharge Current 50A



100% UNBALANCE
Support Unbalance Load



Max. 1.5
PV OVERSIZE
1.5 Times PV Oversize



Max. 20A
MAX. 20A_{dc}
String Current Up To 20A



<10ms
UPS FUNCTION
Switch Time < 10ms

Support for Time-of-use Optimization

Configurable Operation Modes

AFCI (Optional) & Rapid Shutdown Ready

Build in Anti-feed-in Function

100% unbalanced output, each phase;
200% unbalanced output, each phase (Below 10kW)

Smart Monitoring & Remote Firmware Upgrade

PV Input	AF3K-THP	AF4K-THP	AF5K-THP	AF6K-THP
Max. DC Input Power (kW)	5	6	7.5	9
Max. PV Voltage (V)	1000			
Rated DC Input Voltage (V)	620			
DC Input Voltage Range (V)	150-1000			
MPPT Voltage Range (V)	150-850			
Full MPPT Range(V)	200-850		250-850	
Start-up Voltage (V)	160			
Max. DC Input Current (A)	20x2			
Max. Short Current(A)	30x2			
No. of MPPT Tracker / Strings	2/2			
Battery Port				
Battery Nominal Voltage (V)	100	100	100	150
Battery Voltage Range (V)	80-600			
Max. Charge/Discharge Current (A)	50			
Max. Charge/Discharge Power (W)	3K	4K	5K	6K
Charging Curve	3 Stages			
Compatible Battery Type	Li-ion battery			
AC Grid Output	AF3K-THP	AF4K-THP	AF5K-THP	AF6K-THP
Nominal AC Output Power (VA)	3000	4000	5000	6000
Max. AC Input Power	4500	6000	7500	9000
Max. AC Output Current (A)	5.3	7	8.5	10.5
Nominal AC Voltage (V)	230/400			
Nominal AC Frequency (Hz)	50/60			
Power Factor	1 (-0.8-0.8)			
Current THD (%)	<3%			
AC Load Output (Back-up)				
Nominal Output Power (VA)	3000	4000	5000	6000
Nominal Output Voltage (V)	230/400			
Nominal Output Frequency (Hz)	50/60			
Nominal Output Current (A)	4.4	5.8	7.3	8.7
Peak Output Power	3300VA, 60s	4400VA, 60s	5500VA, 60s	6600VA, 60s
THDV (with linear load)	<3%			
Switching Time (ms)	<10			
Efficiency	AF3K-THP	AF4K-THP	AF5K-THP	AF6K-THP
Europe Efficiency	97.50%			
Max. Efficiency	98.00%			
Battery Charge/Discharge Efficiency	98.00%			
Protection				
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			
Enclosure Protect Level	IP65			
General Data	AF3K-THP	AF4K-THP	AF5K-THP	AF6K-THP
Dimensions (W x H x D, mm)	558 x 535 x 260 mm			
Weight (kg)	29kg			
Topology	Transformerless			
Cooling Concept	Intelligent Fan			
Relatively Humidity	0-100%			
Operating Temperature Range (°C)	-25 to 60 °C			
Operating Altitude (m)	<4000			
Noise Emission (dB)	<30			
Standby Consumption (W)	<5			
Display & Communication Interfaces	LCD, LED, RS485, CAN, Wi-Fi, GPRS, 4G			
Certification & Approvals	NRS097, G98/G99, EN50549-1, C10/C11, AS4777.2, VDE-AR-N4105, VDE0126, IEC62109-1, IEC62109-2			
EMC	EN61000-6-2, EN61000-6-3			

PV Input	AF8K-THP	AF10K-THP	AF12K-THP
Max. DC Input Power (kW)	12	15	18
Max. PV Voltage (V)	1000		
Rated DC Input Voltage (V)	620		
DC Input Voltage Range (V)	150-1000		
MPPT Voltage Range (V)	150-850		
Full MPPT Range(V)	300-850	500-850	
Start-up Voltage (V)	160		
Max. DC Input Current (A)	20x2		
Max. Short Current(A)	30x2		
No. of MPPT Tracker / Strings	2/2		
Battery Port			
Battery Nominal Voltage (V)	200	250	300
Battery Voltage Range (V)	80-600	120-650	
Max. Charge/Discharge Current (A)	50		
Max. Charge/Discharge Power (W)	8K	10K	12K
Charging Curve	3 Stages		
Compatible Battery Type	Li-ion battery		
AC Grid Output	AF8K-THP	AF10K-THP	AF12K-THP
Nominal AC Output Power (VA)	8000	10000	12000
Max. AC Input Power	12000	15000	18000
Max. AC Output Current (A)	13.5	17	21.5
Nominal AC Voltage (V)	230/400		
Nominal AC Frequency (Hz)	50/60		
Power Factor	1 (-0.8-0.8)		
Current THD (%)	<3%		
AC Load Output (Back-up)			
Nominal Output Power (VA)	8000	10000	12000
Nominal Output Voltage (V)	230/400		
Nominal Output Frequency (Hz)	50/60		
Nominal Output Current (A)	11.6	14.5	17.4
Peak Output Power	8800VA, 60s	11000VA, 60s	13200VA, 60s
THDV (with linear load)	<3%		
Switching Time (ms)	<10		
Efficiency	AF8K-THP	AF10K-THP	AF12K-THP
Europe Efficiency	97.50%		
Max. Efficiency	98.20%	98.30%	
Battery Charge/Discharge Efficiency	98.00%		
Protection			
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		
Enclosure Protect Level	IP65		
General Data	AF8K-THP	AF10K-THP	AF12K-THP
Dimensions (W x H x D, mm)	558 x 535 x 260 mm		
Weight (kg)	29kg		
Topology	Transformerless		
Cooling Concept	Intelligent Fan		
Relatively Humidity	0-100%		
Operating Temperature Range (°C)	-25 to 60 °C		
Operating Altitude (m)	<4000		
Noise Emission (dB)	<30		
Standby Consumption (W)	<5		
Display & Communication Interfaces	LCD, LED, RS485, CAN, Wi-Fi, GPRS, 4G		
Certification & Approvals	NRS097, G98/G99, EN50549-1, C10/C11, AS4777.2, VDE-AR-N4105, VDE0126, IEC62109-1, IEC62109-2		
EMC	EN61000-6-2, EN61000-6-3		

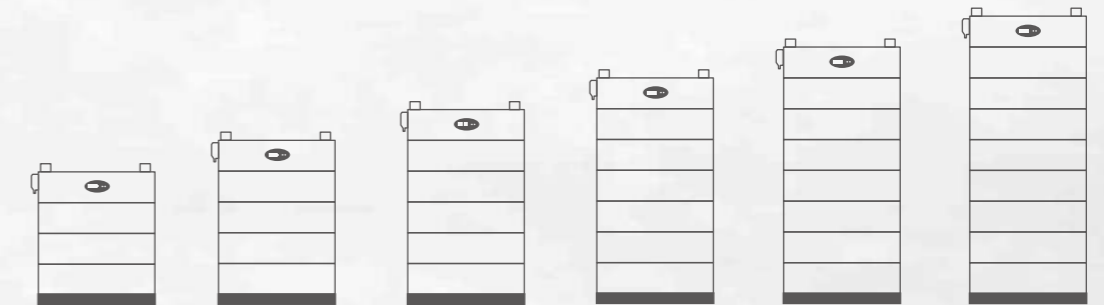
High Voltage Stackable Energy Storage Battery

AF2500W-H1



Model	AF2500W-H1
Capacity	52Ah
Battery Type	LiFePO4
Installation	Ground-mounted
Max. Discharge/Charge Current	35A
Protection Level	IP65
Cycle Life	>6000.@25°C, 0.5C, 90%DOD
Transportation SOC	30%
Working Temperature	Charge: 0°C~+55°C Discharge: -20°C~+55°
Storage	-20°C~+35°C
Control Box/Single Battery Module Dimension	606x220x225mm

Support capacity selection 7.5kWh / 10kWh / 12.5kWh / 15kWh / 17.5kWh / 20kWh



Expansion Flexibility
2.5kWh modular design,
Scalable from 7.5kWh to 20kWh



Easy Installation
24kg/52.9lb per battery box, easy to move and install.
Quick connector between boxes, no cable connecting.



Safe & Reliable
Lithium Iron Phosphate (LFP) cell only.
BMS, fuse and aerosol kit are built in.



Environment Adaptability
Wider temperature range:
-20°C~+55°C. IP65 protection class.



Smart O&M
Check the APP to find data on your phone.Remote diagnosis and OTA.



More Usable Energy
90% Depth of Discharge, more
than 6000 cycles (0.5C, 25 C).

Model	AF7500W-H3	AF10000W-H4	AF12500W-H5	AF15000W-H6	AF175000W-H7	AF20000W-H8
Nominal Voltage	144V	192V	240V	288V	336V	384V
Connection	1P45S	1P60S	1P75S	1P90S	1P105S	1P120S
Voltage Working Range	114.7V-159.7V	153V-213V	191.2V-266.2V	230V-319V	267.7V-372.7V	306V-426V
Nominal Capacity	7.488kWh	9.984kWh	12.48kWh	14.976kWh	17.472kWh	19.968kWh
Weight	~80kg/176lb	~105kg/231lb	~129kg/284lb	~152.3kg/335lb	~176.2kg/388lb	~199.5kg/438lb
Dimension (W x H x D mm)	606x730x220	606x900x220	606x1070x220	606x1240x220	606x1410x220	606x1580x220

High Voltage Stackable Energy Storage Battery

AF5000W-H1



Model	AF5000W-H1
Capacity	104Ah
Battery Type	LiFePO4
Installation	Ground-mounted
Max. Discharge/Charge Current	50A
Protection Level	IP65
Cycle Life	>6000.@25°C, 0.5C, 90%DOD
Transportation SOC	30%
Working Temperature	Charge: 0°C~+55°C Discharge: -20°C~+55°
Storage	-20°C~+35°C



Support capacity selection 15kWh / 21kWh / 26kWh / 31kWh / 37kWh / 42kWh



Expansion Flexibility
5kWh modular design, Scalable from 15kWh to 42kWh.



Smart O&M
Check the APP to find data on your phone. Remote diagnosis and OTA.



Safe & Reliable
Lithium Iron Phosphate (LFP) cell only. BMS, fuse and aerosol kit are built in.



Environment Adaptability
Wider temperature range: -20°C~+55°C. IP65 protection class.



More Usable Energy
90% Depth of Discharge, more than 6000 cycles (0.5C, 25°C).

Model	AF15000W-H3	AF21000W-H4	AF26000W-H5	AF31000W-H6	AF37000W-H7	AF42000W-H8
Nominal Voltage	153.6V	204.8V	256V	307.2V	358.4V	409.6V
Connection	2P48S	2P64S	2P80S	2P96S	2P112S	2P128S
Voltage Working Range	114.7V-159.7V	153V-213V	191.2V-266.2V	230V-319V	267.7V-372.7V	306V-426V
Nominal Capacity	15.974kWh	21.299kWh	26.624kWh	31.949kWh	37.274kWh	42.598kWh

AC Coupled Inverter

1-4.6 kW



Afore AC Coupled Inverter (1kW-4.6kW) suitable for both single-phase & three-phase systems. It can be fitted alongside string inverter, enabling you to upgrade to solar battery storage system without changing your current installation.



SEAMLESSLY SWITCH
Seamlessly Switch Time between EPS with Grid



SMART
Smart EMS/BMS



UNIBODY
One-piece Aluminum Housing



SAFETY
Proven Safety



Max. 80A
Max. 80A Battery Charge and Discharge Current



SUPPORT
Island support

97.6% High Frequency Isolation Charge and Discharge Efficiency



Plug & Play, Easy Maintenance

Integrated WIFI Monitoring & Remote Parameter Setting

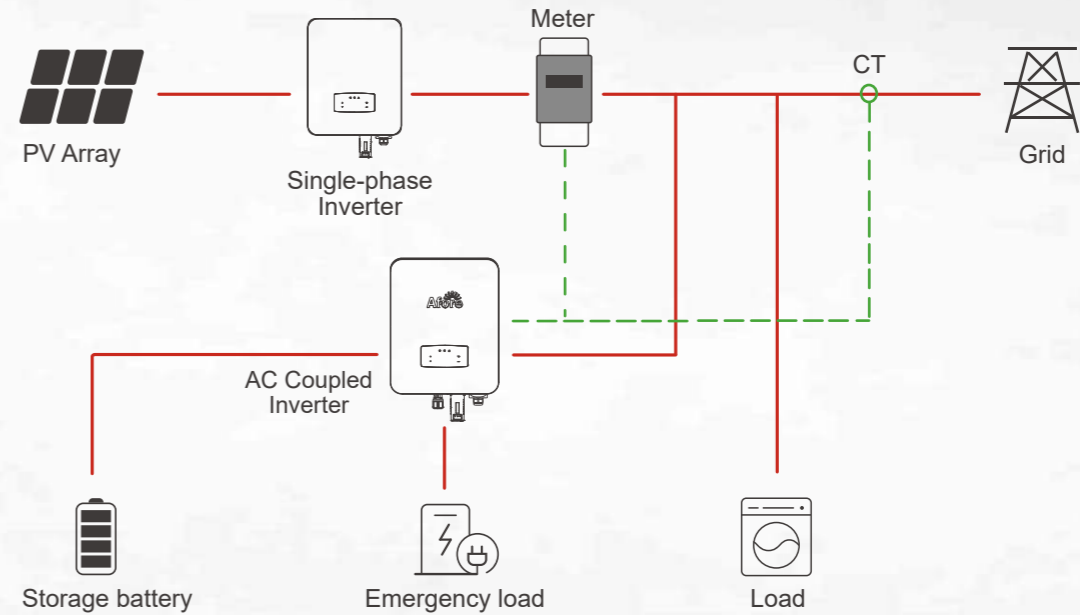


IP 65 Water-resistant & Dustproof

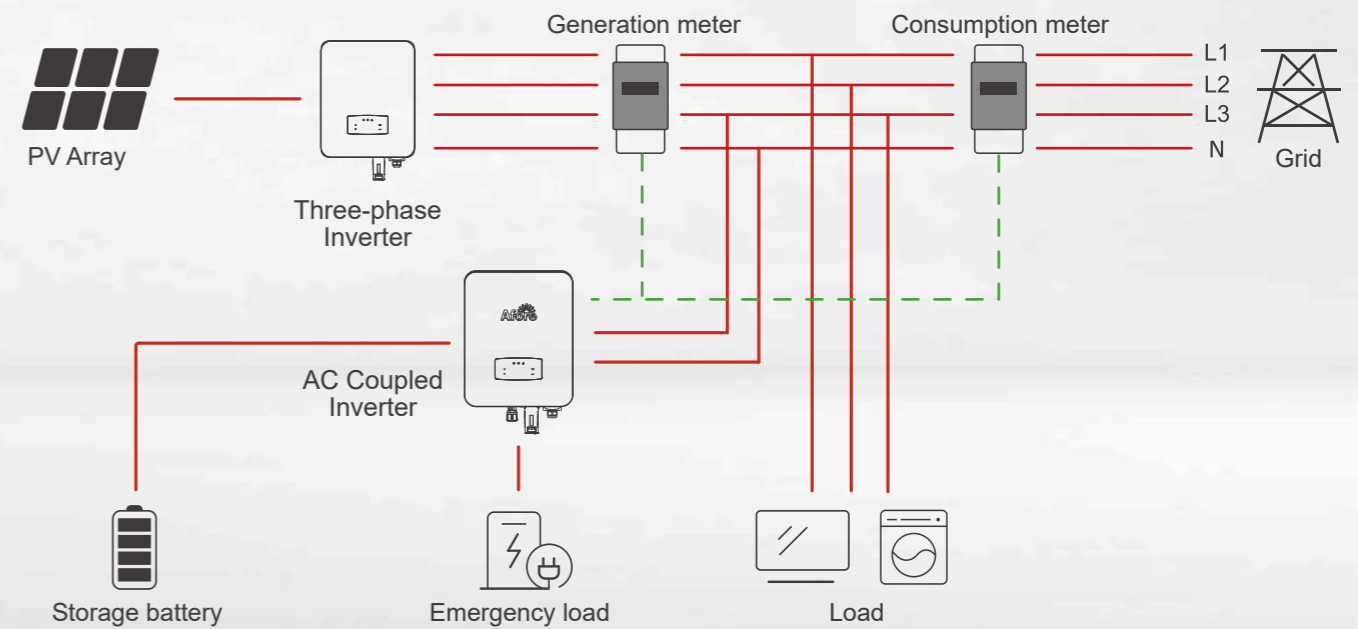
Retrofitting Storage Solution on Existing Solar System:

Addina battery storagee to an existina solar ssttem enables home owners to store their solar PY oenerated electricityinstead of exportingit to the grid. More savings on your electricity bill.

Single Phase AC Coupled (Retro Fit)



Three Phase AC Coupled (Retro Fit)



Battery	AF1K-SL-0	AF1.5K-SL-0	AF2K-SL-0	AF2.5K-SL-0
Max. Charge/Discharge Power (kW)	1	1.5	2.0	2.5
Max. Charge/Discharge Current (A)	25	40	50	63
Battery Normal Voltage (V)	51.2			
Battery Voltage Range (V)	40 - 60			
Battery Type	Li-ion/lead-acid etc.			

AC Grid				
Max Continuous Current (A)	5.0	7.0	10.0	12.0
Max Continuous Power (kVA)	1.0	1.5	2.0	2.5
Nominal Grid Current(A)	4.6 / 4.4	6.9 / 6.6	9.1 / 8.7	11.4 / 10.9
Nominal Grid Voltage (V)	198 to 242 @ 220 / 207 to 253 @ 230			
Nominal Grid Frequency (Hz)	50 / 60			
Power Factor	0.999 (Adjustable from 0.8 overexcited to 0.8 underexcited)			
Current THD (%)	< 3			

AC Load Output	AF1K-SL-0	AF1.5K-SL-0	AF2K-SL-0	AF2.5K-SL-0
Max Continuous Current (A)	5.0	7.0	10.0	12.0
Max Continuous Power (kVA)	1.0	1.5	2.0	2.5
Max Peak Current (A) (10min)	6.9 / 6.6	10.5 / 10.0	13.7 / 13.1	17.1 / 16.4
Max Peak Power (kVA) (10min)	1.5	2.3	3.0	3.75
Nominal AC Current (A)	4.6 / 4.4	6.9 / 6.6	9.1 / 8.7	11.4 / 10.9
Nominal AC Voltage L-N (V)	220 / 230			
Nominal AC Frequency (Hz)	50 / 60			
Switching Time (s)	Seamless			
Voltage THD (%)	< 3			

Efficiency				
Max. Efficiency (%)	97.6			
Bat. between AC Efficiency (%)	96.8			

Protection	AF1K-SL-0	AF1.5K-SL-0	AF2K-SL-0	AF2.5K-SL-0
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			
Enclosure Protect Level	IP65 / NEMA4X			

General Data	AF1K-SL-0	AF1.5K-SL-0	AF2K-SL-0	AF2.5K-SL-0
Dimensions (W x H x D, mm)	370 x 513 x 192			
Weight	17			
Topology	Transformer			
Cooling	Intelligent Fan			
Relatively Humidity	0 - 100 %			
Operating Temperature Range (°C)	- 25 to 60			
Operating Altitude (m)	< 4000			
Noise Emission (dB)	< 25			
Standby Consumption (W)	< 10			
Mounting	Wall Bracket			
Communication with RSD	SUNSPEC			
Display & Communication Interfaces	LCD, LED, RS485, CAN, Wi-Fi, GPRS, 4G			
Certification & Approvals	NRS097, G98/G99, EN50549-1, C10/C11, AS4777.2, VDE-AR-N4105, VDE0126, IEC62109-1, IEC62109-2			
EMC	EN61000-6-2, EN61000-6-3			

Battery	AF3K-SL-0	AF3.6K-SL-0	AF4K-SL-0	AF4.6K-SL-0
Max. Charge/Discharge Power (kW)	3.0	3.6	4.0	4.6
Max. Charge/Discharge Current (A)	80	80	80	80
Battery Normal Voltage (V)	51.2			
Battery Voltage Range (V)	40 - 60			
Battery Type	Li-ion/lead-acid etc.			

AC Grid				
Max Continuous Current (A)	14.0	17.0	19.0	22.0
Max Continuous Power (kVA)	3.0	3.6	4.0	4.6
Nominal Grid Current (A)	13.7 / 13.1	16.4 / 15.7	18.2 / 17.4	21.0 / 20.0
Nominal Grid Voltage (V)	198 to 242 @ 220 / 207 to 253 @ 230			
Nominal Grid Frequency (Hz)	50 / 60			
Power Factor	0.999 (Adjustable from 0.8 overexcited to 0.8 underexcited)			
Current THD (%)	< 3			

AC Load Output	AF3K-SL-0	AF3.6K-SL-0	AF4K-SL-0	AF4.6K-SL-0
Max Continuous Current (A)	14.0	17.0	19.0	22.0
Max Continuous Power (kVA)	3.0	3.6	4.0	4.6
Max Peak Current (A) (10min)	20.5 / 19.6	24.6 / 23.5	27.3 / 26.1	31.4 / 30.0
Max Peak Power (kVA) (10min)	4.5	5.4	6.0	6.9
Nominal AC Current (A)	13.7 / 13.1	16.4 / 15.7	18.2 / 17.4	21.0 / 20.0
Nominal AC Voltage L-N (V)	220 / 230			
Nominal AC Frequency (Hz)	50 / 60			
Switching Time (s)	Seamless			
Voltage THD (%)	< 3			

Efficiency				
Max. Efficiency (%)	97.6			
Bat. between AC Efficiency (%)	96.8			

Protection	AF3K-SL-0	AF3.6K-SL-0	AF4K-SL-0	AF4.6K-SL-0
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			
Enclosure Protect Level	IP65 / NEMA4X			

General Data	AF3K-SL-0	AF3.6K-SL-0	AF4K-SL-0	AF4.6K-SL-0
Dimensions (W x H x D, mm)	370 x 513 x 192			
Weight	17			
Topology	Transformer			
Cooling	Intelligent Fan			
Relatively Humidity	0 - 100 %			
Operating Temperature Range (°C)	- 25 to 60			
Operating Altitude (m)	< 4000			
Noise Emission (dB)	< 25			
Standby Consumption (W)	< 10			
Mounting	Wall Bracket			
Communication with RSD	SUNSPEC			
Display & Communication Interfaces	LCD, LED, RS485, CAN, Wi-Fi, GPRS, 4G			
Certification & Approvals	NRS097, G98/G99, EN50549-1, C10/C11, AS4777.2, VDE-AR-N4105, VDE0126, IEC62109-1, IEC62109-2			
EMC	EN61000-6-2, EN61000-6-3			

Split Phase Hybrid Storage Inverter

3-9.6 kW



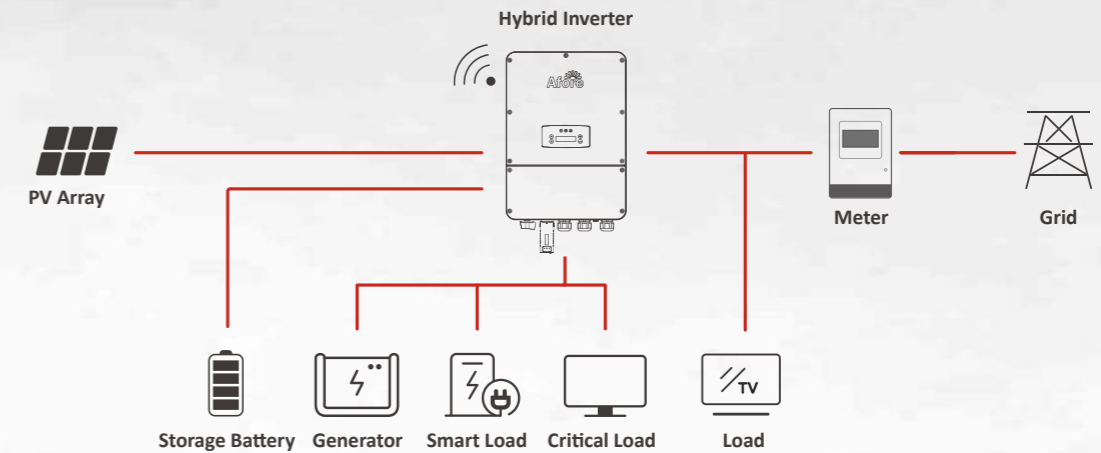
The Afore AF Series storage Inverters are designed to increase energy independence for homeowners. The power range is from 3.0kW to 9.6kW, compatible with high voltage (80-495V) batteries.

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

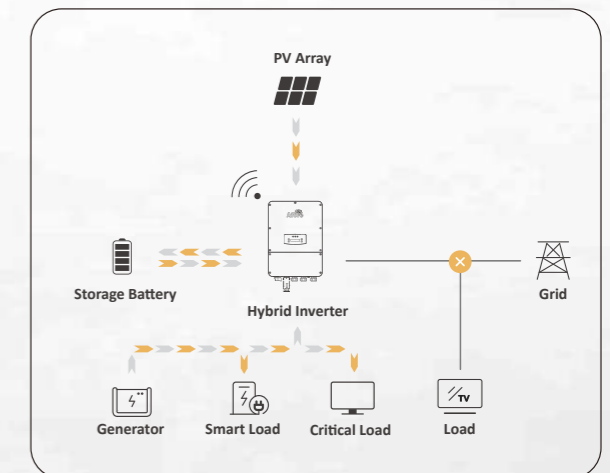
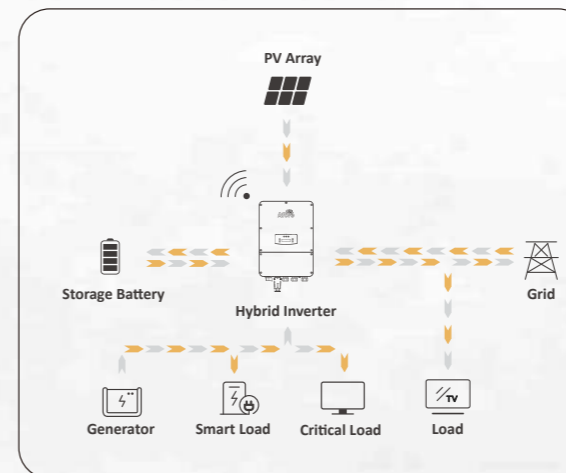
Thanks for the UPS function (switch time < 10ms), enables the crucial loads power on during outages. Additionally, under the backup operation mode, the inverter provides you up to 150% peak output overloading.

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

For New Storage System:

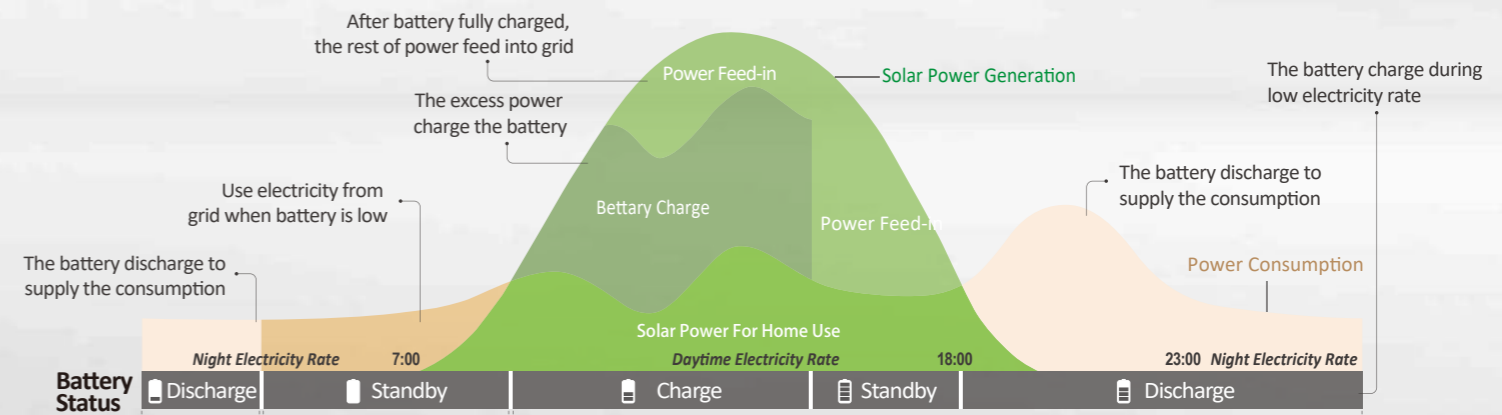


Optimizing Self-Consumption (on-grid) + Emergency Power Supply (off-grid)



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

Max.6 Parallel Stacking

INPUT

Support Generator

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					
No. of MPP Tracker / No. of PV String	2 / 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)	15	17.5	19.5	22.5	24.5	27
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)	15	17.5	19.5	22.5	24.5	27
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 (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 (W x H x D)	400 x 600 x 229 mm / 15.7 x 23.6 x 9.0 in					
Weight	25 kg / 55 lbs					
Topology	Transformerless					
Cooling	Natural Convection					
Relatively Humidity	0 - 100 %					
Operating Temperature Range	- 25 to 60 °C / - 77 to 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, IEE1547, IEE1547A, IEE1547.1, 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
No. of MPP Tracker / No. of PV String	2 / 2					3 / 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)	29.0	34.0	37	39	41.5	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)	29.0	34.0	37	39	41.5	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 (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
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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 (W x H x D)	400 x 600 x 229 mm / 15.7 x 23.6 x 9.0 in					
Weight	25 kg / 55 lbs					
Topology	Transformerless					
Cooling	Natural Convection	Intelligent Fan				
Relatively Humidity	0 - 100 %					
Operating Temperature Range	- 25 to 60 °C / - 77 to 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, IEE1547, IEE1547A, IEE1547.1, CSA 22.2 No.107, Rule21, HECO Rule 14					
EMC	FCC part15 CLASS B					

Monitoring Device & Solution



- 
Failure alarm
- 
PV system information push
- 
Multiple systems in one account
- 
Cloud data synchronization
- 
PC browser Android and IOS
- 
Real-time/ Historical data monitoring and analysis
- 
System Income Calculation



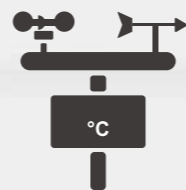
Wi-Fi / Ethernet / GPRS Data Sticker



Power Plant Data Logger



Zero injection Smart Meter(optional)



Weather Station

PV System Monitoring Solution

