

# ENERGY STORAGE SYSTEM SOLUTIONS PV SYSTEM SOLUTIONS





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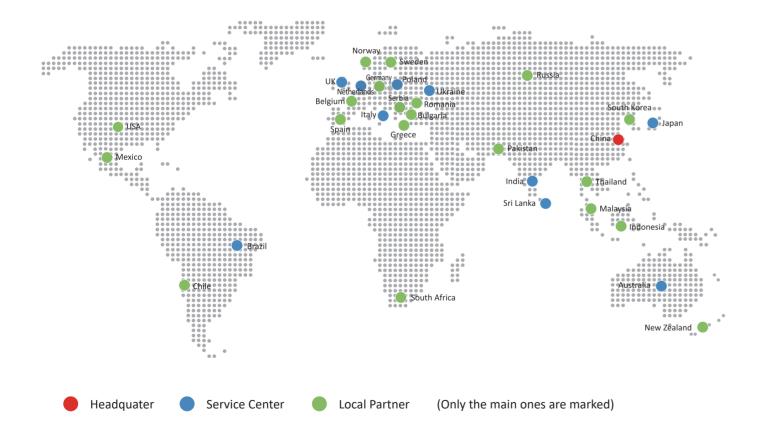
### | About Us

Afore is a leading PV inverter provider from China, with more than fifteen years dedicated experience in PV inverter R&D and manufacturing, Afore inverters have been installed in Europe, Australia, China, Sri Lanka, India, 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 1-12kW, three phase 3-60kW, split phase 3-9.6kW, AC coupled), energy storage battery series (low voltage wall mounted series, high voltage stackable series) 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!

### | Global Market



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Wall Mounted Energy Storage Battery (5.22/10.49/16.07kWh)

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High Voltage Stackable Energy Storage Battery (5.22~41.77kWh)

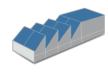


### **Single Phase PV String Inverter**

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



### **Three Phase PV String Inverter**

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### **Three Phase PV String Inverter**

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

### **Single Phase Hybrid Storage Inverter**

1-3.6 kW



The Afore AF low voltage series storage Inverters are designed to increase energy independence for homeowners. The power range is from 1kW to 3.6kW, compatible with low voltage (40-60V) batteries.

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

Thanks for the UPS function (switch time < 10ms), that 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 Afore energy storage inverter features Smart Electricity Pricing & Automation, an energy management tool based on real-time electricity pricing strategies. It continuously monitors electricity price fluctuations and dynamically adjusts device operation accordingly. Operating 24/7 fully automatically without the need for manual intervention, it helps users optimize their electricity usage and reduce energy costs.



Electricity Pricing

& Automation

**PV OVERSIZE** 



1.5 Times PV Oversize



MPPT CHANNELS Up to 2 MPPT Channels



**UPS FUNCTION** 



PARALLEL Max.6 Parallel Stacking

Support Generator

Support for Time-of-use Optimization

AFCI (Optional) & Rapid Shutdown Ready



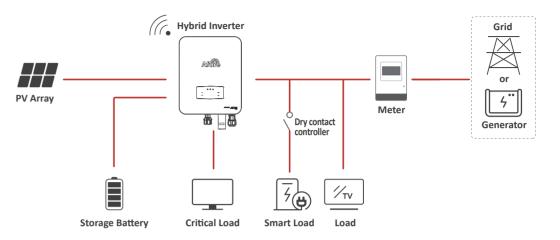
Build in Anti-feed-in Function Compact Size and Easy Installation

Configurable Operation Modes



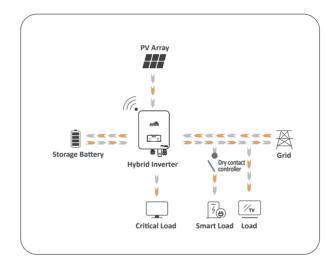
Smart Monitoring & Remote Firmware Upgrade

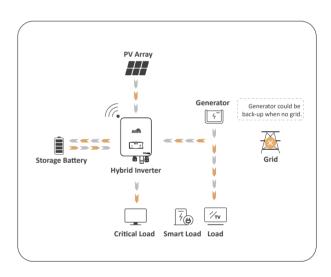
#### For New Storage System:



### Optimizing Self-Consumption (on-grid) +

### **Emergency Power Supply(off-grid)**

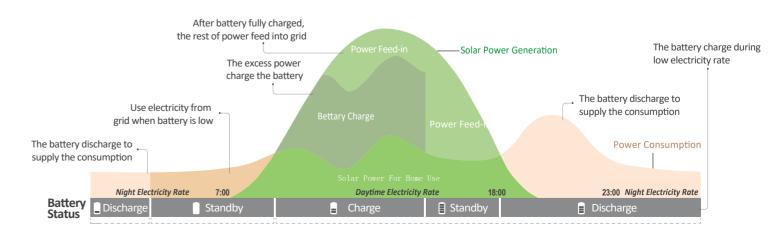




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#### **Optimizing Self-Consumption Mode**

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.



Technical Data	AF1K-SL-1	AF1.5K-SL-1	AF2K-SL-1	AF2.5K-SL-1
PV Input	4.5	2.2	2.2	2.5
Max. Input Power (kW)	1.5	2.3	3.0	3.8
Max. PV Voltage (V)			550	
MPPT Range (V)			- 500	
Full MPPT Range (V)	80 - 500	90 - 500	120 - 500	150 - 500
Normal Voltage (V)		3	860	
Startup Voltage (V)		1	100	
Max. Input Current (A)		18.	.5 x 1	
Max. Short Current (A)		26	5 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
Max. Charge/Discharge Current (A)	25	40	50	63
Battery Normal Voltage (V)		5	1.2	
Battery Voltage Range (V)		40	- 60	
Battery Type		Li-ion / Le	ad-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)		· · · · · · · · · · · · · · · · · · ·	/ 207 to 253 @ 230	,
Nominal Grid Frequency (Hz)			/ 60	
Power Factor			n 0.8 leading to 0.8 lagging	)
Current THD (%)			< 3	•
AC Load Output			-	
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	17.3 / 16.6
Max Peak Power (kVA) (10min)				
Nominal AC Voltage L-N (V)	1.5	2.3	3.0	3.8
			/ 230	
Nominal AC Frequency (Hz)			/ 60	
Switching Time (ms)			mless	
Voltage THD (%)		•	< 3	
Efficiency			7.0	
CEC Efficiency (%)			7.0	
Max. Efficiency (%)			7.6	
PV to Bat. Efficiency (%)			8.1	
Bat. between AC Efficiency (%)		9	6.8	
Protection				
PV Reverse Polarity Protection			/es	
Over Current/Voltage Protection			/es	
Anti-Islanding Protection			/es	
AC Short Circuit Protection			/es	
Residual Current Detection			/es	
Ground Fault Monitoring			/es	
Insulation Resister Detection			/es	
PV Arc Detection			/es	
Enclosure Protect Level		-	NEMA4X	
AC/DC surge protection		Ту	rpe II	
General Data				
Dimensions (W x H x D, mm)		370 x 5	535 x 192	
Weight (kg)		:	17	
Topology		Transfo	ormerless	
Cooling		Natural (	Convection	
Relative Humidity		0 - 2	100 %	
Operating Temperature Range (°C)		- 25	to 60	
Operating Altitude (m)		< 4	4000	
Standby Consumption (W)		<	: 10	
Mounting		Wall	Bracket	
Communication with RSD		SUN	NSPEC	
Display & Communication Interfaces		LCD, LED, RS485, CAN,	Wi-Fi, GPRS, 4G, Sunspec	

Technical Data	AF3K-SL-1	AF3.6K-SL-1	AF3K-SL	AF3.6K-SL
PV Input				
Max. Input Power (kW)	4.5	5.4	4.5	5.4
Max. PV Voltage (V)		55		
MPPT Range (V)		80 -		
Full MPPT Range (V)	170 - 500	210 - 500	90 - 500	110 - 500
Normal Voltage (V)		36		
Startup Voltage (V)	40	10		
Max. Input Current (A)		.5 x 1		5 x 2
Max. Short Current (A)		6 x 1		x 2
No. of MPP Tracker / No. of PV String	1	1/1	2 /	/ 2
Max Charge Discharge Dower (kM)	3.0	3.6	3.0	3.6
Max. Charge/Discharge Power (kW)  Max. Charge/Discharge Current (A)	3.0	3.0		3.0
Battery Normal Voltage (V)				
Battery Voltage Range (V)		51		
Battery Type				
AC Grid		Li-ion / Lea	u-aciu etc.	
Max Continuous Current (A)	14.0	17.0	14.0	17.0
Max Continuous Power (kVA)	3.0	3.6	3.0	3.6
Nominal Grid Current (A)	13.7 / 13.1	16.4 / 15.7	13.7 / 13.1	16.4 / 15.7
Nominal Grid Voltage (V)	13.7   13.1	198 to 242 @ 220 /		20.7 23.7
Nominal Grid Frequency (Hz)		50 /		
Power Factor		1 default (adjustable from		
Current THD (%)		- cradic (adjustable from	0 00 07	
AC Load Output		``		
Max Continuous Current (A)	14.0	17.0	14.0	17.0
Max Continuous Power (kVA)	3.0	3.6	3.0	3.6
Max Peak Current (A) (10min)	20.5 / 19.6	24.6 / 23.5	20.5 / 19.6	24.6 / 23.5
Max Peak Power (kVA) (10min)	4.5	5.4	4.5	5.4
Nominal AC Voltage L-N (V)		220 /		
Nominal AC Frequency (Hz)		50 /	60	
Switching Time (ms)		Seam	less	
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				
PV Reverse Polarity Protection		Ye	S	
Over Current/Voltage Protection		Ye	S	
Anti-Islanding Protection		Ye	S	
AC Short Circuit Protection		Ye		
Residual Current Detection		Ye		
Ground Fault Monitoring		Ye		
Insulation Resister Detection		Ye		
PV Arc Detection		Ye		
Enclosure Protect Level		IP65 / N		
AC/DC surge protection		Тур	е п	
General Data		370 53	E v 102	
Dimensions (W x H x D, mm)		370 x 53		
Weight (kg)		1 Transfor		
Topology		Transfor Natural Co		
Cooling Relative Humidity				
Relative Humidity Operating Temperature Range (°C)		0 - 10		
Operating Altitude (m)		- 25 t		
Standby Consumption (W)		< 40		
Mounting		Wall Bi		
Communication with RSD		SUNS		
Display & Communication Interfaces		LCD, LED, RS485, CAN, W		
Certification & Approvals	NRS097 GOS ENEGEAO 1	, C10/C11, AS4777.2, VDE-AR-		-1 IEC62100-2 IEC62477 1
EMC	14113037, G30, EN3U349-1,		EN61000-6-3	1, ILCUZ1UJ-Z, ILCUZ4//-1

### **Single Phase Hybrid Storage Inverter**

### 4-6 kW Plus Series



The Afore AF low voltage series storage Inverters are designed to increase energy independence for homeowners. The power range is from 4kW to 6kW, compatible with low voltage (40-60V) batteries.

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

Thanks for the UPS function (switch time < 10ms), that 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 Afore energy storage inverter features Smart Electricity Pricing & Automation, an energy management tool based on real-time electricity pricing strategies. It continuously monitors electricity price fluctuations and dynamically adjusts device operation accordingly. Operating 24/7 fully automatically without the need for manual intervention, it helps users optimize their electricity usage and reduce energy costs.



Electricity Pricing & Automation



**MAX. 120A** Max. Charge/ Discharge Current 120A



**PV OVERSIZE** 1.5 Times PV Oversize





MPPT CHANNELS Up to 2 MPPT Channels



**UPS FUNCTION** 



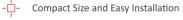
**PARALLEL** Max.6 Parallel Stacking

Support for Time-of-use Optimization



Build in Anti-feed-in Function





AFCI (Optional) & Rapid Shutdown Ready



Smart Monitoring & Remote Firmware Upgrade

The charging and discharging power of the battery is greater



Off-grid mode, with a larger load capacity, the maximum load can be 6KVA

Technical Data	AF4K-SLP	AF4.6K-SLP	AF5K-SLP	AF5.5K-SLP	AF6K-SLI
PV Input					
Max. Input Power (kW)	6	6.9	7.5	8.3	9
Max. PV Voltage (V)			550		
MPPT Range (V)			80 - 500		
Full MPPT Range (V)	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)	4.0	4.6	5.0	5.5	6.0
Max. Charge/Discharge Current (A)			120		
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)	19.0	22.0	23.0	26.0	28.0
Max Continuous Power (kVA)	4.0	4.6	5.0	5.5	6.0
Nominal Grid Current (A)	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 2	42 @ 220 / 207 to 25	3 @ 230	
Nominal Grid Frequency (Hz)			50 / 60		
Power Factor		1 default (adjus	stable from 0.8 leading	to 0.8 lagging)	
Current THD (%)			< 3		
AC Load Output					
Max Continuous Current (A)	19.0	22.0	23.0	26.0	28.0
Max Continuous Power (kVA)	4.0	4.6	5.0	5.5	6.0
Max Peak Current (A) (10min)	27.3 / 26.1	31.4 / 30	34.1 / 32.7	37.8 / 36.1	41.0 / 39.2
Max Peak Power (kVA) (10min)	6.0	6.9	7.5	8.3	9.0
Nominal AC Voltage L-N (V)			220 / 230		
Nominal AC Frequency (Hz)			50 / 60		
Switching Time (ms)			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					
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		
nsulation Resister Detection			Yes		
PV Arc Detection			Yes		
Enclosure Protect Level			IP65 / NEMA4X		
AC/DC surge protection			Type II		
General Data					
Dimensions (W x H x D, mm)			370 x 535 x 192		
Veight (kg)			20.5		
Гороlоду			Transformerless		
Cooling			Intelligent Fan		
Relative Humidity			0 - 100 %		
Operating Temperature Range (°C)			- 25 to 60		
Operating Altitude (m)			< 4000		
Standby Consumption (W)			< 10		
Mounting			Wall Bracket		
Communication with RSD			SUNSPEC		
Display & Communication Interfaces		LCD, LED, RS4	185, CAN, Wi-Fi, GPRS,	4G, Sunspec	
Certification & Approvals	NRS097, G99, EN	50549-1. C10/C11. AS4777	.2, VDE-AR-N4105, VDE	0126, IEC62109-1, IEC621	109-2. IEC62477-

### **Off-Grid Inverter**

### Single Phase / 6 kW



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

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

The Afore energy storage inverter features Smart Electricity Pricing & Automation, an energy management tool based on real-time electricity pricing strategies. It continuously monitors electricity price fluctuations and dynamically adjusts device operation accordingly. Operating 24/7 fully automatically without the need for manual intervention, it helps users optimize their electricity usage and reduce energy costs.



AI EMS
Electricity Pricing
& Automation



MAX. 120A Max. Charge/ Discharge Current 120A



PV OVERSIZE
2 Times PV Oversize



MPPT CHANNELS
Up to 2 MPPT Channels



Support Li-ion / Lead-acid

■ Technical Data AF6K-1L PV Input Max. Input Power (kW) 12 Max. PV Voltage (V) 550 MPPT Range (V) 80 - 500 Full MPPT Range (V) 170 - 500 Normal Voltage (V) 360 100 Startup Voltage (V) 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) 6 Max. Charge/Discharge Current (A) 120 Battery Normal Voltage (V) 51.2 Battery Voltage Range (V) 40 - 60 Battery Type Li-ion / Lead-acid etc. AC Charge (Grid and Generator) Max. Continuous Current (A) 28 Max. Continuous Power (kVA) Nominal Grid Current (A) 26.1 Nominal Grid Voltage (V) L/N/PE, 220Vac, 230Vac Nominal Grid Frequency (Hz) 50 / 60 Power Factor 1 AC Output Nominal Current (A) 26.1 Max. Continuous Current (A) 28 Max. Continuous Power (kVA) Max. Continuous Apparent Power (kVA) Nominal AC Voltage (V) L/N/PE, 220Vac, 230Vac Nominal AC Frequency (Hz) 50 / 60 Power Factor 1 Output Voltage Waveform Pure Sine Wave Overload Capacity 1.5 times / 10S THDV 3% Max Parallel Nr. 6 Efficiency 97.0 CEC Efficiency (%) Max. Efficiency (%) 97.6 98.1 PV to Bat. Efficiency (%) Bat. between AC Efficiency (%) 96.8 Protection PV Reverse Polarity Protection Yes Over Current/Voltage Protection Yes AC Short Circuit Protection **Residual Current Detection** Yes Ground Fault Monitoring Yes Insulation Resister Detection Yes PV Arc Detection Yes Ingress protection (IP) IP66 **Protective Class** Class I Non-isolated (PV - AC - BAT) Inverter Isolation OVC III (AC Main), OVC II (DC) Overvoltage Category Surge protection Surge III **General Data** 370 x 535 x 192 Dimensions (W x H x D, mm) Weight (kg) 20.5 Topology Transformerless Cooling Intelligent Fan 0 - 100 % Relative Humidity Operating Temperature Range (°C) - 25 to 60 (Derating 45) Operating Altitude (m) < 4000 Standby Consumption (W) < 10 Wall Bracket Mounting Communication with RSD SUNSPEC

Display & Communication Interfaces LCD, LED, RS485, CAN, Wi-Fi, GPRS, 4G, Sunspec

# **Single Phase Hybrid Storage Inverter**

7-12 kW



The Afore AF low voltage series storage Inverters are designed to increase energy independence for homeowners. The power range is from 7kW to 12kW, compatible with low voltage (40-60V) batteries.

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

Thanks for the UPS function (switch time < 10ms), that 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 Afore energy storage inverter features Smart Electricity Pricing & Automation, an energy management tool based on real-time electricity pricing strategies. It continuously monitors electricity price fluctuations and dynamically adjusts device operation accordingly. Operating 24/7 fully automatically without the need for manual intervention, it helps users optimize their electricity usage and reduce energy costs.



Electricity Pricing



MAX. 370A Max. Charge/ Discharge Current 370A





1.5 Times PV Oversize



MPPT CHANNELS Up to 2 MPPT Channels



**UPS FUNCTION** Switch Time < 10ms



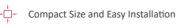
**PARALLEL** Max.6 Parallel Stacking



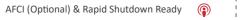
INPUT

Higher Yields		
upport for Time-of-use Optimization	Ø	
Configurable Operation Modes	0	





Build in Anti-feed-in Function





Technical Data	AF7K-SL	AF8K-SL	AF9K-SL	AF10K-SL	AF11K-SL	AF12K-SI			
PV Input									
Max. Input Power (kW)	10.5	12	13.5	15	16.5	18			
Max. PV Voltage (V)			9	50					
MPPT Range (V)			80 -	900					
Full MPPT Range (V)	180 - 850	200 - 850	225 - 850	250 - 850	275 - 850	300 - 850			
Normal Voltage (V)			6	50					
Startup Voltage (V)	100								
Max. Input Current (A)	26 + 18.5								
Max. Short Current (A)	32 + 25								
No. of MPP Tracker / No. of PV String	2/2								
Battery Port									
Max. Charge/Discharge Power (kW)	10.5	12	13.5	15	16.5	18			
Max. Charge/Discharge Current (A)	220	250	280	310	340	370			
Normal Charge/Discharge Current(A)	180	200	230	250	275	300			
Battery Normal Voltage (V)			51	2					
Battery Voltage Range (V)			40	- 60					
Battery Type			Li-ion / Lea	ıd-acid etc.					
AC Grid									
Max Continuous Current (A)	32	37	41	46	50	55			
Max Continuous Power (kVA)	7	8	9	10	11	12			
Nominal Grid Current (A)	32 / 31	37 / 35	41/39	46 / 44	50 / 48	55 / 52			
Nominal Grid Voltage (V)	,	0.,00		/ 230	55, 15				
Nominal Grid Frequency (Hz)				/ 60					
Power Factor		1 defa		0.8 leading to 0.8 la	gging)				
Current THD (%)				3	8881				
AC Load Output									
Max Continuous Current (A)	32	37	41	46	50	55			
Max Continuous Power (kVA)	7	8	9	10	11	12			
Max Peak Current (A) (60s)	48 / 46	55.5 / 52.5	61.5 / 58.5	68 / 66	75 / 72	82 / 78			
Max Peak Power (kVA) (60s)	10.5	12	13.5	15	16.5	18			
Nominal AC Voltage L-N (V)	10.5	12		/ 230	10.5	10			
Nominal AC Frequency (Hz)				/ 60					
Switching Time (ms)				nless					
Voltage THD (%)				3					
Efficiency			`	J					
			94	5.8					
CEC Efficiency (%)				3.1					
Max. Efficiency (%)  Protection			30	). <u>1</u>					
PV Reverse Polarity Protection			V	es					
Bat. Reverse Polarity Protection				es					
Over Current/Voltage Protection				es					
Anti-Islanding Protection				es					
AC Short Circuit Protection				es					
Residual Current Detection				es					
Ground Fault Monitoring				es					
PV Arc Detection				es					
Enclosure Protect Level				66					
AC/DC surge protection				oe II					
General Data			1 9 1						
Dimensions (W x H x D, mm)			600 x 4	00 x 250					
Weight (kg)				0					
Topology				merless					
Cooling				ent Fan					
Relative Humidity				00 %					
· · · · · · · · · · · · · · · · · · ·									
Operating Temperature Range (°C)				- 60 000					
Operating Altitude (m) Standby Consumption (W)									
Standby Consumption (W)				10					
Mounting Communication with PSD				racket					
Communication with RSD			SUN	SPEC					

## **Single Phase Hybrid Storage Inverter**

8-12 kW



The Afore AF low voltage series storage Inverters are designed to increase energy independence for homeowners. The power range is from 8kW to 12kW, compatible with low voltage (40-60V) batteries.

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

Thanks for the UPS function (switch time < 10ms), that 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 Afore energy storage inverter features Smart Electricity Pricing & Automation, an energy management tool based on real-time electricity pricing strategies. It continuously monitors electricity price fluctuations and dynamically adjusts device operation accordingly. Operating 24/7 fully automatically without the need for manual intervention, it helps users optimize their electricity usage and reduce energy costs.



**Electricity Pricing** & Automation



Max. Charge/ Discharge Current 240A





1.5 Times PV Oversize



MPPT CHANNELS Up to 3 MPPT Channels



**UPS FUNCTION** Switch Time < 10ms



PARALLEL Max.6 Parallel Stacking



Higher Yields		 		Colorful touch LCD, User-friendly
Support for Time-of-use Optimization	0	1	εŧ	Build in Anti-feed-in Function
Configurable Operation Modes	°0	!	<b>→</b>	Compact Size and Easy Installation
AFCI (Optional) & Rapid Shutdown Ready		1		Smart Monitoring & Remote Firmware Upgrade

Technical Data	AF8K-SLP	AF9K-SLP	AF10K-SLP	AF11K-SLP	AF12K-SLP
PV Input					
Max. Input Power (kW)	12	13.5	15	16.5	18
Max. PV Voltage (V)			550		
MPPT Range (V)			80 - 500		
Full MPPT Range (V)	150 - 500	170 - 500	190 - 500	210 - 500	230 - 500
Normal Voltage (V)			360		
Startup Voltage (V)			100		
Max. Input Current (A)			18.5 x 3		
Max. Short Current (A)			26 x 3		
No. of MPP Tracker / No. of PV String			3 / 1+1+2		
Battery Port					
Max. Charge/Discharge Power (kW)	8.0	9.0	10	11	12
Max. Charge/Discharge Current (A)	200	240	240	240	240
Battery Normal Voltage (V)			51.2		
Battery Voltage Range (V)			40 - 60		
Battery Type			Li-ion / Lead-acid et	с.	
AC Grid & Diesel Gen (Optional)					
Max Continuous Current (A)	37	41	46	50	55
Max Continuous Power (kVA)	8.0	9.0	10	11	12
Nominal Grid Current (A)	36.4 / 34.8	41 / 39.2	45.5 / 43.5	50 / 47.9	54.6 / 52.2
Nominal Grid Voltage (V)		198 to 24	2 @ 220 / 207 to 2	53 @ 230	
Nominal Grid Frequency (Hz)			50 / 60		
Power Factor		1 default (adjust	able from 0.8 leadin	ng to 0.8 lagging)	
Current THD (%)			< 3		
AC Load Output					
Max Continuous Current (A)	37	41	46	50	55
Max Continuous Power (kVA)	8	9	10	11	12
Max Peak Current (A) (10min)	55.5	61.5	69	75	82.5
Max Peak Power (kVA) (10min)	12	13.5	15	16.5	18
Nominal AC Voltage L-N (V)			220 / 230		
Nominal AC Frequency (Hz)			50 / 60		
Switching Time (ms)			Seamless		
Voltage THD (%)			< 3		
Efficiency			. 0		
European Efficiency (%)			96.8		
Max. Efficiency (%)			98.1		
Protection			30.1		
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					
PV Arc Detection			Yes		
Enclosure Protect Level			Yes		
General Data			IP66		
			785 x 614 x 258		
Dimensions (W x H x D, mm)					
Weight (kg)			51		
Topology			Transformerless		
Cooling  Rolative Humidity			Intelligent Fan		
Relative Humidity			0 - 100 %	۸۲۱	
Operating Temperature Range (°C)		•	25 to 60 (Derating	45)	
Operating Altitude (m)			< 4000		
Standby Consumption (W)			< 30		
Mounting			Wall Bracket		
Communication with RSD			SUNSPEC		
Display & Communication Interfaces			485, CAN, Wi-Fi, GP		
		CE IECC31	16, IEC61727, IEC616	83 IEC60068	
Certification & Approvals EMC		CE, IEC621	10, 11.001727, 11.0010	703, ILC00000	

# Wall-mounted Residential ESS









Scalable up to 30kWh

Model

### AF5000W-LP

Parameter		
Total Energy		5.22kWh
Usable Energy		4.96kWh
Voltage		44.8~57.6Vdc
Nominal Voltage		51.2Vd.c.
Rated Capacity		102Ah
Max.Charge Volt	age	57.6Vd.c.
Nominal Dischar	ging Current	60A
Nominal Chargin	g Current	60A
Weight		47kg
Dimension(mm)	(H*L*W)	680*480*180mm
Max.recommend	ded DOD	95%
Operating Condi	tion	Indoor or outdoor
Operating	Charging	0~50°C
Temperature	Discharging	-15~50°C
Storage Tempera	ature Range	$>$ 1 month 0~35°C / $\leq$ 1 month -20~45°C
Humidity		15% $\sim$ 85%RH (No Condensation)
Over Voltage Cat	tegory	II
Cooling Type		Natural cooling
Case Material		Metal
Installation		Wall-mounted or floor-standing
IP Rating		IP 66
Protective Class		I
Max.Connection	Number	6P
Communication		CAN/ RS485
Battery Protection	on	Over-current/Over-voltage/Short circuit/ Under-voltage/Over temperature
Certificates		CE,IEC62619,IEC61000,IEC62040,IEC63056,UN38.3,MSDS

<sup>\*</sup>Testing conditions based on temperature 25°C at the beginning of life. Total Energy/Usable Energy are measured with a standard test method: 0.2C Charge and Discharge. As per the characteristics of lithium batteries, such parameters as the charge/ discharge current and efficiency listed above are subject to change.

# Wall-mounted Residential ESS









**Built-in BMS** Protection



Reliable Backup Power





#### Model

#### AF10000W-LA0

Parameter				
Total Energy	10.49kWh			
Usable Energy	9.97kWh			
Voltage	44.8~57.6Vdc			
Nominal Voltage	51.2Vd.c.			
Rated Capacity	57.6Vd.c.			
Max.Charge Voltage	205Ah			
Nominal Discharging Current	100A(1P) /160A(2P~6P)			
Nominal Charging Current	100A(1P) /160A(2P~6P)			
Veight	87kg			
Dimension(mm)(H*L*W)	670*430*230mm			
Max.recommended DOD	95%			
Operating Condition	Indoor or outdoor			
Operating Charging	0~55°C			
Temperature Discharging	-15~55°C			
Standard Ambient Temperature Range	0~40°C			
Storage Temperature Range	>1 month 0~35°C / ≤1 month -20~45°C			
Humidity	15% $\sim$ 85%RH (No Condensation)			
Over Voltage Category	II			
Cooling Type	Natural cooling			
Case Material	Metal			
nstallation	floor-standing			
P Rating	IP 66			
Heating unit(optional)	130W			
Protective Class	ı			
Max. Connection Number	6P			
Communication	CAN / RS485 / Wifi			
Battery Protection	Over-current/Over-voltage/Short circuit/ Under-voltage/Over-temperature			
Certificates	CE,UN38.3,MSDS			

<sup>\*</sup>Testing conditions based on temperature 25°C at the beginning of life. Total Energy/Usable Energy are measured with a standard test method: 0.2C Charge and Discharge. As per the characteristics of lithium batteries, such parameters as the charge/ discharge current and efficiency listed above are subject to change.

# **Movable Residential ESS**





**Large Capacity** 



**Built-in BMS Protection** 



**Reliable Backup Power** 







Model

#### AF16000W-LZ

Total Energy	16.07kWh			
Usable Energy	15.27kWh			
Voltage	44.8~57.6Vd.c.			
Nominal Voltage	51.2Vd.c.			
Rated Capacity	314Ah			
Max.Charge Voltage	57.6Vd.c.			
Nominal Discharging Current	150A(1P) /160A(2P~6P)			
Nominal Charging Current	150A(1P) /160A(2P~6P)			
Weight	120kg			
Dimension(mm)(H*L*W)	800*680*230mm			
Max.recommended DOD	95%			
Operating Condition	Indoor or outdoor			
Operating Charging	0~55°C			
Temperature Discharging	-15~55°C			
Standard Ambient Temperature Range	0~40°C			
Storage Temperature Range	0°C to 40°C @60+25% Relative Humidity			
Humidity	15% $\sim$ 85%RH (No Condensation)			
Over Voltage Category	II			
Cooling Type	Natural cooling			
Case Material	Metal			
Installation	Floor-standing			
IP Rating	IP 66			
Heating unit(optional)	150W			
Protective Class	ı			
Max. Connection Number	6P			
Communication	CAN / RS485			
WiFI	Yes			
Battery Protection	Over-current/Over-voltage/Short circuit/ Under-voltage/Over-temperature			

<sup>\*</sup>Testing conditions based on temperature 25°C at the beginning of life. Total Energy/Usable Energy are measured with a standard test method: 0.2C Charge and Discharge. As per the characteristics of lithium batteries, such parameters as the charge/ discharge current and efficiency listed above are subject to change.

### **Three Phase Hybrid Storage Inverter**

### 7-12 kW (LV Battery Supported)



The Afore AF low voltage series storage Inverters are designed to increase energy independence for homeowners. The power range is from 7kW to 12kW, compatible with low voltage (40-60V) batteries.

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

Thanks for the UPS function (switch time < 10ms), that 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 Afore energy storage inverter features Smart Electricity Pricing & Automation, an energy management tool based on real-time electricity pricing strategies. It continuously monitors electricity price fluctuations and dynamically adjusts device operation accordingly. Operating 24/7 fully automatically without the need for manual intervention, it helps users optimize their electricity usage and reduce energy costs.



AI EMS Electricity Pricing



MAX. 370A Max. Charge/ Discharge Current 370A





100% UNBALANCE MPPT CHANNELS



Support Unbalance Load Up to 2 MPPT Channels







PARALLEL Max.6 Parallel Stacking



INPUT



		Higher	Yields
upport for	Time-of-use	Optimi	zatior







48V low voltage battery, transformer isolation design



Build in Anti-feed-in Function

Compact Size and Easy Installation



Smart Monitoring & Remote Firmware Upgrade



Technical Data	AF7K-TL	AF8K-TL	AF9K-TL	AF10K-TL	AF11K-TL	AF12K-TL
PV Input						
Max. Input Power (kW)	10.5	12	13.5	15	16.5	18
Max. PV Voltage (V)			95			
MPPT Range (V)			80 -			
Full MPPT Range (V)	180 - 850	200 - 850	225 - 850	250 - 850	275 - 850	300 - 850
Normal Voltage (V)			65			
Startup Voltage (V)			10	00		
Max. Input Current (A)				18.5		
Max. Short Current (A)				+ 25		
No. of MPP Tracker / No. of PV String			2 /	/ 2		
Battery Port						
Max. Charge/Discharge Power (kW)	10.5	12	13.5	15	16.5	18
Max. Charge/Discharge Current (A)	220	250	280	310	340	370
Normal Charge/Discharge Current(A)	180	200	230	250	275	300
Battery Normal Voltage (V)			51			
Battery Voltage Range (V)			40 -			
Battery Type			Li-ion / Lea			
AC Grid			2. 1011 / 200	u uo.u e.e.		
Max Continuous Current (A)	11	12	14	15	17	18
Max Continuous Power (kVA)	7	8	9	10	11	12
Nominal Grid Current (A)	11 / 10.5	12 / 11.5	14 / 13	15 / 14.5	17 / 16	18 / 17.5
Nominal Grid Voltage (V)	11/ 10.0	11 / 11.5	380 /		27, 20	10 / 17 10
Nominal Grid Frequency (Hz)			50 /			
Power Factor		1 defa	·	0.8 leading to 0.8 la	gging)	
Current THD (%)		I dela	<		55'''5/	
AC Load Output				3		
Max Continuous Current (A)	11	12	14	15	17	18
Max Continuous Power (kVA)	7	8	9	10	11	12
Max Peak Current (A) (60s)	22 / 21	24 / 23	28 / 26	30 / 29	34 / 32	36 / 35
Max Peak Power (kVA) (60s)	10.5	12	13.5	15	16.5	18
Nominal AC Voltage L-N (V)	10.5	12	380 /		10.5	10
Nominal AC Frequency (Hz)			50 /			
Switching Time (ms)			Sean			
Voltage THD (%)			<			
Efficiency						
CEC Efficiency (%)			96	i 8		
Max. Efficiency (%)			98			
Protection						
PV Reverse Polarity Protection			Ye	25		
Bat. Reverse Polarity Protection			Ye			
Over Current/Voltage Protection			Ye			
Anti-Islanding Protection			Ye			
AC Short Circuit Protection			Ye			
Residual Current Detection			Ye			
Ground Fault Monitoring			Ye			
PV Arc Detection			Ye			
Enclosure Protect Level			IP			
AC/DC surge protection			Тур	e II		
General Data						
Dimensions (W x H x D, mm)			600 x 40	00 x 250		
Weight (kg)			3	0		
Topology			Transfor	merless		
Cooling			Intellig	ent Fan		
Relative Humidity			0 - 1	00 %		
Operating Temperature Range (°C)			-25	- 60		
Operating Altitude (m)			< 30	000		
Standby Consumption (W)			<:	10		
Mounting				racket		
Communication with RSD				SPEC		
Display & Communication Interfaces			LED, RS485, CAN, V			

### **Three Phase Hybrid Storage Inverter**

3-15 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 15kW, 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), that 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 Afore energy storage inverter features Smart Electricity Pricing & Automation, an energy management tool based on real-time electricity pricing strategies. It continuously monitors electricity price fluctuations and dynamically adjusts device operation accordingly. Operating 24/7 fully automatically without the need for manual intervention, it helps users optimize their electricity usage and reduce energy costs.



**Electricity Pricing** & Automation



**WIDE RANGE** Voltage Range (80-600V)



**PV OVERSIZE** 1.5 Times PV Oversize



String Current Up To 18.5A

MAX. 18.5Adc **UPS FUNCTION** 



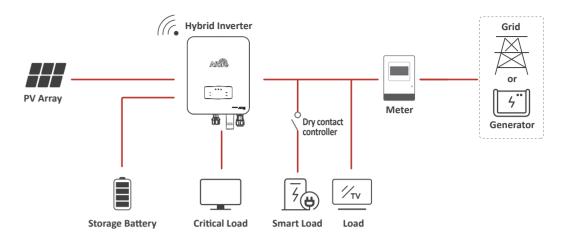
COMPACT



**GENERATOR** Generator Backup Support

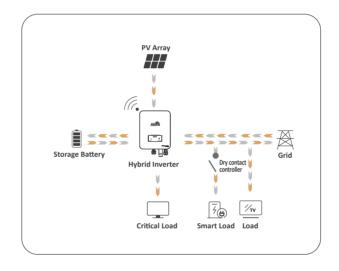


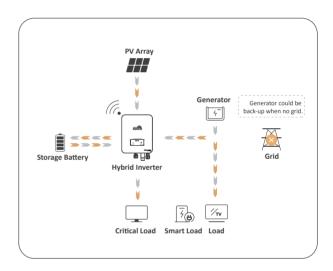
#### For New Storage System:



### Optimizing Self-Consumption (on-grid) +

### **Emergency Power Supply(off-grid)**

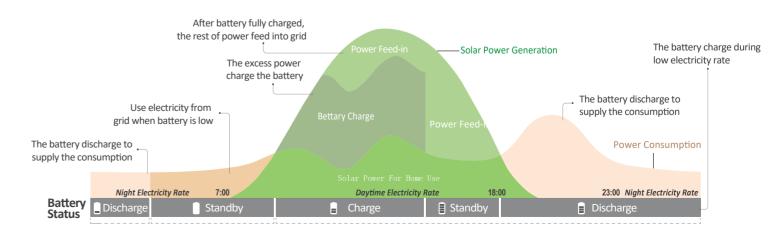




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#### **Optimizing Self-Consumption Mode**

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.



Technical Data	AF3K-MTH	AF4K-MTH	AF5K-MTH	AF6K-MTH
PV Input				
Max. DC Input Power (kW)	5	6	7.5	9
Max. PV Voltage (V)		10		
Rated DC Input Voltage (V)		62		
DC Input Voltage Range (V)		150-		
MPPT Voltage Range (V)		150-	-850	350.050
Full MPPT Range(V)		200-850		250-850
Start-up Voltage (V)		16		
Max. DC Input Current (A)		18.5		
Max. Short Current(A)		25		
No. of MPPT Tracker / Strings		2/	/2	
Battery Port	250	250	350	350
Battery Nominal Voltage (V)	350	350	350	350
Battery Voltage Range (V)		80-		
Max. Charge/Discharge Current (A)	2	3		
Max. Charge/Discharge Power (kW)	3	4	5	6
Charging Curve			ages	
Compatible Battery Type		Li-ion / Lead-acid / Sodiu	in metal chloride battery	
AC Grid Nominal AC Output Power (kW)	3	4	5	6
Nominal AC Output Power (kW)				
Max. AC Input/Output Power (kVA)	4.5 / 3.3	6 / 4.4	7.5 / 5.5	9 / 6.6
Max. AC Output Current (A)	5.3	7 20.N.DE/20	8.5	10.5
Nominal AC Voltage (V)		3P+N+PE/3P		
Nominal AC Frenquency (Hz)		50/		
Power Factor		1 (-0.8-0.8		
Current THD (%)		<3	i %	
AC Load Output (Back-up)	2		_	
Nominal Output Power (kVA)	3	4	5	6
Nominal Output Voltage (V)		3P+N+PE/3P		
Nominal Output Frequency (Hz)		50/		
Nominal Output Current (A)	4.4	5.8	7.3	8.7
Peak Output Power	3.3kVA, 60s	4.4kVA, 60s	5.5kVA, 60s	6.6kVA, 60s
THDV (with linear load)		<3		
Switching Time (ms)		<1	10	
Efficiency		07.5	-00/	
Europe Efficiency		97.5		
Max. Efficiency		98.0		
Battery Charge/Discharge Efficiency		98.0	00%	
Protection				
Reverse Polarity Protection		Ye		
Over Current / Voltage Protection		Ye		
Anti-islanding Protection		Ye		
AC Short-ciruit Protection		Ye		
Leakage Current Detection  Ground Fault Manitoring		Ye		
Ground Fault Monitoring Grid Monitoring		Ye Ye		
Enclosure Protect Level		YE		
AC/DC surge protection		Тур		
General Data		Тур	·• ··	
Dimensions (W x H x D, mm)		370 x 598.	5 v 192mm	
Weight (kg)			kg	
Topology		Transfor		
Cooling Concept		Natural Co		
Relatively Humidity		0-10		
Operating Temperature Range (°C)		-25 to		
Operating Altitude (m)		-23 to		
Standby Consumption (W)		< 40		
Display & Communication Interfaces			Vi-Fi, GPRS, 4G, Sunspec	
Certification & Approvals	NRS097 G98/G99 FNEOE	49-1, C10/C11, AS4777.2, VD		2109-1 IFC62109-2 IFC6247
	, UJUJ UJJ, LINJUJ	c.c. c.i. not///.c. VD		,UL_UU_ Z, ILUUZ4/

Technical Data	AF8K-MTH	AF10K-MTH	AF12K-MTH	AF15K-MTH
PV Input				
Max. DC Input Power (kW)	12	15	18	22.5
Max. PV Voltage (V)		1	1000	
Rated DC Input Voltage (V)			620	
DC Input Voltage Range (V)		150	0-1000	
MPPT Voltage Range (V)		15	0-850	
Full MPPT Range(V)	300-850		500-850	
Start-up Voltage (V)			160	
Max. DC Input Current (A)			8.5x2	
Max. Short Current(A)			25 x 2	
No. of MPPT Tracker / Strings			2/2	
Battery Port				
Battery Nominal Voltage (V)	350	350	450	500
Battery Voltage Range (V)		80	0-600	
Max. Charge/Discharge Current (A)			30	
Max. Charge/Discharge Power (kW)	8	10	12	15
Charging Curve			Stages	
Compatible Battery Type		Li-ion / Lead-acid / Sod	lium metal chloride battery	
AC Grid				
Nominal AC Output Power (kW)	8	10	12	15
Max. AC Input/Output Power (kVA)	12 / 8.8	15 / 11	18 / 13.2	22.5 / 16.5
Max. AC Output Current (A)	13.5	17	21.5	27
Nominal AC Voltage (V)			3P+PE 230/400	
Nominal AC Frenquency (Hz)			0/60	
Power Factor			8 adjustable)	
Current THD (%)		•	<3%	
AC Load Output (Back-up)	•		12	45
Nominal Output Power (kVA)	8	10	12	15
Nominal Output Voltage (V)			3P+PE 230/400	
Nominal Output Frequency (Hz)	44.6		0/60	24.0
Nominal Output Current (A)	11.6	14.5	17.4	21.8
eak Output Power	8.8kVA, 60s	11kVA, 60s	13.2kVA, 60s	16.5kVA, 60s
THDV (with linear load)			<3%	
Switching Time (ms)			<10	
Efficiency		0-	7.50%	
europe Efficiency			:	200/
Max. Efficiency	98	3.20%		30%
Battery Charge/Discharge Efficiency		90	8.00%	
Protection Reverse Polarity Protection			Yes	
Neverse Polarity Protection Over Current / Voltage Protection			Yes	
Anti-islanding Protection			Yes	
AC Short-ciruit Protection			Yes	
eakage Current Detection			Yes	
Ground Fault Monitoring			Yes	
Grid Monitoring			Yes	
Enclosure Protect Level			IP66	
AC/DC surge protection			ype II	
General Data				
Dimensions (W x H x D, mm)		370 x 598	8.5 x 192mm	
Veight (kg)			22kg	
opology			formerless	
Cooling Concept			igent Fan	
Relatively Humidity			100%	
Operating Temperature Range (°C)			to 60 °C	
Operating Altitude (m)			4000	
Standby Consumption (W)			<5	
Display & Communication Interfaces		LCD, LED, RS485. CAN.	, Wi-Fi, GPRS, 4G, Sunspec	
Certification & Approvals	NRS097, G98/G99, EN50549		-AR-N4105, VDE0126, IEC621	L09-1. IEC62109-2. IFC6
	, , ,	. , ,	,,	,

### **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), that 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 Afore energy storage inverter features Smart Electricity Pricing & Automation, an energy management tool based on real-time electricity pricing strategies. It continuously monitors electricity price fluctuations and dynamically adjusts device operation accordingly. Operating 24/7 fully automatically without the need for manual intervention, it helps users optimize their electricity usage and reduce energy costs.



AI EMS
Electricity Pricing
& Automation



BATTERY
Support
Sodium metal chloride battery



WIDE RANGE Voltage Range (150-800V)



100% UNBALANCE



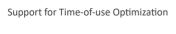
MAX. 40Adc UP: String Current Up To 40A Swit

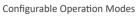


UPS FUNCTION Switch Time < 10ms



INPUT Support Generator

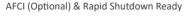




**→** 1

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

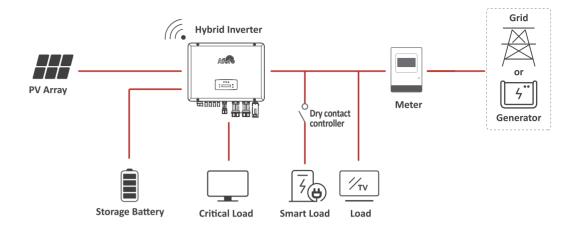
Build in Anti-feed-in Function





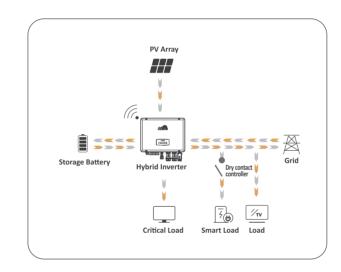
Smart Monitoring & Remote Firmware Upgrade

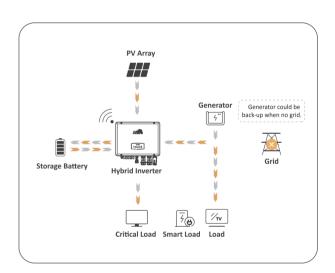
### For New Storage System:



#### **Optimizing Self-Consumption (on-grid)**

### Emergency Power Supply (off-grid)

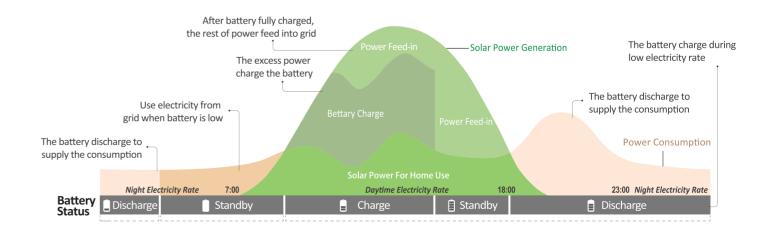




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### **Optimizing Self-Consumption Mode**

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.



Technical Data	AF3K-TH	AF4K-TH	AF5K-TH	AF6K-TH	AF8K-TH	AF10K-TH
PV Input	_		3.5		42	45
Max. DC Input Power (kW)	5	6	7.5	9	12	15
Max. PV Voltage (V)			10			
Rated DC Input Voltage (V)			62			
DC Input Voltage Range (V)			150-			
MPPT Voltage Range (V)		200 850	150-		200 850	500-850
Full MPPT Range(V)		200-850		250-850	300-850	500-850
Start-up Voltage (V)			16			
Max. DC Input Current (A)			20:			
Max. Short Current(A)  No. of MPPT Tracker / Strings			2/			
Battery Port			2/			
•	200	200	200	250	300	400
Battery Nominal Voltage (V)	200	200	150-		300	400
Battery Voltage Range (V)  May Charge (Discharge Current (A)			3			
Max. Charge/Discharge Current (A)  Max. Charge/Discharge Power (kW)	3	4	5	6	8	10
		4			0	
Charging Curve Compatible Battery Type		Li-ion	/ Lead-acid / Sodiu		atterv	
AC Grid		11 1011	, Lead dela / Sould			
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/			
Nominal AC Frenquency (Hz)			50/			
Power Factor			1 (-0.8-0.8			
Current THD (%)			<3			
AC Load Output (Back-up)						
Nominal Output Power (kVA)	3	4	5	6	8	10
Nominal Output Voltage (V)			230/	400		
Nominal Output Frequency (Hz)			50/			
Nominal Output Current (A)	4.4	5.8	7.3	8.7	11.6	14.5
Peak Output Power	3.3kVA, 60s	4.4kVA, 60s	5.5kVA, 60s	6.6kVA, 60s	8.8kVA, 60s	11kVA, 60s
THDV (with linear load)	,	,	<3			,
Switching Time (ms)			<1			
Efficiency						
Europe Efficiency			97.5	50%		
Max. Efficiency		98.0		70 70	98.3	20%
Battery Charge/Discharge Efficiency			98.0	00%		
Protection						
Reverse Polarity Protection			Υe	es		
Over Current / Voltage Protection			Ye	es		
Anti-islanding Protection			Ye	es		
AC Short-ciruit Protection			Ye	es		
Leakage Current Detection			Ye	es		
Ground Fault Monitoring			Ye	es		
Grid Monitoring			Ye	es		
Enclosure Protect Level			IP6	65		
AC/DC surge protection			Тур	e II		
General Data						
Dimensions (W x H x D, mm)			558 x 535	x 260 mm		
Weight (kg)			29	kg		
Topology			Transfor	merless		
Cooling Concept		Natural Co			Intellig	ent Fan
			0-10	00%		
Relatively Humidity			25 40	60 °C		
Relatively Humidity Operating Temperature Range (°C)						
Operating Temperature Range (°C) Operating Altitude (m)			-25 (0			
Operating Temperature Range (°C) Operating Altitude (m) Standby Consumption (W)				000		
Operating Temperature Range (°C) Operating Altitude (m)		LCD,	<40	000 5	nspec	

Technical Data	AF12K-TH	AF15K-TH	AF17K-TH	AF20K-TH	AF25K-TH	AF30K-TH
PV Input						
Max. DC Input Power (kW)	18	22.5	25.5	30	37.5	45
Max. PV Voltage (V)			10			
Rated DC Input Voltage (V)			62			
DC Input Voltage Range (V)			150-			
MPPT Voltage Range (V)			150-			
ull MPPT Range(V)			500-			
Start-up Voltage (V)	20. 2	20.22	16			2
Max. DC Input Current (A)	20x2	20+32	32		40:	
Max. Short Current(A)	30x2	30+48	48		60:	
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-			
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 Sta	ages		
Compatible Battery Type		Li-ion	/ Lead-acid / Sodiu	m metal chloride b	attery	
AC Grid						
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,			
Nominal AC Frenquency (Hz)			50,	<sup>′</sup> 60		
Power Factor			1 (-0.8-0.8	adjustable)		
Current THD (%)			<3	5%		
AC Load Output (Back-up)						
Nominal Output Power (kVA)	12	15	17	20	25	30
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	13.2kVA, 60s	16.5kVA, 60s	18.7kVA, 60s	22kVA, 60s	27.5kVA, 60s	33kVA, 60s
THDV (with linear load)			<3	%		
Switching Time (ms)			<:	10		
Efficiency						
Europe Efficiency	9	7.50%	97.8	80%	98.00%	98.10%
Max. Efficiency		98.3	30%		98.	50%
Battery Charge/Discharge Efficiency			98.0	00%		
Protection						
Reverse Polarity Protection			Ye	es		
Over Current / Voltage Protection			Ye	es		
Anti-islanding Protection			Ye	es		
AC Short-ciruit Protection			Ye	es		
eakage Current Detection			Ye	es		
Ground Fault Monitoring			Ye	es		
Grid Monitoring			Ye	es		
Enclosure Protect Level			IP	55		
AC/DC surge protection			Тур	e II		
General Data						
Dimensions (W x H x D, mm)				x 260 mm		
Weight (kg)			29kg		36	kg
Гороlogy			Transfor	merless		
Cooling Concept			Intellig	ent Fan		
Relatively Humidity			0-1	00%		
Operating Temperature Range (°C)			-25 to	0 60 °C		
Operating Altitude (m)			<40	000		
Standby Consumption (W)			<	5		
Display & Communication Interfaces		LCD,	LED, RS485, CAN, V	/i-Fi, GPRS, 4G, Sur	ispec	
Certification & Approvals	NRS097, G99,	EN50549-1, C10/C11,	AS4777.2, VDE-AR-	N4105, VDE0126,	EC62109-1, IEC6210	09-2, IEC6247

### **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 and 120-650V) batteries.

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

Thanks for the UPS function (switch time < 10ms), that 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 Afore energy storage inverter features Smart Electricity Pricing & Automation, an energy management tool based on real-time electricity pricing strategies. It continuously monitors electricity price fluctuations and dynamically adjusts device operation accordingly. Operating 24/7 fully automatically without the need for manual intervention, it helps users optimize their electricity usage and reduce energy costs.



**Electricity Pricing** & Automation



**BATTERY** Support Sodium metal chloride battery



**Battery Voltage** Minimum 80V





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







MAX. 20Adc Support Unbalance Load String Current Up To 20A



**UPS FUNCTION** 

Support for Time-of-use Optimization





AFCI (Optional) & Rapid Shutdown Ready

Configurable Operation Modes

Build in Anti-feed-in Function

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

Smart Monitoring & Remote Firmware Upgrade

echnical Data	AF3K-THP	AF4K-THP	AF5K-THP	AF6K-THP	AF8K-THP	AF10K-THP	AF12K-THI
PV Input							
Max. DC Input Power (kW)	5	6	7.5	9	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)		200-850		250-850	300-850	500	-850
Start-up Voltage (V)		200 030		160	300 030	. 300	
Max. DC Input Current (A)				20x2			
Max. Short Current(A)				30x2			
No. of MPPT Tracker / Strings				2/2			
-				2/2			
Sattery Port	100	100	100	150	200	250	300
Battery Nominal Voltage (V)	100	100		130	200	i	
Battery Voltage Range (V)			80-600			120	-650
Max. Charge/Discharge Current (A)				50			
Max. Charge/Discharge Power (kW)	3	4	5	6	8	10	12
Charging Curve				3 Stages			
Compatible Battery Type			Li-ion / Lead-aci	d / Sodium metal o	hloride battery		
AC Grid							
Nominal AC Output Power (kW)	3	4	5	6	8	10	12
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	18 / 13.2
Max. AC Output Current (A)	5.3	7	8.5	10.5	13.5	17	21.5
Nominal AC Voltage (V)				230/400			
Nominal AC Frenquency (Hz)				50/60			
Power Factor			1 (	-0.8-0.8 adjustabl	e)		
Current THD (%)				<3%			
AC Load Output (Back-up)							
Nominal Output Power (kVA)	3	4	5	6	8	10	12
Nominal Output Voltage (V)		· · · · · · · · · · · · · · · · · · ·		230/400			
Nominal Output Frequency (Hz)							
Nominal Output Current (A)			7.2	50/60	11.6	445	47.4
	4.4	5.8	7.3	8.7		14.5	17.4
Peak Output Power	3.3kVA, 60s	4.4kVA, 60s	5.5kVA, 60s	6.6kVA, 60s	8.8VA, 60s	11VA, 60s	13.2kVA, 60
THDV (with linear load)				<3%			
Switching Time (ms)				<10			
Efficiency							
urope Efficiency				97.50%			
Max. Efficiency		98.	00%		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-ciruit Protection				Yes			
eakage Current Detection				Yes			
Ground Fault Monitoring				Yes			
Grid Monitoring				Yes			
Inclosure Protect Level				IP65			
AC/DC surge protection				Type II			
General Data				76			
Dimensions (W x H x D, mm)				558 x 535 x 260 mr	n		
Weight (kg)				29kg			
Topology				Transformerless			
Cooling Concept		Matural C	Convection	11 011310111111111111111111111111111111		Intelligent Fan	
		ivatural (	Convection	0 1009/		micingent ran	
Relative Humidity				0-100%			
Operating Temperature Range (°C)				-25 to 60 °C			
Operating Altitude (m)				<4000			
				<5			
standby Consumption (W)							
Display & Communication Interfaces Certification & Approvals				35, CAN, Wi-Fi, GPI 77.2, VDE-AR-N410			

### **Three Phase Hybrid Storage Inverter**

36-60 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 36kW to 60kW, 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

Thanks for the UPS function (switch time < 10ms), that 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 Afore energy storage inverter features Smart Electricity Pricing & Automation, an energy management tool based on real-time electricity pricing strategies. It continuously monitors electricity price fluctuations and dynamically adjusts device operation accordingly. Operating 24/7 fully automatically without the need for manual intervention, it helps users optimize their electricity usage and reduce energy costs.



**Electricity Pricing** & Automation



Support Sodium metal chloride battery





WIDE RANGE Voltage Range (150-800V)





**100% UNBALANCE** Support Unbalance Load



String Current Up To 40A



Switch Time < 10ms



INPUT

Support 280AH, 315AH battery system



Build in Anti-feed-in Function

2 times AC Oversize

Configurable Operation Modes



100% unbalanced output, each phase

AFCI (Optional) & Rapid Shutdown Ready



Smart Monitoring & Remote Firmware Upgrade

echnical Data	AF36K-TH	AF40K-TH	AF45K-TH	AF50K-TH	AF60K-TH
PV Input					
Aax. DC Input Power (kW)	54	60	67.5	75	90
Aax. PV Voltage (V)			1000		
ated DC Input Voltage (V)			620		
OC Input Voltage Range (V)			150-1000		
MPPT Voltage Range (V)			150-850		
full MPPT Range(V)			500-850		
tart-up Voltage (V)			160		
Max. DC Input Current (A)			40 x 4		
Max. Short Current(A)			48 x 4 4/8		
Io. of MPPT Tracker / Strings			4/6		
Battery Port			500		
lattery Nominal Voltage (V)					
Asses Change (Rical ages (V)			150-800		
Max. Charge/Discharge Current (A)	26	40	120		
Max. Charge/Discharge Power (kW)	36	40	45	50	60
Charging Curve		1:: /1	3 Stages	Jantala Isaasaan	
Compatible Battery Type		Li-ion / Lead-	acid / Sodium metal ch	lioride battery	
AC Grid	36	40	AF	50	
Iominal AC Output Power (kW)	36	40	45	50	60
Max. AC Input/Output Power (kVA)	54 / 39.6	60 / 44	67.5 / 49.5	75 / 55	90 / 66
Max. AC Output Current (A)	60.5	67	75.5	83.5	96
Iominal AC Voltage (V)			230/400		
Iominal AC Frenquency (Hz)			50/60		
ower Factor		1	(-0.8-0.8 adjustable)	)	
Current THD (%)			<3%		
AC Load Output (Back-up)	25	40	45	50	60
Nominal Output Power (kVA)	36	40	45	50	60
Iominal Output Voltage (V)			230/400		
Iominal Output Frequency (Hz)			50/60		
Max. AC Output Current (A)	60.5	67	75.5	83.5	96
Peak Output Power	39.6kVA, 60s	44kVA, 60s	49.5kVA, 60s	55kVA, 60s	66kVA, 60s
HDV (with linear load)			3%		
witching Time (ms)			<10		
Efficiency					
urope Efficiency	98.20%	98.30%	98.30%	98.30%	98.30%
Max. Efficiency			98.60%		
sattery Charge/Discharge Efficiency			99.00%		
Protection					
leverse Polarity Protection			Yes		
Over Current / Voltage Protection			Yes		
anti-islanding Protection			Yes		
AC Short-ciruit Protection			Yes		
eakage Current Detection			Yes		
Ground Fault Monitoring			Yes		
Grid Monitoring			Yes		
inclosure Protect Level			IP66		
AC/DC surge protection			Type II		
General Data					
Dimensions (W x H x D, mm)			867 x 715 x 306 mm		
Veight (kg)			81kg		
opology			Transformerless		
Cooling Concept			Intelligent Fan		
telative Humidity			0-100%		
Operating Temperature Range (°C)			-25 to 60 °C		
Operating Altitude (m)			<4000		
tandby Consumption (W)			<100		
Display & Communication Interfaces			485, CAN, Wi-Fi, GPRS,	-	
Certification & Approvals		0540 4 040/044 40	777.2, VDE-AR-N4105,	VDE0436 JECC3400	4 15000400 0

# **Stack-mounted Residential ESS**





LFP Battery, Intelligent BMS and protective hardware providing complete protection



**ACCURACY**Dynamic SOC calibration



COMPATIBILITY
Suitable for most
mainstream inverters



EASY INSTALLATION Scalable up to 56 packs

Model	AF10000W	AF15000W	AF20000W	AF25000W	AF30000W	AF35000W	AF40000W
	-HN						
Darameter							

Parameter							
Battery Type				LFP			
Number of Connection	2pcs	3pcs	4pcs	5pcs	6pcs	7pcs	8pcs
Total Energy	10.44kWh	15.66kWh	20.88kWh	26.11kWh	31.33kWh	36.55kWh	41.77kWh
Usable Energy	9.92kWh	14.88kWh	19.84kWh	24.81kWh	29.77kWh	34.73kWh	39.69kWh
Max.Parallel Connections				8P			
Voltage	102.4 Vd.c.	153.6 Vd.c.	204.8 Vd.c.	256 Vd.c.	307.2 Vd.c.	358.4 Vd.c.	409.6 Vd.c
Nominal Charging Voltage	115.2 Vd.c.	172.8 Vd.c.	230.4 Vd.c.	288 Vd.c.	345.6 Vd.c.	403.2 Vd.c.	460.8 Vd.c
Max. Charging Current				50A			
Nominal Discharging Curre	nt			50A			
Discharge Cut-off Voltage	89.6 Vd.c.	134.4 Vd.c.	179.2 Vd.c.	224 Vd.c.	268.8 Vd.c.	313.6 Vd.c.	358.4 Vd.c
Battery Efficiency				95%			
Battery Protection		Over-curre	nt/Over-voltage/	Short-circuit/Und	er-voltage/Over t	emperature	
Maximum Recommended	DOD			95%			
Communication				CAN,RS485			
IP Rating				IP66			
Operating Temperature				-15~50 ℃			
Altitude				≤5,000m			
Humidity			15%~8	85%RH (No conde	ensation)		
Dimension	(720±2)* (420±2)* (616±3)mm	(720±2)* (420±2)* (766±5)mm	(720±2)* (420±2)* (916±7)mm	(720±2)* (420±2)* (1066±9)mm	(720±2)* (420±2)* (1216±11)mm	(720±2)* (420±2)* (1366±13)mm	(720±2)* (420±2)* (1566±13)mr
Net Weight	(116±3)kg	(163±5)kg	(210±7)kg	(257±9)kg	(304±11)kg	(351±13)kg	(398±13)kg
Heating Unit				51.2V/65W*4			
Certificates	С	E-EMC,IEC62619	,IEC62477,IEC620	)40,IEC62100,IEC6	60068-2-52,IEC60	730,UN38.3,MSD	S
Installation			9	Stacked Installation	on		

#### Model

#### AF5000W-HM

Parameter		
Total Energy	5.22 kWh	
Usable Energy*	4.96 kWh	
Voltage Range	44.8~57.6 Vd.c	
Nominal Voltage	51.2 V	
Max.Charging Voltage	57.6 V	
Max.Continuous Charging Current	50 A	
Max.Continuous Discharge Current	50 A	
DOD	95%	
Dimension ((L*W*H),mm)	(720±2)*(420±2)*(174±3)mm	
Net Weight	(47±2)kg	
Operating Condition	Indoor or outdoor	
Operating Temperature	-15~50 °C	
Humidity	15% $\sim$ 85%RH (No condensation)	
Configuration	(8S)2S	
Heating Unit	51.2V/65W*4	

# **Stack-mounted Residential ESS**





Support mixing of old and new batteries



Superior Voltage Stability & Regulation



High Efficiency and Extended Runtime



Optimal Battery Performance and Health



Design Flexibility and Compatibility



Protection

Model

#### AF8000W-HA4 AF16000W-HA4 AF24000W-HA4 AF32000W-HA4

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Parameter							
Number of Packs	1pcs	2pcs	3pcs	4pcs			
Total Energy	8.03kWh	16.07kWh	24.11kWh	32.15kWh			
Usable Energy*	7.63kWh	15.27kWh	22.91kWh	30.55kWh			
Charging Voltage Range on HV Side		504~6	57 Vd.c				
Discharging Voltage Range on HV Side		481.6~6	557 Vd.c				
Nominal Voltage on HV Side		5	76				
Nominal Current on HV Side	7A	14A	21A	28A			
Voltage Range on LV Side		22.4~2	9.2Vd.c.				
Nominal Voltage on LV Side		25.6	Vd.c.				
Nominal Current on LV Side		15	66A				
Recommended DOD	95%						
Max.Number of Parallel Connections			4				
Communication		CAN/RS	485/WIFI				
Dimension (L*W*H)	(800±2)* (270±2)* (610±3) mm	(800±2)* (270±2)* (950±3) mm	(800±2)* (270±2)* (1290±3)mm	(800±2)* (270±2)* (1630±3) mm			
Net Weight	(116±3)kg	(186±5)kg	(256±7)kg	(326±7)kg			
Running Environment		Indoor o	r Outdoor				
Operating Temperature		-15^	′52°C				
Humidity		15%~85%RH (N	lo condensation)				
Cooling Type		Natura	l cooling				
WiFi Frequency Range		2412MHz	~2472MHz				
Max. WiFi Transmission Power		200	dBm				
IP Rating		IP	66				
Installation		Stack-r	nounted				
Power Source		Station-	powered				
	Station-powered						

<sup>\*</sup>Testing conditions based on temperature 25°C at the beginning of life.

Total Energy/Usable Energy are measured with a standard test method: 0.2C Charge and Discharge.

As per the characteristics of lithium batteries, such parameters as the charge/ discharge current and efficiency listed above are subject to change.

### **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), that it 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 Afore energy storage inverter features Smart Electricity Pricing & Automation, an energy management tool based on real-time electricity pricing strategies. It continuously monitors electricity price fluctuations and dynamically adjusts device operation accordingly. Operating 24/7 fully automatically without the need for manual intervention, it helps users optimize their electricity usage and reduce energy costs.



AI EMS
Electricity Pricing
& Automation



PV OVERSIZE

1.5 Times PV Oversize



MPPT CHANNELS
Up to 3 MPPT Channels



UPS FUNCTION



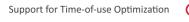
PARALLEL Max.6 Parallel Stacking



INPUT Support Generator



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









Build in Anti-feed-in Function

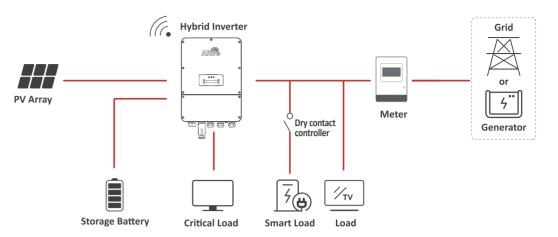


Compact Size and Easy Installation



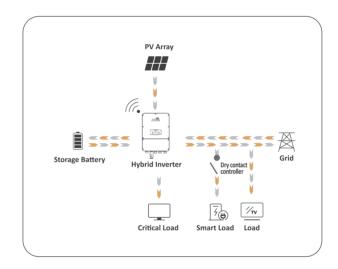
Smart Monitoring & Remote Firmware Upgrade

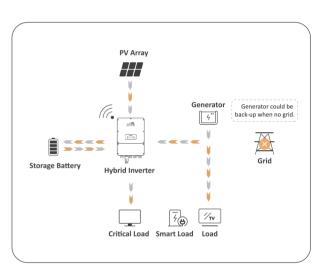
### For New Storage System:



### **Optimizing Self-Consumption (on-grid)**

### + Emergency Power Supply (off-grid)

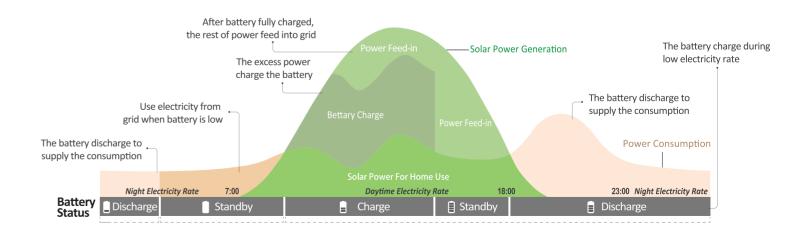




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### **Optimizing Self-Consumption Mode**

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.



Technical Data	AF3K-DH	AF3.6K-DH	AF4K-DH	AF4.6K-DH	AF5K-DH	AF5.5K-DF				
PV Input  Any Input Dower (I/A/)	4.5	F.4	5.0	6.0	3.5	0.2				
Max. Input Power (kW)	4.5	5.4	6.0	6.9	7.5	8.3				
Max. PV Voltage (V)				500 - 550						
MPPT Range (V) Full MPPT Range (V)	110 550	125 550			105 550	200 550				
Normal Voltage (V)	110 - 550	135 - 550	150 - 550	170 - 550 360	185 - 550	200 - 550				
Startup Voltage (V)										
Max. Input Current (A)		100 15.5 x 2								
Max. Short Current (A)				0 x 2						
No. of MPP Tracker / No. of PV String				/2						
Battery Port				, -						
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)	4.5 / 4.5	3.4 / 3.4		50	7.5 / 7.5	0.5 / 0.5				
Battery Normal Voltage (V)				130						
Battery Voltage Range (V)				- 495						
Battery Type			Li-ion / Le	ad-acid etc.						
AC Grid										
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				
Nominal Grid Current (A)	12.5 / 14.5	15.0 / 17.4	17.0 /19.3	19.5 / 22.2	20.9 / 24.1	23.0 / 26.5				
Nominal Grid Voltage (V)	,			/ 183 to 229 @ 208		20.0 / 20.3				
Nominal Grid Frequency (Hz)				60						
Power Factor		1 defa	ult (adjustable fron	n 0.8 leading to 0.8 lag	gging)					
Current THD (%)				< 3						
Gen Input & AC Load Output										
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-N (V)			120	/ 104						
Nominal AC Frequency (Hz)				60						
Switching Time (ms)				10						
Voltage THD (%)			<	< 3						
Efficiency			_							
CEC Efficiency (%)				7.0						
Max. Efficiency (%)				7.6						
PV to Bat. Efficiency (%)				8.1						
Bat. between AC Efficiency (%)			9	6.8						
Protection			,	,						
PV Reverse Polarity Protection				es /es						
Bat. Reverse Polarity Protection  Over Current/Voltage Protection				es /os						
Anti-Islanding Protection				′es ′es						
AC Short Circuit Protection				es es						
Residual Current Detection				es es						
Ground Fault Monitoring				res						
Insulation Resister Detection				′es						
PV Arc Detection				′es						
Rapid Shut Down			Y	'es						
Protection Degree			NEN	MA4X						
AC/DC surge protection			Ту	pe II						
General Data										
Dimensions (W x H x D)			400 x 600 x 229 m	m / 15.7 x 23.6 x 9.0 in						
Weight			25 kg	/ 55 lbs						
Topology			Tranfo	rmerless						
Cooling			Intelli	gent Fan						
Relative Humidity			0 - 1	100 %						
Operating Temperature Range			- 25 to 60 °	C / - 77 to 140 °F						
Operating Altitude			< 4000 m	/ < 13123 ft						
Standby Consumption (W)			<	10						
Mounting				Bracket						
Communication with RSD				ISPEC						
Display & Communication Interfaces				Wi-Fi, GPRS, 4G, Sunsp						
Certification & Approvals	UL 1741 SA, UL 1									

Technical Data PV Input	AF6K-DH	AF7K-DH	AF7.6K-DH	AF8K-DH	AF8.6K-DH	AF9.6K-DI
Max. Input Power (kW)	9.0	10.5	11.4	12.0	12.9	15.0
Max. PV Voltage (V)			60	00		
MPPT Range (V)			80 -	550		
Full MPPT Range (V)	220 - 550	170 - 550	185 - 550	195 - 550	210 - 550	235 - 550
Normal Voltage (V)			36	50		
Startup Voltage (V)			10	00		
Max. Input Current (A)	15.5 x 2	1		15.5 x 3		
Max. Short Current (A)	26.0 x 2	1		26.0 x 3		
No. of MPP Tracker / No. of PV String	2/2	1		3/3		
Battery Port						
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)			5	0		
Battery Normal Voltage (V)			23	30		
Battery Voltage Range (V)			80 -	495		
Battery Type			Li-ion / Lea	d-acid etc.		
AC Grid						
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
Nominal Grid Current (A)	25.0 /28.9	29.2 / 33.7	31.7 / 36.6	33.4 /38.5	35.9 / 41.4	40.0 / 46.2
Nominal Grid Voltage (V)			211 to 264 @ 240 /	/ 183 to 229 @ 208		
Nominal Grid Frequency (Hz)			6	0		
Power Factor		1 def	ault (adjustable from	0.8 leading to 0.8 la	agging)	
Current THD (%)			<	3		
Gen Input & AC Load Output						
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-N (V)			120 /	/ 104		
Nominal AC Frequency (Hz)			6	0		
Switching Time (ms)			< :			
Voltage THD (%)			<	3		
Efficiency						
CEC Efficiency (%)			97			
Max. Efficiency (%)			97			
PV to Bat. Efficiency (%)			98			
Bat. between AC Efficiency (%)			96	5.8		
Protection						
PV Reverse Polarity Protection				es		
Bat. Reverse Polarity Protection			Ye			
Over Current/Voltage Protection				es		
Anti-Islanding Protection			Ye			
AC Short Circuit Protection			Ye			
Residual Current Detection  Ground Fault Monitoring				es es		
Ground Fault Monitoring  Insulation Resister Detection			Ye			
PV Arc Detection			Ye			
Rapid Shut Down				es es		
Protection Degree				IA4X		
AC/DC surge protection			Typ			
General Data			Тур	- ii		
Dimensions (W x H x D)			400 x 600 x 229 mm	1/15 7 y 22 6 y 0 0 in		
Weight						
Гороlogy			25 kg /			
Cooling			Tranfor Intellig			
Relative Humidity			0 - 1			
Operating Temperature Range				/ - 77 to 140 °F		
Operating Altitude				< 13123 ft		
Standby Consumption (W)						
Mounting			\\\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\			
Communication with RSD			SUN:	racket SPEC		
Display & Communication Interfaces		100	), LED, RS485, CAN, W		nec	
- op.or a communication interfaces		LCL	, LLD, N3403, CAN, W	, o. no, 40, oulls	PCC	

Single Phase PV String Inverter 1-3 kW



Single Phase PV String Inverter 3-6 kW



Single Phase PV String Inverter 7-10 kW



■ Technical Data	HNS1000TL-1	HNS1500TL-1	HNS2000TL-1	HNS2500TL-1	HNS3000TL-1	HNS3000TL	HNS3600TL	HNS4000TL	HNS5000TL	HNS6000TL	HNS7000TL	HNS8000TL	HNS9000TL	HNS10000TL
PV Input Data														
Max. DC Power ( W )	1500	2250	3000	3750	4200	4500	5400	6000	7000	8400	9800	11200	12600	14000
Max. DC Voltage ( V )	500	500	500	500	500	600	600	600	600	600	600	600	600	600
MPPT Voltage Range ( V )	50-500	50-500	50-500	50-500	50-500	70-550	70-550	70-550	70-550	70-550	70-550	70-550	70-550	70-550
MPPT Full Power Voltage Range ( V )	70 - 500	110-500	145-500	180-500	220-500	110-550	130-550	145-550	180-550	220-550	220-550	220-550	220-550	220-550
Rated Input Voltage ( V )	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		360		1			360	200 000	220 330	1 220 330	360		
Start-up Voltage ( V )			50					70			I I I	7		
Max. Input Current ( A )			14					14 x 2			14+26 26+26			
Max. Short Current ( A )			18		i			18 x 2			18+35 35+35			
No. of MPP Tracker / No. of PV String			1/1		i			2/2			2/3 2/4			
Input Connector Type			MC4			MC4				1	M		/-	
AC Output Data			IVIC4					IVIC4			!	IVIC	-4 	
Max. Output Power (VA)	1100	1650	2200	2750	3300	3300	3960	4400	5500	6600	7700	8800	9900	11000
	1000	1500	2000	2500	3000	3000	3600	4000	5000	6000	7000	8000	9000	10000
Nominal Output Power ( W )	6	9	12	13	15	15	17.5	20	24	28.7	33.6	38.3	45	50
Max. Output Current ( A )	0				13	13				20.7	33.0			50
Nominal Output Voltage ( V )			PE, 220Vac, 230Vac, 2					220Vac, 230Vac, 240Vac				L/N/PE, 220Vac,		1\
Grid Voltage Range	180Vac-276Vac (According to local standard)				180Vac-276Vac	(According to local sta	ndard)		1	L80Vac-276Vac (Accor		<u>a)</u>		
Nominal Output Frequency ( Hz )	50/60					50/60			I I	50/				
Grid Frequency Range			-66Hz (According to lo		1 1			Iz (According to local sta			45-55Hz/54-66Hz (According to local standard)			
Output Power Factor		1 default (adju	stable from 0.8 leadir	ng to 0.8 lagging)	i		1 default (adjustab	le from 0.8 leading to 0	.8 lagging)		1 default (adjustable from 0.8 leading to 0.8 lagging)			gging)
Output Current THD					<3%				<3	%				
Efficiency														
Max. Efficiency	97.50%	97.80%	98.10%	98.10%	98.13%	98.20%	98.20%	98.20%	98.20%	98.20%	98.20%	98.20%	98.32%	98.40%
Euro Efficiency	96.60%	96.70%	96.80%	97.23%	97.56%	97.80%	97.82%	97.85%	97.90%	97.92%	97.95%	98.00%	98.00%	98.10%
Protection											ı			
PV Reverse Polarity Protection			YES					YES			I I	YE		
PV Insulation Resistance Detection	YES					YES				YE				
AC Short Circuit Protection			YES		i			YES			! !	YE		
AC Over Current Protection			YES		 		YES				 	YE	S	
AC Over Voltage Protection			YES		 		YES				 	YE	S	
Anti-Islanding Protection			YES		1		YES				1 1	YE	S	
Residual Current Detection			YES		I I	YES					I I	YE	S	
Over Temperature Protection			YES			YES					1	YE	S	
Integrated DC switch			YES		į	YES				: !	YE	S		
Surge Protection			Integrated (Type III)	)	1	Integrated (Type III)				Integrated (Type III)				
Smart IV Curve Scaning			YES		 	YES				YES				
Quick Arc Fault Circuit interruption			Optional		1	Optional				Optional				
General Data														
Dimensions (W x H x D, mm)			280 x 260 x 116		 			360 x 358 x 142			I I I	370 x 53	5 x 192	
Weight ( kg )			6		!			10			17	7	:	18
Protection Degree			IP65		!			IP66			1	IP6	56	
Enclosure Material			Aluminum		I I			Aluminum			! !	Alumi	num	
Ambient Temperature Range (°C)			-25 -+ 60					-25 -+ 60			<u> </u> 	-25 -	+ 60	
Humidity Range			0-100%		I I			0-100%			I I I	0-10		
Topology			Transformerless		<u> </u>	Transformerless				Transformerless				
Communication Interface		RS485 / WiF	i / Wire Ethernet / GF	PRS (ontional)				/ire Ethernet / GPRS (op	ntional)		: RS	6485 / WiFi / Wire Ethe		
Cooling Concept		1.5-05 / WII	Convection	(optional)	1		113-103 / 11111 / 11	Convection			Conve			t fan cooling
	<0.2	ZO 2									- Conve	<		Turi Cooling
Night Power Consumption ( W )	<0.2	<0.2	<1	<1	<1			<1			1 <del>1</del> 1			
Max. Operation Altitude ( m )			4000					4000				40	···	
Certifications and Standards		==: !:= =	C4000 C 2 511155 51	000 6 2 51:01000 7 7	FN64000 2 2					00.60.51/250.51555	C 2 ENGAGES 2 2 ====		44 ENGAGOO O 15	
EMC Standard		EN/IEC	61000-6-2, EN/IEC 61		, EN61000-3-3			1	EN/IEC 610		-6-3, EN61000-3-2, EN6	· · · · · · · · · · · · · · · · · · ·	-11, EN61000-3-12	
Safety Standard				8, UL1741, EN62109				IEC 60068, UL1741, EN62109						
Grid-connection	IEEE1547, CSA C	EE1547, CSA C22, EN50549, VDE4105, VDE0126, RD1699, ABNT NBR16149 & 16150, AS4777.2, NB/T32004, G98, IEC6172				004, G98, IEC61727		! IEEE154	47, CSA C22, EN50549,	VDE4105, VDE0126, F	RD1699, ABNT NBR16	149 & 16150, AS4777.2	2, NB/T32004, G99, IE	.C61727

### **Three Phase PV String Inverter**

MOTA www

Afore

3-25 kW

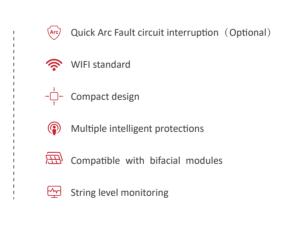


# Smart | Safety | Efficient

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.





















SMART Smart IV Curve Scanning



Technical Data	BNT003KTL	BNT004KTL	BNT005KTL	BNT006KTL	BNT008KTL	BNT010KTI	
PV Input Data							
Max. DC Power ( W )	5100	6000	7500	9000	12000	15000	
Max. DC Voltage ( V )			1100				
MPPT Voltage Range ( V )			150 - 10	00			
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							
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+P	E 230/400			
Grid Voltage Range		20	60Vac-519Vac (accordir	ng to local standar	d)		
Nominal Output Frequency ( Hz )			50/60				
Grid Frequency Range		45-	55Hz/55-65Hz(accordir	g to local standard	1)		
Output Power Factor			ult (adjustable from 0.8				
Output Current THD			<3%				
Efficiency							
Max. Efficiency			98.30%			98.70%	
Euro Efficiency	97.61%	97.65%	98.00%	98.	.05%	98.23%	
Protection			<u>'</u>				
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 Scaning			YES	,			
Quick Arc Fault Circuit Interruption			Optiona	al			
General Data			Орион				
Dimensions (W x H x D, mm)			370 x 535	x 192			
Weight ( kg )			16				
Protection Degree			IP66				
Enclosure Material			Alumin	um			
Ambient Temperature Range (°C)			-25 to 6				
Humidity Range			0-100%				
Topology			Transform				
Communication Interface		RS485 /	WiFi / Wire Ethernet / 0		unspec		
Cooling Concept		11.5-0.5 /	Convect		Intelligent	fan cooling	
Night Power Consumption ( W )			Convect	1011	intelligent	ian coolling	
Max. Operation Altitude ( m )			<u>&lt;1</u> ≤4000				
Certifications and Standards			≥4000				
		EN/IEC 61	000-6-2, EN/IEC 61000-	6-3 EN61000-2 2	EN61000-3-3		
EMC Standard		LIN/ILC 010	IEC 60068, UL17		F1401000-3-3		
Safety Standard		1555454			DD1600		
Grid-connection	IEEE1547, CSA C22, EN50549, VDE4105, VDE0126, RD1699, ABNT NBR16149 & 16150, AS4777.2, NB/T32004, G98, IEC61727						

	BNT012KTL	BNT013KTL	BNT015KTL	BNT017KTL	BNT020KTL	BNT025KT
PV Input Data						
Max. DC Power ( W )	18000	19500	22500	25500	30000	37500
Max. DC Voltage ( V )			110	00		
MPPT Voltage Range ( V )			150 - :	1000		
MPPT Full Power Voltage Range ( V )			500 -	850		
Rated Input Voltage ( V )			62	0		
Start-up Voltage ( V )			15			
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	_,.		M	24	_, .	
AC Output Data						
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			
Grid Voltage Range				ding to local standard	4)	
Nominal Output Frequency ( Hz )			50/6		1)	
Grid Frequency Range		45			١	
Output Power Factor			•	ding to local standard	,	
Output Current THD		1 deli	<3%	0.8 leading to 0.8 lagg	31118/	
			<b>\3</b> /	5		
Efficiency Max. Efficiency		98.70%			98.75%	
Euro Efficiency		98.23%			98.35%	
,		36.23/6			36.3376	
Protection PV Reverse Polarity Protection			YE	c c		
PV Insulation Resistance Detection			YE			
			YE			
AC Short Circuit Protection						
AC Over Current Protection			YE			
AC Over Voltage Protection			YE			
Anti-Islanding Protection			YE			
Residual Current Detection			YE			
Over Temperature Protection			YE			
Integrated DC switch			YE			
Surge Protection				d (Type II)		
Smart IV Curve Scaning			YE	ES		
Quick Arc Fault Circuit Interruption			Opti	onal		
General Data						
Dimensions (W x H x D, mm)	:			35 x 192		
Weight ( kg )	16	1			19	
Protection Degree			IP	66		
Enclosure Material			Alum	inum		
Ambient Temperature Range (°C)			-25 t	0 60		
Humidity Range			0-10	00%		
Гороlоду			Transfor	merless		
Communication Interface		RS485 /	WiFi / Wire Ethernet	/ GPRS (optional) / Su	inspec	
Cooling Concept			Intelligent	fan cooling		
Night Power Consumption ( W )			<	1		
Max. Operation Altitude ( m )			≤40	000		
Certifications and Standards						
EMC Standard	EN/	IEC 61000-6-2, EN/IE	C 61000-6-3, EN6100	00-3-2, EN61000-3-3,	EN61000-3-11, EN610	000-3-12
afety Standard			IEC 60068, U	JL1741, EN62109		
				49, VDE4105, VDE012		

### **Three Phase PV String Inverter**

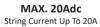
30-60 kW



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 housing 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 (which can be changed to Ethernet / GPRS). Check the system status anytime and anywhere via online portal or APP.







PV OVERSIZE Max. 1.5 Time PV Oversize Input



PROTECTION

Multiple Intelligent

Protections



ANTI-FLOW ant 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%



IP 68 Cooling Fan





Type II DC & AC lightning protection





Ø

AC output 1.1x continuous operation

	BNT030KTL	BNT036KTL	BNT040KTL	BNT050KTL	BNT060KT
PV Input Data					
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	38	x3	40 x 3	38 x 4
Max. Short Current ( A )	48x2	48	x3	48x3	48x4
No. of MPP Tracker / No. of PV String	2/5	3,	<b>/</b> 6	3/7	4/8
Input Connector Type	-		MC4	i	
AC Output Data					
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 )			P+N+PE /3P+PE 230/40		
Grid Voltage Range			Vac (according to local		
Nominal Output Frequency ( Hz )		200780-313	50/60	standardy	
Grid Frequency Range		<b>ΛΕ ΕΕ∐-7/ΕΕ</b>	-	al standard)	
			-65Hz (according to location	-	
Output Power Factor Output Current THD		I derauit (adju	stable from 0.8 leading	to 0.8 lagging)	
			<3%		
Efficiency	00.50%	00.65%	00.65%	00.000/	00.000/
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			\		
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 Scaning			YES		
Quick Arc Fault Circuit Interruption			Optional		
General Data					
Dimensions (W x H x D, mm)	450 x 485 x 210		710 x 47	0 x 236	
Weight ( kg )	26		44		51
Protection Degree			IP66		
Enclosure Material			Aluminum		
Ambient Temperature Range (°C)			-25 to 60		
Humidity Range			0-100%		
Topology			Transformerless		
Communication Interface		RS485 / WiFi / W	ire Ethernet / GPRS (op	tional) / Sunspec	
Cooling Concept		ı	ntelligent Fan Cooling		
Night Power Consumption ( W )			<1		
Max. Operation Altitude ( m )			≤4000		
Certifications and Standards			<u> </u>		
EMC Standard		FN/IFC 61000-6-2 F	N/IEC 61000-6-3 EN61	000-3-11, EN61000-3-12	)
Safety Standard					=
			60068, UL1741, EN621		
Grid-connection			2, EN50549, VDE4105, \ .6150, AS4777.2, NB/T3		

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### **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 housing 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 (which can be changed to Ethernet / GPRS). Check the system status anytime and anywhere via online portal or APP.



Intelligent string monitoring, Smart I-V curve scan

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Type II DC & AC Lighting Protection





MAX. 38Adc String Current Up to 38A



**PV OVERSIZE** >1.5 Time PV Oversize Input



POWER FACTOR Active and Reactive Power Compensation



**ANTI-FLOW** 

DES	Coolin	σFan
F U O	COUIIII	gian



Multiple Intelligent Protections

Compatible with 210 Solar Panel & bifacial module



Arc Fault Circuit Interrupter (AFCI) (Optional)



DC side supports "Y" connector

AC output 1.1x continuous operation

Technical Data	BNT070KTL	BNT075KTL	BNT080KTL	BNT090KTL	BNT100KTL	BNT110KTL			
PV Input Data									
Max. DC Power ( kW )	105	112.5	120	135	150	165			
Max. DC Voltage ( V )			1	100					
MPPT Voltage Range ( V )	200 - 1000								
MPPT Full Power Voltage Range ( V )	500 - 850								
Rated Input Voltage ( V )		620							
Start-up Voltage ( V )			3	300					
Max. Input Current ( A )			38	3 x 6					
Max. Short Current ( A )			48	3 x 6					
No. of MPP Tracker / No. of PV String			6	5/12					
Input Connector Type				ΛC4					
AC Output Data									
Max. Output Power ( kVA )	77	82.5	88	99	110	110			
Nominal Output Power ( kW )	70	75	80	90	100	110			
Max. Output Current ( A )	111	120	127	143	158	159.5			
Nominal Output Voltage ( V )				P+PE 230/400					
Grid Voltage Range				ording to local standar	d)				
Nominal Output Frequency ( Hz )				/60	,				
Grid Frequency Range		45		ording to local standard	d)				
Output Power Factor				n 0.8 leading to 0.8 lag	·				
Output Current THD		2 301	<3		<i>- - - - - - - - - -</i>				
Efficiency									
Max. Efficiency			go	9.00%					
Euro Efficiency		98.3			98.4	10%			
Protection		30.0		;	30.	.0,5			
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									
Smart IV Curve Scaning				ed (Type II) YES					
Quick Arc Fault Circuit Interruption				otional					
General Data			- Ο <u>ρ</u>	, correction					
Dimensions (W x H x D, mm)			983 v	610 x 318					
Weight ( kg )			303 X	78					
Protection Degree				P66					
Enclosure Material				minum					
Ambient Temperature Range (°C)				to 60					
Humidity Range				100%					
Topology				ormerless					
Communication Interface		DC/IOE /		et / GPRS (optional) / S	Sunsner				
Cooling Concept		N3463 /			Juliapec				
				t fan cooling					
Night Power Consumption ( W )				<1 4000					
Max. Operation Altitude ( m )				+000					
Certifications and Standards			00.60.50.50.65	20.64 51.61.5	FNG4000 2 1 -				
EMC Standard		EN/IEC 610		00-6-4, EN61000-3-11,	EN61000-3-12				
Safety Standard				UL1741, EN62109					
Grid-connection				549, VDE4105, VDE012 4777.2, NB/T32004, G					

### **Monitoring** AI—Electricity Pricing & Automation



Electricity Pricing & Automation is an energy management tool based on real-time electricity price strategy. It monitors electricity price fluctuations in real time and dynamically adjusts the operating status of equipment.

It runs automatically 24 hours a day, 7 days a week without manual intervention. It helps users optimize electricity usage and reduce electricity costs.











**Multiple Systems** 









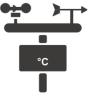
Wi-Fi / Ethernet / GPRS Data Sticker



Power Plant Data Logger



Zero injection Smart Meter(optional)



Weather Station

### **| Global Projects**

