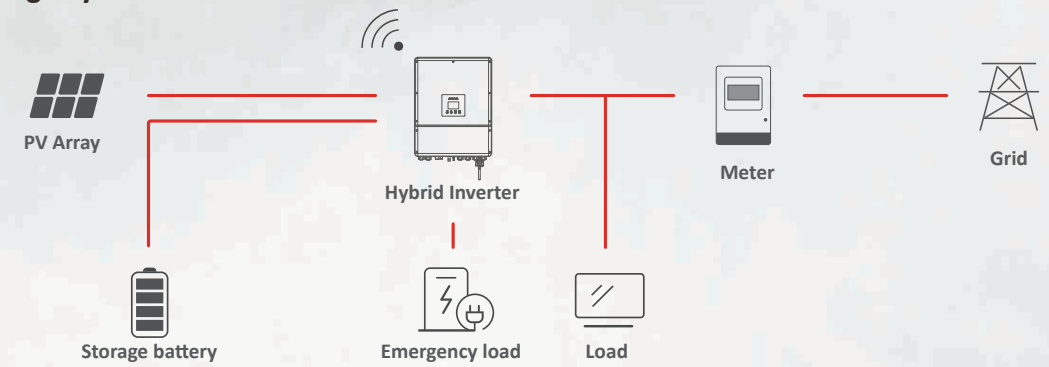


Hybrid Storage Inverter

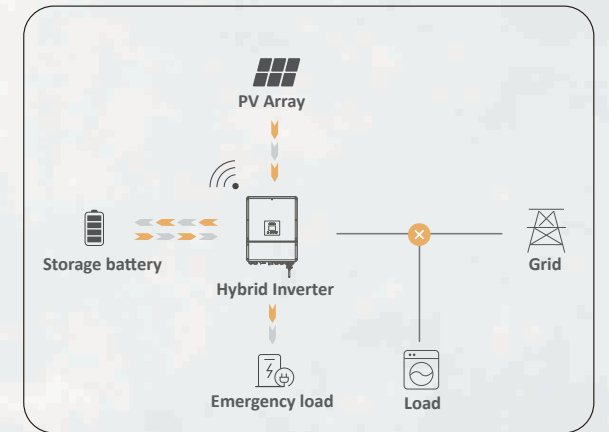
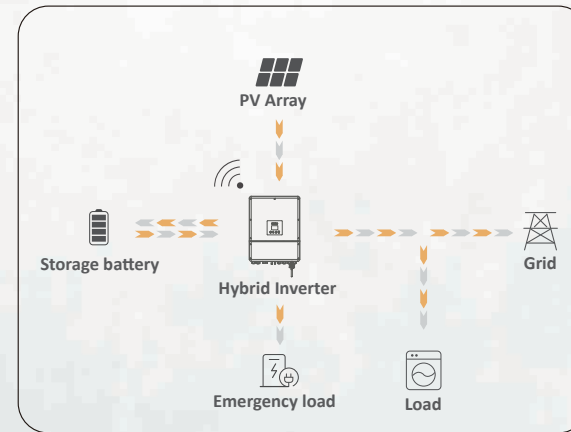
3-6 kW



For New Storage System:



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



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

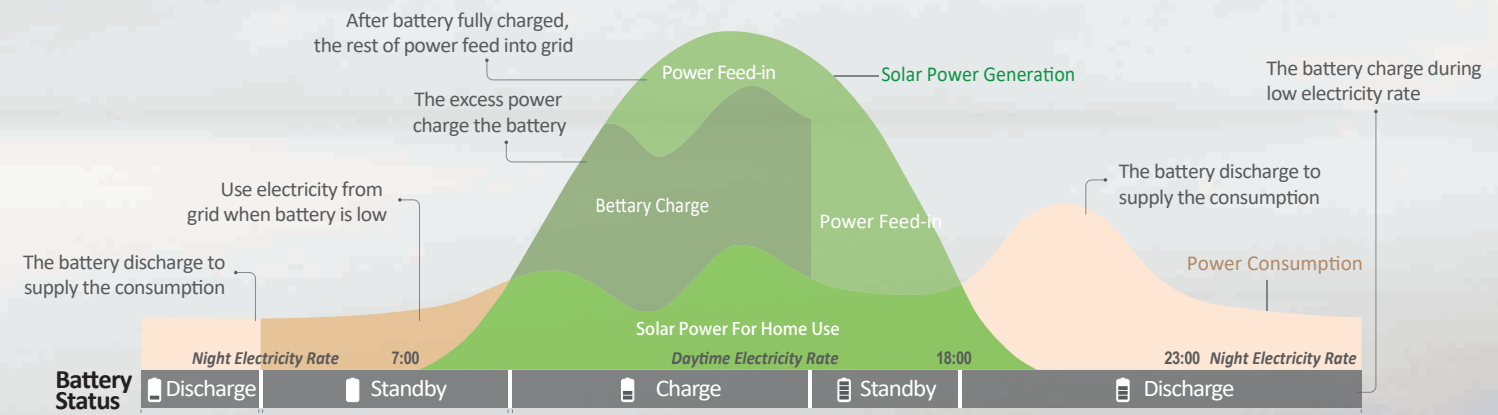
The storage inverter increases energy independence for homeowners. To optimize self-consumption, the battery automatically charged and discharged on the basis of customized setting. Significantly reduce the amount of energy purchased from public grid.

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

Optimizing Self-Consumption Mode

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

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



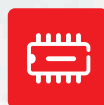
Solar Input	AF3k-SL	AF3.6k-SL	AF4k-SL	AF4.6k-SL	AF5k-SL	AF5.5k-SL	AF6k-SL
Max. DC Input Power (W)	6600	7600	8000	8600	9000	9600	10000
Rated DC Input Voltage (V)	360						
DC Input Voltage Range (V)	60-580						
MPPT Voltage Range (V)	50-550						
Start-up Voltage (V)	60						
Max. DC Input Current (A)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

Solar Input	AF3k-SH	AF3.6k-SH	AF4k-SH	AF4.6k-SH	AF5k-SH	AF5.5k-SH	AF6k-SH
Max. DC Input Power (W)	6600	8000	8000	10000	10000	10000	10000
Rated DC Input Voltage (V)	360						
DC Input Voltage Range (V)	60-580						
MPPT Voltage Range (V)	50-550						
Start-up Voltage (V)	60						
Max. DC Input Current (A)	20 x 2						
Nr. of MPPT Tracker	2						
Storage Battery	AF3k-SH	AF3.6k-SH	AF4k-SH	AF4.6k-SH	AF5k-SH	AF5.5k-SH	AF6k-SH
Battery Nominal Voltage (V)	288						
Battery Voltage Range (V)	85-360						
Max. Charge/Discharge Current (A)	30						
Max. Charge/Discharge Power (W)	6000/3000	7000/3600	8000/4000	9000/4600	10000/5000	10000/5500	10000/6000
Charging Curve	3 Stages						
Compatible Battery Type	Lithium-ion,Lead-Acid etc.						
Emergency Power Supply(EPS Mode)	AF3k-SH	AF3.6k-SH	AF4k-SH	AF4.6k-SH	AF5k-SH	AF5.5k-SH	AF6k-SH
EPS Nominal Output Power (W)	3000	3600	4000	4600	5000	5500	6000
EPS Nominal Output Voltage (V)	230						
EPS Nominal Output Frequency (Hz)	50/60						
EPS Nominal Output Current (A)	13	16	17.5	20	22	24	26
Peak Output Power	3600w,30s	4000w,30s	4600w,30s	5000w,30s	5500w,30s	6000w,30s	6500w,30s
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Over Current/Voltage Protection	Yes						
Anti-Islanding Protection	Yes						
AC Short Circuit Protection	Yes						
Leakage Current Detection	Yes						
Ground Fault Monitoring	Yes						
Grid Monitoring	Yes						
Protection Degree	IP65 / NEMA4X						
General Data	AF3k-SH	AF3.6k-SH	AF4k-SH	AF4.6k-SH	AF5k-SH	AF5.5k-SH	AF6k-SH
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Battery Bank & All-in-one Solution



10 Years Lifetime



BMS Build-in



Modular Expansion



LiFePO4

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