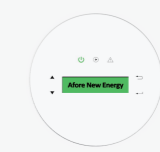




**Afore**



# All In One Energy Storage System Three Phase Storage Solution (HV)

Afore ATH Series is an all-in-one solar and storage solution that integrates the inverter, battery charger, UPS-level switching, and battery enclosure into a pre-wired modular system for easier and faster installation. The compact, elegantly designed, and robust unit is IP66 rated, so it can be mounted either inside or outside withstanding all weather conditions and brings a reduction of installation time of up to 50%.

## FOR SOLAR + ENERGY STORAGE SYSTEM

### POWER

3 / 4 / 5 / 6 / 8 / 10 / 12 / 15kW

### BATTERY CAPACITY

7.68kWh - 25.6kWh



IP66 Outdoor Design



Modular Design  
Plug & Play



AFCI Standard



Scalable Design Up  
To 25.6kWh



UPS function  
switch time ≤ 10ms

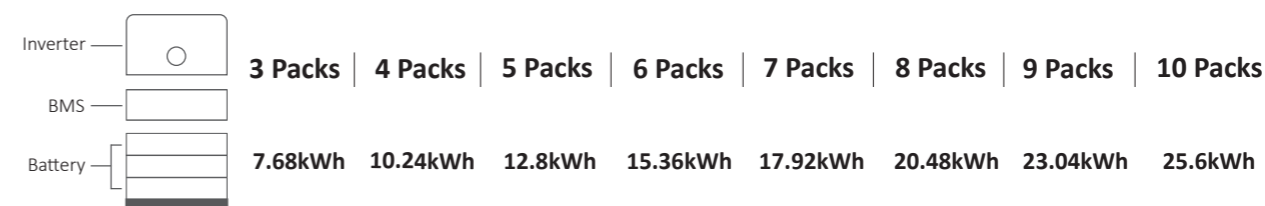


RSD Ready  
VPP Ready



## ■ Technical Data

	AF3K-ATH	AF4K-ATH	AF5K-ATH	AF6K-ATH	AF8K-ATH	AF10K-ATH	AF12K-ATH	AF15K-ATH
<b>PV Input</b>								
Max. DC Input Power (kW)	5	6	7.5	9	12	15	18	22.5
Max. PV Voltage (V)	1000							
Rated DC Input Voltage (V)	620							
DC Input Voltage Range (V)	150-1000							
MPPT Voltage Range (V)	150-850							
Full MPPT Range(V)	200-850		250-850		300-850		500-850	
Start-up Voltage (V)	160							
Max. DC Input Current (A)	20x2							
Max. Short Current(A)	30x2							
No. of MPPT Tracker / Strings	2/2							
<b>Battery Port</b>								
Battery Nominal Voltage (V)	150	200	200	250	300	350	450	500
Battery Voltage Range (V)	80-600							
Max. Charge/Discharge Current (A)	30							
Max. Charge/Discharge Power (kW)	3	4	5	6	8	10	12	15
Charging Curve	3 Stages							
Compatible Battery Type	Li-ion / Sodium-ion battery							
<b>AC Grid</b>								
Nominal AC Output Power (kW)	3	4	5	6	8	10	12	15
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	22.5 / 16.5
Max. AC Output Current (A)	5.3	7	8.5	10.5	13.5	17	21.5	27
Nominal AC Voltage (V)	230/400							
Nominal AC Frequency (Hz)	50/60							
Power Factor	1 (-0.8-0.8) adjustable							
Current THD (%)	<3%							
<b>AC Load Output (Back-up)</b>								
Nominal Output Power (VA)	3000	4000	5000	6000	8000	10000	12000	15000
Nominal Output Voltage (V)	230/400							
Nominal Output Frequency (Hz)	50/60							
Nominal Output Current (A)	4.4	5.8	7.3	8.7	11.6	14.5	17.4	21.8
Peak Output Power	3300VA, 60s	4400VA, 60s	5500VA, 60s	6600VA, 60s	8800VA, 60s	11000VA, 60s	13200VA, 60s	16500VA, 60s
THDV (with linear load)	<3%							
Switching Time (ms)	<10							
<b>Efficiency</b>								
Europe Efficiency	97.50%							
Max. Efficiency	98.00%			98.20%			98.30%	
Battery Charge/Discharge Efficiency	98.00%							
<b>Protection</b>								
Reverse Polarity Protection	Yes							
Over Current / Voltage Protection	Yes							
Anti-islanding Protection	Yes							
AC Short-circuit Protection	Yes							
Leakage Current Detection	Yes							
Ground Fault Monitoring	Yes							
Grid Monitoring	Yes							
Enclosure Protect Level	IP66							
AC/DC surge protection	Type II							
<b>General Data</b>								
Dimensions (W x H x D, mm)	600 x 432 x 210							
Weight (kg)	25							
Topology	Transformerless							
Cooling Concept	Natural Convection				Intelligent Fan			
Relatively Humidity	0-100%							
Operating Temperature Range (°C)	-25 to 60 °C							
Operating Altitude (m)	<4000							
Noise Emission (dB)	<40							
Standby Consumption (W)	<5							
Display & Communication Interfaces	LCD, LED, RS485, CAN, Wi-Fi, GPRS, 4G							
Certification & Approvals	NRS097, G98/G99, EN50549-1, C10/C11, AS4777.2, VDE-AR-N4105, VDE0126, IEC62109-1, IEC62109-2							
EMC	EN61000-6-2, EN61000-6-3							



## ■ Model AF2500W-HB

Parameter	
Nominal Voltage(Vdc)	51.2
Nominal Capacity(Wh)	2560
Working Voltage Range(Vdc)	129.6-516.6
Charge Voltage(Vdc)	56.16
Nominal Charge/Discharge Current(A)	25
Max.Charge/Discharge Current(A)	50
Peak Current(A)	100@3sec
Series Connection	3-10 pcs
Cycle Life	6000 @ 80% DOD, 25°C / 0.5C
<b>Structure</b>	
Power Module Dimensions(mm)/Weight(kg)	600*210*250 /14
Battery Module Dimensions(mm)/Weight(kg)	600*210*160 /27
Lampstand Module Dimensions(mm)/Weight(kg)	600*210*90 /5
Top Cap Module Dimensions(mm)/Weight(kg)	600*210*50 /2.5
IP Rating	IP65
Installation	Stacked
<b>Working Environment</b>	
Charge Working Temperature(°C)	0-55
Discharge Working Temperature(°C)	-20~60
Altitude(M)	<2500
Humidity(RH)	5-95% (w/o condensing)
<b>Communication</b>	
Communication Port	RS485, CAN
Display	SOC status indicator, LED indicator
<b>Certification</b>	
CB, IEC62619, CE-EMC, CE-GPSD, UKCA, UL1973, UL9540A, EN62040, IEC62040; UN38.3, MSDS	