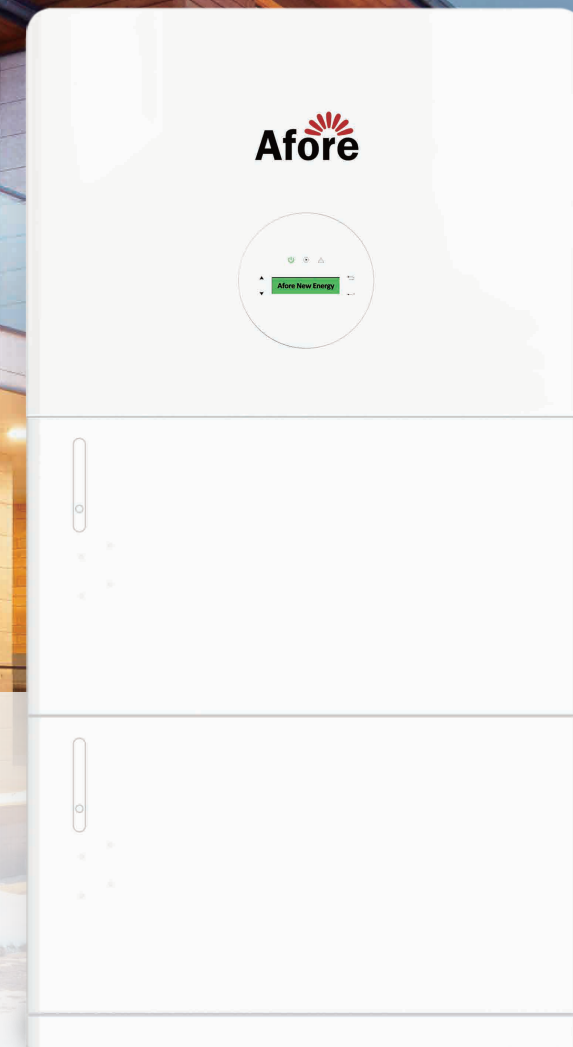




All In One Energy Storage System Single Phase Home Storage Solution (LV)

Afore ASL 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%.



IP66 Outdoor Design



Modular Design
Plug & Play



AFCI Standard



Scalable Design
Up To 30.72kWh



150% Backup
Overloading for 10s



RSD Ready
VPP Ready

FOR SOLAR + ENERGY STORAGE SYSTEM

POWER 3 / 3.6 / 4 / 4.6 / 5 / 5.5 / 6 kW

CAPACITY 5.12kWh - 30.72kWh Battery Capacity

■ Technical Data	AF3K-ASL	AF3.6K-ASL	AF4K-ASL	AF4.6K-ASL	AF5K-ASL	AF5.5K-ASL	AF6K-ASL
PV Input							
Max. Input Power (kW)	4.5	5.4	6.0	6.9	7.5	8.3	9.0
Max. PV Voltage (V)	550						
MPPT Range (V)	80 - 500						
Full MPPT Range (V)	90 - 500	110 - 500	120 - 500	130 - 500	150 - 500	160 - 500	170 - 500
Normal Voltage (V)	360						
Startup Voltage (V)	100						
Max. Input Current (A)	18.5 x 2						
Max. Short Current (A)	26 x 2						
No. of MPP Tracker / No. of PV String	2 / 2						
Battery Port							
Max. Charge/Discharge Power (kW)	3.0	3.6	4.0	4.6	5.0	5.5	6.0
Max. Charge/Discharge Current (A)	80				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)	14.0	17.0	19.0	22.0	23.0	26.0	28.0
Max Continuous Power (kVA)	3.0	3.6	4.0	4.6	5.0	5.5	6.0
Nominal Grid Current (A)	13.7 / 13.1	16.4 / 15.7	18.2 / 17.4	21.0 / 20.0	22.8 / 21.8	25.0 / 24.0	27.3 / 26.1
Nominal Grid Voltage (V)	198 to 242 @ 220 / 207 to 253 @ 230						
Nominal Grid Frequency (Hz)	50 / 60						
Power Factor	0.999 (Adjustable from 0.8 overexcited to 0.8 underexcited)						
Current THD (%)	< 3						
AC Load Output (Back-up)							
Max Continuous Current (A)	14.0	17.0	19.0	22.0	23.0	26.0	28.0
Max Continuous Power (kVA)	3.0	3.6	4.0	4.6	5.0	5.5	6.0
Max Peak Current (A) (10min)	20.5 / 19.6	24.6 / 23.5	27.3 / 26.1	31.4 / 30	34.1 / 32.7	37.8 / 36.1	41.0 / 39.2
Max Peak Power (kVA) (10min)	4.5	5.4	6.0	6.9	7.5	8.3	9.0
Nominal AC Voltage L-N (V)	220 / 230						
Nominal AC Frequency (Hz)	50 / 60						
Switching Time (ms)	< 10						
Voltage THD (%)	< 3						
Efficiency							
CEC Efficiency (%)		97.0			98.1		
Max. Efficiency (%)		97.6			98.1		
PV to Bat. Efficiency (%)		98.1			98.1		
Bat. between AC Efficiency (%)		96.8			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						
Insulation Resister Detection	Yes						
PV Arc Detection	Yes						
Enclosure Protect Level	IP66 / NEMA4X						
AC/DC surge protection	Type II						
General Data							
Dimensions (W x H x D, mm)	600 x 430 x 210						
Weight (kg)	25						
Topology	Transformerless						
Cooling	Intelligent Fan						
Relatively 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, 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	AF5000W-LX	AF10000W-LX	AF15000W-LX	AF20000W-LX	AF25000W-LX	AF30000W-LX
Parameter						
Number of Pack	1pcs	2pcs	3pcs	4pcs	5pcs	6pcs
Total Energy	5.12kWh	10.24kWh	15.36kWh	20.48kWh	25.6kWh	30.72kWh
Usable Energy*	4.87kWh	9.73kWh	14.6kWh	19.46kWh	24.32kWh	29.19kWh
Voltage Range	44.8～57.6Vd.c					
Nominal Voltage	51.2Vd.c.					
Max. Charge Voltage	57.6Vd.c.					
Max. Continuous Charging Current	50 A	100 A	150 A	160 A	160 A	160 A
Max. Continuous Discharge Current	50 A	100 A	150 A	160 A	160 A	160 A
DOD	95 %					
Communication	CAN					
Dimension(L*W*H)	(600±2)* (215±2)* (360±3) mm	(600±2)* (215±2)* (680±5) mm	(600±2)* (215±2)* (1000±7) mm	(600±2)* (215±2)* (1320±9) mm	(600±2)* (215±2)* (1640±9) mm	(600±2)* (215±2)* (1960±9) mm
Net Weight	(49±2) kg	(95±4) kg	(141±6) kg	(187±6) kg	(234±6) kg	(285±6) kg
Operating Condition	Indoor or outdoor					
Operating	Charging 0~50 °C					
Temperature	Discharging -15~50 °C					
Humidity	15%～85% RH (No Condensation)					
Cooling Type	Natural					
IP Rating	IP66					
Installation Method	Stacked installation					
Heating film power(W)(optional)	130W/pcs					
Supply connection	Fixed power cord					
WiFi	Yes					
Warranty	10 years (5 free warranty + 5 paid warranty)					
Configuration	IEC62619,IEC63056,IEC61000-6-1,IEC61000-6-3,IEC62477-1,IEC60730,IEC62040,UN38.3,MSDS					

*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.