

AKHV Series

64.3~1543.2kWh | 314Ah

The AKHV Series is a high-performance scalable battery storage module. The system design allows for maximum flexibility, making it suitable for a broad range of storage applications. Additional batteries can be installed in series allowing for a maximum storage capacity of 1543.2kWh. Installation is easy with a plug and play solution that can save valuable time for installers.

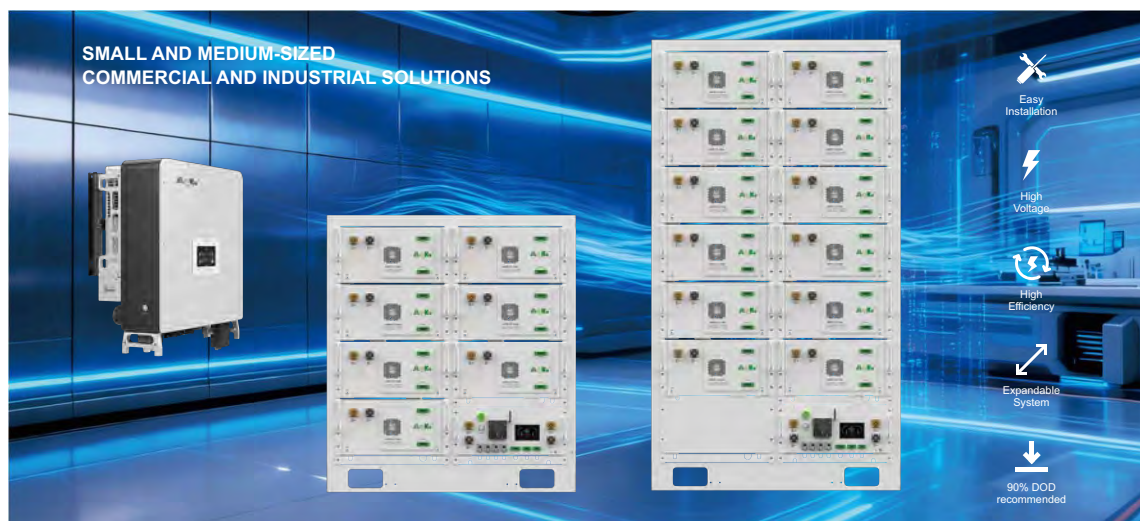


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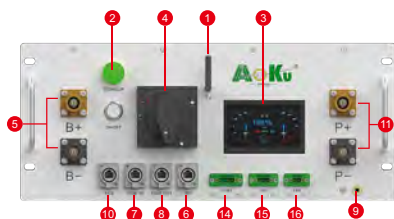


▼ Main Features

- 16.08 kWh per Module
- >6000 cycles (90%DOD 70%EOL)
- Wide Temperature Tolerance High
- Voltage range
- Single cluster (rack) 193kWh, scalable to 1543.2 kWh
- CAN/RS485 Communication with inverter and software computer
- LiFePO4 Chemistry-Safest Lithium Technology

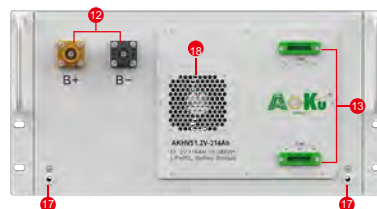


▼ Product Overview



Energy System Management Unit

AK-ESMU (front view)



Battery Module

AKHV51.2V-314Ah (front view)

- | | | |
|--|---------------------------------------|--------------------------------------|
| 1. WiFi Antenna | 2. LED Indicator | 3. LCD Display |
| 4. Battery Breaker | 5. HV Battery Input (B+/B-) | 6. SPI COM In Port from Batteries 9. |
| 7. RS485/CAN0/CAN1 Communication Port | 8. RS485/CAN0/CAN1 Communication Port | Ground Screw |
| 10. RS485/CAN0/CAN1 Communication Port | 11. +/- HV Output to Inverter | 12. Battery Module Terminals (B+/B-) |
| 13. SPI COM In Port | 14. +/-24V relay control port | 15. EPO Extended Control Port |
| 16. Fan extension control port | 17. GND (either-or) | 18. Fan |

Technical Data		AKHV-204V-64kWh	AKHV-307V-96kWh	AKHV-409V-129kWh	AKHV-512V-161kWh	AKHV-614V-193kWh
Battery Type		LiFePO 4				
Battery Module		AKHV51.2V-314Ah*4	AKHV51.2V-314Ah*6	AKHV51.2V-314Ah*8	AKHV51.2V-314Ah*10	AKHV51.2V-314Ah*12
Nominal Capacity		64307Wh	96460Wh	128614Wh	160768Wh	192922Wh
Max.output power		64kWh	96kWh	129kWh	161kWh	193kWh
Nominal Voltage		204.8V	307.2V	409.6V	512.0V	614.4V
Operating Voltage		172.8~230.4V	259.2~345.6V	345.6~460.8V	432.0~576.0V	518.4~691.2V
Recommend Discharge Current		100A				
Max.Charge/Discharge Current		200A				
Peak Discharge Current		240A@30S				
Battery Module Capacity		314Ah				
Built-in Circuit Breaker		250A				
Charge Efficiency		99%				
Battery Roundtrip Efficiency		95%				
Cycle Life		> 6000 cycles (90%DOD 70%EOL)				
COMMUNICATIONS AND MONITORING						
Communication ports		CAN2.0, RS485				
WiFi interface		Yes,for remote monitoring				
LCD Display Information		Real- time voltage, current, power, SOC, temperature, charge/discharge status, alarms				
PROTECTION						
Main Protection Device		250A DC Breaker & Overcurrent Fuse				
Internal Protections		Over/Under Voltage Protection, Over Current Protection, Over Temperature Protection, Short Circuit Protection, Active Cell Balancing, Temperature Monitoring & Protection				
GENERAL Rating of Enclosure						
Max Parallel Connection		Up to 8 units (1543.2kWh max, may require additional hardware)				
Scalable Design		Modular 4- 12 battery modules per rack				
IP Rating of Enclosure		IP20				
Design Life		10` Years				
Installation Location		Indoor Rack Mounting				
Operating Temperature		Charge:0~50°C, Discharge:- 20~60°C				
Storage Temperature		- 5~35°C				
Recommend Depth of Discharge		90%				
Humidity		5~95%(No Condensing)				
Altitude		Max.3,000m				
GENERAL						
Machine Dimension (W*H*D)(mm)	AK-ESMU	498*210*740				
	AKHV51.2V-314Ah	498*245*510				
(W*H*D)(mm)		576*1465*780	576*1967*780	1090*1465*780	1090*1716*780	1090*1967*780
N.W(kg)	AK-ESMU	19.5				
	AKHV - Series	512	746	988	1226	1462
CERTIFICATION & STANDARDS						
Safety		IEC62619, MSDS				
EMC		EN IEC 61000- 6- 1/2/3/4				
Transportation		UN38.3				

*The technical specifications of this document are subject to change without any notice.