



Residential BESS

LV-AST-3H12K5.32Aa

102.4V 52Ah Single module

An efficient, safe, and intelligent home energy storage solution, featuring a convenient modular battery design and integrated inverter. Seamlessly switch between power sources, remotely control your energy needs, and customize intelligent operating plans.



High-voltage LiFePO₄ battery, single module is 102.4V 52Ah.

1 to 2 layers recommended, each layer 2 modules loaded.

Cobalt Free Lithium Iron Phosphate (LFP) Battery: Maximum Safety, Life Cycle and Power.

Applicable off grid or hybrid on and off-Grid solar energy storage system.

Self-Consumption Optimization for Residential and Commercial Applications.

Modular Design Simplifies Transportation and Installation.

**DONGUAN
LITHIUM VALLEY
ENERGY CO., LTD .**

High-voltage All-in-one Stackable ESS

- Flexible configuration and easy installation**

Modular design, freely configurable according to different needs

- Multi-mode switching**

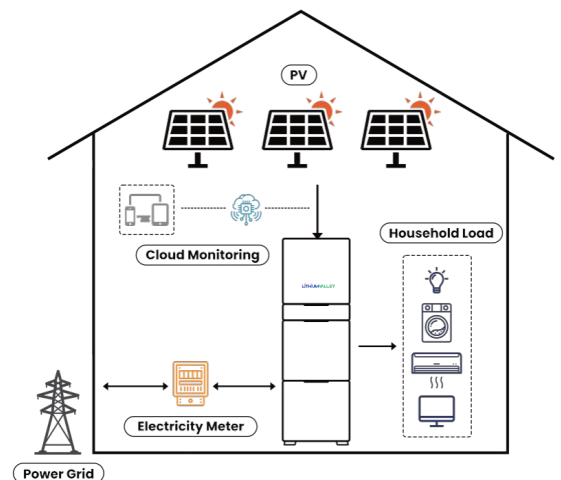
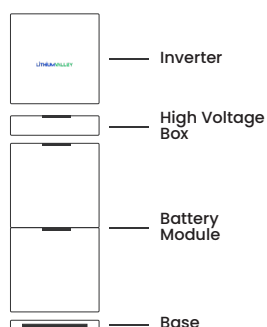
Hybrid, off-grid and grid-connected dual output mode

- Remote Monitoring**

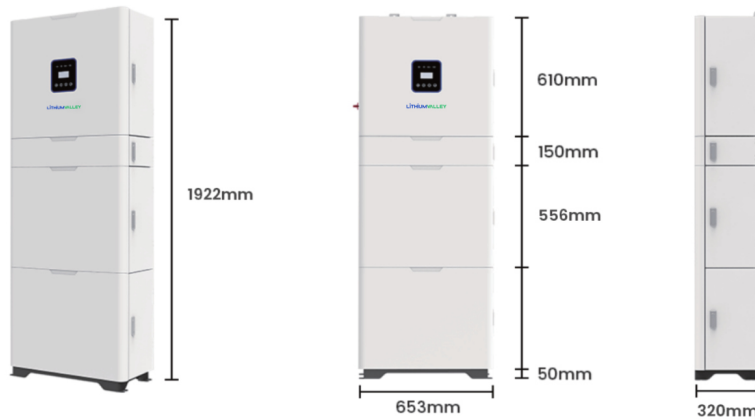
APP intelligent control, efficient and convenient (WiFi, bluetooth)

- Home Energy Smart Management**

Intelligent configuration of energy storage charging and discharging strategies to maximize integrated value



Dimensions



Battery		LV-AST-3H12K5.32Aa	
Number of layers	1 layer	2 layers	
Model	204.8V50Ah	307.2V50Ah	409.6V50Ah
Energy(kWh)	10.24	15.36	20.48
Operating Voltage Range(V)	179.2~224.64	268.8~336.9	358.4~449.2
Weight(KG)	180	240	285
Dimension (L*W*H)mm	653*320*1366	653*320*1922	
Cell technology	Lithium-iron phosphate (LiFePO4)		
Life cycle	6000 times @80%DOD 25°C 0.5C		
Rated charge/discharge current(A)	50A		
Input (PV)			
Rated charge/discharge current(A)	15		
Max. DC voltage(V)	1000		
MPPT voltage range(V)	180~850		
Max.input current of single MPPT(A)	13		
MPPT tracker/strings	2/1		
GRID Input			
Rated output power(kVA)	12		
Max. output current(A)	17.3		
Grid voltage/range(V)	400/360~440		
Frequency (Hz)	50/60		
Power factor	-0.8& +0.8		
THDI	<3%		
AC output topology	3W+N+PE		
EPS output			
Rated power(kVA)	12		
Rated output voltage(V)	400		
Max. output current(A)	17.3		
Rated frequency(Hz)	50/60		
Automatic switching time(ms)	<20		
THDI	<2%		
Overload capacity	110%, 30S/120%, 10S/150%, 0.02S		
General Data			
Battery charge /discharge efficiency	96.7%		
DC Max. efficiency	98.2%		
Europe efficiency	97.5%		
MPPT efficiency	99.5%		
Ingress protection	IP65		
Environment	Indoor/outdoor under roof(avoid direct sunlight)		
Noise emission(dB)	<35		
Operation temperature	-25°C~ 60°C		
Cooling	Natural Cooling		
Relative Humidity	0 ~95%(non-condensing)		

*The actual product may have slight differences from some promotional videos or pictures. Please refer to the actual product. Unless otherwise specified the data on this page are all from our company's laboratory. The data may have errors due to changes in the objective environment.

*The specifications are subject to change without prior notice.

