

Low Voltage Battery 5.12kWh

Ai-LB-E Series



Models:
ASW5120-LB-E



Optimal performance

- LFP safe technology, long cyclelife, high efficiency and high power density
- Supports up to 1 C charge / discharge rate with short-term 2 C overload capability
- Cell level monitoring and balancing



Safe & reliable

- Smarter and safer battery management system for precise diagnostics
- Provides complete protection to keep battery healthy and safe
- Built-in fire suppression functionality ⁴



User-friendly

- Stackable and expandable up to 163.84 kWh (supporting 8 modules per unit, 4 units in parallel)
- Streamlined design for easier handling
- Various mounting methods: wall-mounted, floor-standing, and racked

Technical Datasheet

System Data	Battery module	ASW5120-LB-E
	Cell type	LiFePO4
	Rated capacity	100 Ah (≥ 100 Ah)
	Nominal energy ¹	5.12 kWh
	Usable energy ²	4.6 kWh
	Nominal voltage	51.2 V
	Battery voltage range	43.2 V - 57.6 V
	Recommended charge / discharge current	60 A
	Peak discharge current	200 A @ 3 s
	Max. charge / discharge current	100 A / 100 A
	Max. charge / discharge power	5.12 kW
	Peak discharge power	10.24 kW @ 3 s
General Data	Dimensions (W / D / H)	390 / 500 / 155 mm
	Weight	43.0 kg
	Installation location	Indoor
	Mounting method	Floor mounted / Wall mounted / Rack mounted
	Operating temperature range	Charge: 2 °C ~ 58 °C Discharge: -18 °C ~ 58 °C
	Storage temperature range	-20 °C ~ 45 °C
	Cooling concept	Natural convection
	Protective class	II
	Degree of protection	IP20
	Relative humidity	5 % - 95 % (Non-condensing)
	Max. operating altitude	3000 m (> 2000 m derating)
	Scalability	Max. 32 sets in parallel
	Communication	CAN
	Certificate	IEC62619, IEC61000, UN38.3
	Cycle life ³	6000 times
	Round-trip efficiency	≥ 95 %

1. Nominal energy is defined under the following conditions: battery voltage 43.2 V - 57.6 V, 0.2C charge / discharge at 25°C.

2. Usable energy is defined under the following conditions: 90% DOD, 0.2C charge / discharge at 25°C.

3. Cycle life is defined under the following conditions: 90% DOD, 70% EOL, 0.5C charge / discharge at 25°C (One cycle a day).

4. This specification is only applicable in European region.

