

Battery System

ESS-LB5@A-EU、ESA-LF-A、ESA-LF-B



Overview

The low-voltage battery system includes a battery unit ESS-LB5@A-EU, a bottom cover ESA-LF-A and accessories ESA-LF-B. It can be used in conjunction with energy storage inverters or photovoltaic energy storage integrated machines for storing and releasing electrical energy.

Features

- Utilizes lithium iron phosphate batteries, providing high safety and long lifespan.
- Equipped with a self-developed battery management system with protective functions like over-discharge, overcharge, overcurrent, and temperature protection.
- Employs high-precision algorithms for SOC (State of Charge) and SOH (State of Health) estimation, ensuring more accurate calculations.
- Maximum 1 C charging/discharging, faster charging, stronger load carrying capacity.
- Modular design, support 2~4 packs up to 20 kWh, control strategy adaptive.
- Industrial-level wide-temperature design, suitable for high and low temperature environments.

- Vehicle-level anti-interference design can be applied to stronger and more complex electromagnetic environments.
- Equipped with fuse and aerosol fire extinguisher for double electrical safety protection.
- IP65 protection, suitable for indoor and outdoor use.
- Boasts an ultra-thin design, making it aesthetically pleasing and seamlessly integrated with the wall, thus saving space.
- Multiple safety certification: IEC62619, IEC62477, IEC61000, etc.

Specifications

Model	Description
Battery Unit Model	ESS-LB5@A-EU
Bottom Cover Model	ESA-LF-A
Accessories Model	ESA-LF-B
Electrical	Description
Cell Type	LFP(LiFePO4)
Rated Energy	5.12kWh
Rated Capacity	100Ah
Rated Voltage	51.2V
Voltage Range	43.2-58.4V
Rated Charge Current	50A
Max Charge Current	100A
Rated Discharge Current	50A
Max Discharge Current	100A
Cycle Life	≥6000 (25±2℃, 0.5C/0.5C, 70%EOL)
Communication	CAN
Basic parameters	Description
Battery Unit Dimensions	722(W)*156(D)*533(H)mm
Battery Unit Weight	55.5kg
Bottom Cover Dimensions	706(W)*140(D)*39(H)mm
Bottom Cover Weight	2.9kg
Cooling	Passive cooling
Certificates	IEC 62619 / IEC 62477-1 / EN 61000-6-1 / EN 61000-6-3 / UN38.3 etc.
Ingress Protection	IP65
Installation Style	Floor
Operating environment	Description
Operating Temperature	Charging: 0~50℃ Discharging: -20~50℃
Storage Temperature	-20~60℃
Operating Humidity	20%~90%, RH (no condensing)

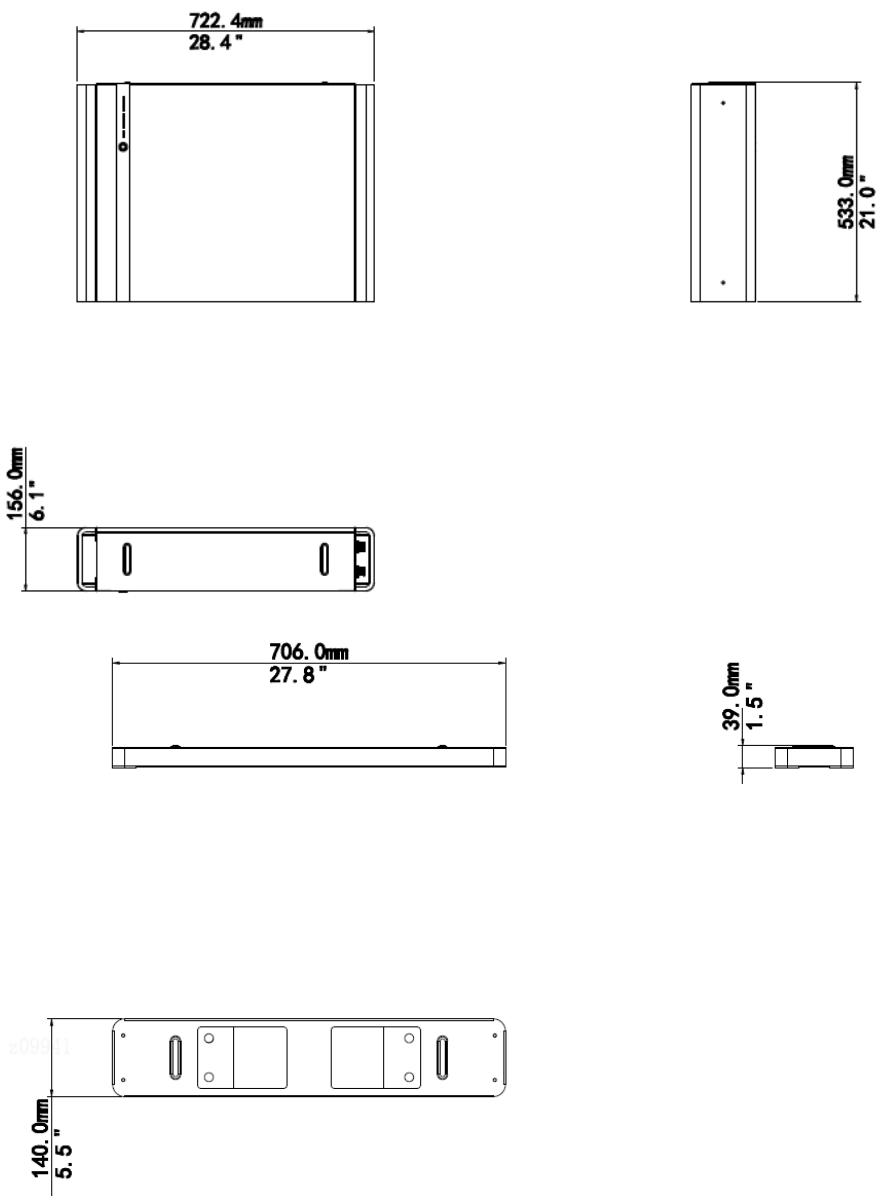
Altitude	≤2000m
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Ordering Information

Model	Qty	Remarks
ESS-LB5@A-EU	1	Battery System (Battery unit, LiFePO4, 5.12kWh, 100Ah, 51.2V, EU)
ESA-LF-A	1	Battery System (Bottom Cover)
ESA-LF-B	1	Battery System (Accessories)

Dimensions

Dimensions: 722(W)*156(D)*533(H)mm



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