

BATTERIES



FSE focus on helping our customers design the best custom battery pack products that are the most cost-effective, environmentally safe, and exceed all their specifications. Our offering of batteries and custom battery pack allows us to work with our customers to manage the power needs of their end products.

A mobile and scalable energy storage system delivering sustainable power. Designed for rapid deployment in virtually any circumstance imaginable.

- 10-year long-term warranty.
- It is composed of powerful branded LifeP04 batteries.
- Adopt a self-cooling method to quickly reduce the overall noise of the system.
- The battery has less self-discharge and can be put on the shelf for up to 6 months without charging. There is no memory effect, and the shallow charge and discharge performance is excellent.
 - High current charging is optional.
 - Safe Lithium iron phosphate battery cell.
- Each battery with an independent BMS system manages power output smartly and effectively.
 - Compatible with most of the available Hybrid Inverters.
- Keep up your home life when power outage, independent power from the grid.

BATTERY MODELS



Model	DL-LFP-HW48100J	DL-LFP-HW51100L	DL-LFP-HW51200L
Product specification	48V 100Ah	51.2V 100Ah	51.2V 200Ah
Nominal voltage	48V	51.2V	51.2V
Nominal capacity	100Ah	100Ah	200Ah
Energy	4.8kwh	5.12kwh	10Kwh /20Kwh /30Kwh /50Kwh
Max charge current	100A/200A	100A/200A	40A
Charging cut-off voltage	54.7V+0.2V	58.4V+0.2V	58.4V+0.2V
Max discharge current	100A/200A	100A/200A	100A
Discharging cut-off voltage	34.5V+0.2V	36.8V+0.2V	36.8V+0.2V
Cell Type	Life PO4 battery	-	-
Display	LCD	-	-
Terminal	M8	-	-
Material	Metal Box	-	-
Communication mode	/	RS485/ CAN	RS485/ CAN
Charge temperature range	0~45°C	-	-
Discharge temperature range	~5~55°C	-	-
Cycle life	>6000Cycles (80%DOD)	-	-
Colour	Black and white	-	-
Weight	46.1kg	48kg	91.5kg/ 168kg/ 244.5kg/ 398kg
Dimensions	483*200*490mm (LxWxH)	483*200*490mm (LxWxH)	690*590*287mm/ 690*590*430mm/ 690*590*580mm/ 690*590*880mm
Assembly Method	Stacked against the wall	-	Movable type stack

Product Features

- Easy to carry
- Built-in Safety
- Energy Dense
- Long cycle life
- Easy to operate
- Climate Tolerant
- Support customization
- Environmental protection

Applicable Scope

- Solar Storage
- Central office
- Base transceiver station
- Electronic cash registers

Telecommunication systems

- Communication equipment
- Switching applications and more
 - Microprocessor-based office machine
 - UPS

RECYCLING PROCESS

Batteries are recycled in a multistep metallurgical process. Batteries are shredded and sorted into requisite components. There are many metals, plastics, and secondary materials that are recovered including zinc and iron. Lithium-ion Battery Recycling Technology: FSE Oy is cooperating with a recycling company that can recycle the batteries and uses them again. We use a combination of mechanical and hydrometallurgical technologies to recycle the battery materials, our industrial scale, low-CO2 processes allow us to recover lithium, cobalt, manganese, and nickel from the battery for reuse in the production of new batteries. Our optimized battery treatment processes are safe, sustainable, and efficient.

RECHARGEABLE BATTERY MODELS



FSE Oy is offering rechargeable lithium-ion batteries with multiple capacities, it has a long cycle life and can be recharged up to 1200 times. Can be used for many different applications, including Power Tools, Home Appliances, and Consumer Electronics. We offer all batteries size like AAA, AA, C, D, 9V, CR123A, CR2, 14250, 18650, 10440, 14500.

Key attributes	
Storage Type	Lithium-ion batteries
Anode Material	LCO
Application	Toys, Power Tools, Home Appliances, Consumer Electronics



Other attributes	
Models	AA/ AAA/ C/ D/ 9V/ CR123A/CR2/14250/14500
Warranty	1 Year
Weight	105g
The charging ratio	5v / 9v
The discharge rate	1.5V/ 1.2V/ 3.7V/ 9V
Type	Lithium-ion batteries
Nominal Voltage	1.5V
Capacity	2600mWh
Cycle life	Long cycle life up to ≥1200 times
Packing way	1 Battery/ 2 batteries/package/ 4 batteries/package
Charging Connection	Type-C

MODEL AAA

FSE batteries pack AAA model, Type C-port. Rechargeable lithium-ion batteries 2600mWh 1.5 v



AAA Batteries	
Product name(s)	FSE AAA 2PC/4PC
Warranty	1 Year
Weight	105g
Storage/Battery Type	Lithium-ion batteries
Nominal Voltage	1.5V
Capacity	2600mWh, 750mWh
Recycle life	Long cycle life up to ≥1200 times
Packing way	2 or 4 batteries / package
Charging Connection	Type-C
Application	Toys, Power Tools, Home Appliances, Consumer Electronics

MODEL AA

FSE batteries pack AA model, Type C-port. Rechargeable lithium-ion batteries 2600mWh 1.5 v



AA Batteries	
Product name(s)	FSE AA 2PC/4PC
Warranty	1 Year
Weight	70g
Storage/Battery Type	Lithium-ion batteries
Nominal Voltage	1.5V
Capacity	2600mWh, 550mWh
Recycle life	Long cycle life up to ≥1200 times
Packing way	2 or 4 batteries / package
Charging Connection	Type-C
Application	Toys, Power Tools, Home Appliances, Consumer Electronics

MODEL 9V

FSE batteries pack 9V model, Type C-port. Rechargeable lithium-ion batteries 650mAh



9V Batteries	
Product name(s)	FSE 9V
Warranty	1 Year
Weight	27g
Storage/Battery Type	Lithium-ion batteries
Nominal Voltage	9V
Capacity	650mAh
Recycle life	Long cycle life up to ≥ 1200 times
Packing way	1 or 2 batteries / package
Charging Connection	Type-C
Application	Toys, Power Tools, Home Appliances, Consumer Electronics

MODEL D

FSE D battery model, Type C-port. Rechargeable lithium-ion batteries 12000mWh



D Batteries	
Product name(s)	FSE D Battery
Warranty	1 Year
Weight	43g
Storage/Battery Type	Lithium-ion batteries
Nominal Voltage	1.5V
Capacity	12000mWh
Recycle life	Long cycle life up to ≥ 1200 times
Packing way	1 battery / package
Charging Connection	Type-C
Application	Toys, Power Tools, Home Appliances, Consumer Electronics

MODEL C

FSE C battery model, Type C-port. Rechargeable lithium-ion batteries 6000mWh 1.5v



C Batteries	
Product name(s)	FSE C Battery
Warranty	1 Year
Weight	30g
Storage/Battery Type	Lithium-ion batteries
Nominal Voltage	1.5V
Capacity	6000mWh
Recycle life	Long cycle life up to ≥ 1200 times
Packing way	2 batteries / package
Charging Connection	Type-C
Application	Toys, Power Tools, Home Appliances, Consumer Electronics