



SAFECLOUD BATTERY

LIFEPO4 & ENERGY STORAGE

Floor-Standing Energy Storage 51.2 V Platform

LiFePO4 battery systems for distributors, energy brands and system integrators.
OEM / ODM from a factory operating since 2007 across two production bases in China.

PRODUCT CATALOG · 2026

FEATURED RANGE



LD-48300

300 Ah · 15.36 kWh



LD-48314

314 Ah · 16.08 kWh



LD-48684

684 Ah · 35.02 kWh

SUPPLIER PROFILE

A manufacturing partner your procurement team can verify

Safeccloud Energy has designed and manufactured LiFePO4 battery packs since 2007. Production runs across two bases in Henan and Anhui provinces, covering drop-in lead-acid replacements, residential energy storage, rack and high-voltage modules, and containerised systems. Supply is organised around distributor, OEM brand and system-integrator programmes rather than one-off retail orders.

2007

ESTABLISHED

48,000 m²

PRODUCTION AREA

8

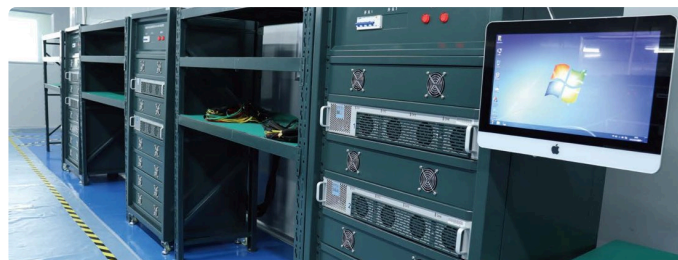
AUTOMATED LINES

100+

COUNTRIES SERVED



Pack assembly line



Aging and test area



Incoming cell sorting and matching



In-line functional inspection

Quality system and product accreditation

Quality management	ISO 9001
Pack level	CE • MSDS • UN 38.3
Cell level	CE • IEC 62619 • UL 1973 • RoHS
Additional scope	FCC • SEDEX

Certificate scope varies by model, production configuration and destination market. Confirm the exact certificate set, issuing body and validity for your selected configuration before publishing specifications or placing a purchase order. Test reports are released on request under a signed enquiry.

Who we supply

01

Distributors & wholesalers

Stable specifications, repeat supply planning, catalogue and compliance documentation.

02

OEM energy brands

Logo, label, colour, packaging and BMS configuration on a proven battery platform.

03

Integrators & EPCs

Architecture, communication protocol and enclosure format matched to the project.

FEATURED RANGE

51.2 V floor-standing storage — three capacities, one platform

All three models share the same electrical platform, BMS logic, communication set and parallel architecture. Selection is a question of energy per cabinet and floor area, not of re-engineering the system. Quote against a single model code so the enclosure, terminal and shipping class on the purchase order match what is despatched.

Model comparison

Parameter	LD-48300	LD-48314	LD-48684
Nominal capacity	300 Ah	314 Ah	684 Ah
Nominal energy	15,360 Wh	16,076.8 Wh	35,020.8 Wh
Nominal voltage	51.2 V DC		
Max. charge / discharge current	200 A		
Cycle life	6,000 cycles (25 °C @ 80 % DOD)		
Units in parallel	Up to 15		
Max. bank energy (15 units)	230.4 kWh	241.2 kWh	525.3 kWh
Communication	CAN · RS485 · RS232		
Product size (L×W×H)	555×250×740 mm	555×250×740 mm	695×435×892 mm
Net weight	~120 kg	~120 kg	~253.5 kg
Gross weight	~137.5 kg	~137.5 kg	~270 kg
Protection rating	IP20 — indoor installation only		
Enclosure	Sheet metal, floor-standing on castors		

Which model to specify

LD-48300

Baseline residential and light commercial

The reference configuration for single-home backup and small commercial backup where 15 kWh per cabinet is the planning unit. Lowest cost per cabinet of the three.

LD-48314

Same footprint, ~5 % more energy

Identical enclosure, weight and shipping class as the 300 Ah, with 716.8 Wh more usable energy. Specify this where energy density per square metre drives the tender.

LD-48684

Commercial & industrial

More than double the energy in one cabinet, reducing parallel-unit count, cabling and commissioning time on C&I sites. Note the ~253.5 kg net weight for site handling.

Before you quote: confirm the continuous-current requirement against the final BMS build, and size cable and protection to the peak figure rather than the nominal one. Charging is blocked below 0 °C to protect the cells — for cold markets, specify the self-heating option at enquiry stage rather than after sample approval. All three models are rated IP20 and are not suitable for outdoor installation without a separate enclosure.

LIFEPO4 DEEP CYCLE BATTERY

300 Ah · 51.2 V floor-standing energy storage cabinet

LD-48300



15,360 Wh
NOMINAL ENERGY

51.2 V DC
NOMINAL VOLTAGE

15 units
MAX. IN PARALLEL

300 Ah
NOMINAL CAPACITY

6,000 cycles
25 °C @ 80 % DOD

230.4 kWh
MAX. BANK ENERGY

Technical highlights

- **200 A continuous rating.** 200 A maximum charge and discharge, 100 A recommended for continuous duty.
- **Multi-layer BMS protection.** Temperature, over-current, short-circuit, over-charge, over-discharge and low-voltage.
- **Up to 15 units in parallel.** Scales to 230.4 kWh on a single addressed bank.
- **90 % depth of discharge.** 10-year design service life on a cobalt-free LiFePO4 chemistry.
- **Floor-standing on castors.** No wall structural work; positioned and levelled on site.
- **Broad inverter compatibility.** Protocol matching for Deye, Solis, GoodWe, Growatt, Sofar and SMA.

Electrical & communication	
Model	LD-48300
Nominal voltage	51.2 V DC
Nominal capacity	300 Ah
Nominal energy	15,360 Wh
Communication protocol	CAN / RS485 / RS232
Max. units in parallel	15
Cycle life	6,000 cycles (25 °C @ 80 % DOD)
CHARGE PARAMETERS	
Rec. charge current	100 A
Max. charge current	200 A
Rec. charge voltage	58 V
Max. charge voltage	58.4 V
DISCHARGE PARAMETERS	
Rec. discharge current	100 A
Max. discharge current	200 A
Rec. discharge cut-off	46 V
Battery cut-off voltage	44 V
Battery recovery voltage	48 V

Mechanical, environment & compliance	
Product size (L×W×H)	555 × 250 × 740 mm
Net weight	~120 kg
Package size (L×W×H)	880 × 625 × 427 mm
Gross weight	~137.5 kg
Protection rating	IP20 (indoor)
Shell material	Sheet metal
TEMPERATURE	
Charging	0 ~ 55 °C
Discharging	-20 ~ 60 °C
Storage	-20 ~ 45 °C
CERTIFICATION	
Pack level	CE · MSDS · UN 38.3
Cell level	CE · IEC 62619 · UL 1973 · RoHS
BMS PROTECTION	
Temperature · over-current · short-circuit · over-charge · over-discharge · low-voltage protection	

Optional enhancements

Touch LCD screen

Self-heating kit

Bluetooth wireless telemetry

iOS / Android monitoring app

Active fire extinguishing module

LIFEPO4 DEEP CYCLE BATTERY

314 Ah · 51.2 V floor-standing energy storage cabinet

LD-48314



16,076.8 Wh
NOMINAL ENERGY

51.2 V DC
NOMINAL VOLTAGE

15 units
MAX. IN PARALLEL

314 Ah
NOMINAL CAPACITY

6,000 cycles
25 °C @ 80 % DOD

241.2 kWh
MAX. BANK ENERGY

Technical highlights

- **Highest energy per footprint.** 716.8 Wh more than the 300 Ah model in an identical 555 × 250 × 740 mm cabinet.
- **90 % depth of discharge.** 10-year design service life on a cobalt-free LiFePO4 chemistry.
- **Up to 15 units in parallel.** Scales to 241.2 kWh on a single addressed bank.
- **Same shipping class.** Identical package size and gross weight as LD-48300 — no freight re-quote when upgrading.
- **Multi-layer BMS protection.** Temperature, over-current, short-circuit, over-charge, over-discharge and low-voltage.
- **Broad inverter compatibility.** Protocol matching for Deye, Solis, GoodWe, Growatt, Sofar and SMA.

Electrical & communication	
Model	LD-48314
Nominal voltage	51.2 V DC
Nominal capacity	314 Ah
Nominal energy	16,076.8 Wh
Communication protocol	CAN / RS485 / RS232
Max. units in parallel	15
Cycle life	6,000 cycles (25 °C @ 80 % DOD)
CHARGE PARAMETERS	
Rec. charge current	100 A
Max. charge current	200 A
Rec. charge voltage	58 V
Max. charge voltage	58.4 V
DISCHARGE PARAMETERS	
Rec. discharge current	100 A
Max. discharge current	200 A
Rec. discharge cut-off	46 V
Battery cut-off voltage	44 V
Battery recovery voltage	48 V

Mechanical, environment & compliance	
Product size (L×W×H)	555 × 250 × 740 mm
Net weight	~120 kg
Package size (L×W×H)	880 × 625 × 427 mm
Gross weight	~137.5 kg
Protection rating	IP20 (indoor)
Shell material	Sheet metal
TEMPERATURE	
Charging	0 ~ 55 °C
Discharging	-20 ~ 60 °C
Storage	-20 ~ 45 °C
CERTIFICATION	
Pack level	CE · MSDS · UN 38.3
Cell level	CE · IEC 62619 · UL 1973 · RoHS
BMS PROTECTION	
Temperature · over-current · short-circuit · over-charge · over-discharge · low-voltage protection	

Optional enhancements

Touch LCD screen

Self-heating kit

Bluetooth wireless telemetry

iOS / Android monitoring app

Active fire extinguishing module

LIFEPO4 DEEP CYCLE BATTERY

684 Ah · 51.2 V commercial energy storage cabinet

LD-48684



35,020.8 Wh
NOMINAL ENERGY

51.2 V DC
NOMINAL VOLTAGE

15 units
MAX. IN PARALLEL

684 Ah
NOMINAL CAPACITY

6,000 cycles
25 °C @ 80 % DOD

525.3 kWh
MAX. BANK ENERGY

Technical highlights

- **35 kWh in a single cabinet.** More than double the 300 Ah model — fewer units, less parallel cabling and shorter commissioning.
- **90 % depth of discharge.** 10-year design service life on a cobalt-free LiFePO4 chemistry.
- **Industrial enclosure.** Sheet-metal cabinet on castors with front-access terminals and interface panel.
- **525 kWh maximum bank.** 15 units in parallel on one addressed bank for C&I backup and peak shaving.
- **Multi-layer BMS protection.** Temperature, over-current, short-circuit, over-charge, over-discharge and low-voltage.
- **Broad inverter compatibility.** Protocol matching for Deye, Solis, GoodWe, Growatt, Sofar and SMA.

Electrical & communication	
Model	LD-48684
Nominal voltage	51.2 V DC
Nominal capacity	684 Ah
Nominal energy	35,020.8 Wh
Communication protocol	CAN / RS485 / RS232
Max. units in parallel	15
Cycle life	6,000 cycles (25 °C @ 80 % DOD)
CHARGE PARAMETERS	
Rec. charge current	100 A
Max. charge current	200 A
Rec. charge voltage	58 V
Max. charge voltage	58.4 V
DISCHARGE PARAMETERS	
Rec. discharge current	100 A
Max. discharge current	200 A
Rec. discharge cut-off	46 V
Battery cut-off voltage	44 V
Battery recovery voltage	48 V

Mechanical, environment & compliance	
Product size (L×W×H)	695 × 435 × 892 mm
Net weight	~253.5 kg
Package size (L×W×H)	1070 × 790 × 620 mm
Gross weight	~270 kg
Protection rating	IP20 (indoor)
Shell material	Sheet metal
TEMPERATURE	
Charging	0 ~ 55 °C
Discharging	-20 ~ 60 °C
Storage	-20 ~ 45 °C
CERTIFICATION	
Pack level	CE · MSDS · UN 38.3
Cell level	CE · IEC 62619 · UL 1973 · RoHS
SITE HANDLING	
~270 kg gross. Confirm lift access, floor loading and pallet route before delivery.	

Optional enhancements

- Touch LCD screen
- Self-heating kit
- Bluetooth wireless telemetry
- iOS / Android monitoring app
- Active fire extinguishing module
- OEM logo & label
- Custom housing colour
- Project packaging

ALSO IN THE CATALOG

The complete LiFePO4 range

Beyond the featured 51.2 V floor-standing platform, the factory supplies drop-in lead-acid replacements, wall and rack formats, high-voltage modules and containerised systems. Full datasheets for any line below are released on request.



12.8 V drop-in replacement

FT-1250 → FT-12400

50–400 Ah · 640 Wh–5,120 Wh · ≥3,000 cycles · up to 4S / 4P · 3-year warranty. RV house banks, marine, golf carts, off-grid solar.



25.6 V drop-in replacement

FT-2450 → FT-24300

50–300 Ah · 1,280–7,680 Wh · ≥3,000 cycles · up to 2S / 2P · 3-year warranty. 24 V systems where a 12 V bus is not established.



Wall-mounted home ESS

FT-48100 / 48200 / 48300

51.2 V · 100–300 Ah · 5.12–15.36 kWh · 6,000 cycles · 1–15 in parallel · RS485 & CAN · 5-year warranty.



Stacked home ESS

FT-48100 / 48200 / 48300

51.2 V · same energy range in a stackable tower format, for installs where wall structure or floor area is constrained.



Rack-mounted batteries

FT-24300 → FT-48300

25.6 V / 51.2 V · 7.68–15.36 kWh per shelf · assembles on metal brackets · telecom base-station backup and cabinet-based ESS.



All-in-one ESS

Battery + inverter

10,035.2 Wh storage with a 5,000 W pure sine-wave inverter · 1–9 in parallel · 10 ms / 20 ms transfer · off-grid or hybrid output.



Solar street light batteries

FT-1230 → FT-2460

12.8 V / 25.6 V · 30–60 Ah · 384 Wh–1,536 Wh · IP67 · ≥2,000 cycles · mounts behind the solar panel.



Portable power stations

AP / XP / Y series

1,024 Wh and 2,048 Wh · 1,800–2,000 W rated, 2,800–3,000 W peak · AC / DC / USB-C PD outputs · plug sets for eight regions.



Containerised BESS

20GP / 40GP

500 kW / 1,003 kWh · 630 kW / 2,408 kWh · 1,000 kW / 2,006 kWh · AC 380 V · air-conditioned · peak shaving, valley filling and demand response.

High-voltage module

Model	Capacity	Energy	Voltage	Parallel	Weight
FT-256300	300 Ah	76,800 Wh	256 V	1–4 units	~630 kg

OEM / ODM

A controlled path from requirement to repeat production

Make the technical decisions early, lock the approved specification, then carry the same quality checkpoints into every production batch. Optional functions should be defined before sample production and frozen after approval — changing them later re-opens the BMS, enclosure, wiring and documentation.

01 Requirement review Application, voltage, capacity, current, destination market, certification scope and order plan.	02 Engineering proposal Cell platform, BMS protection values, CAN / RS485 logic, enclosure and documentation set.	03 Sample & validation Capacity, cycle, protections, communication, thermal behaviour and mechanical fit.	04 Mass production Incoming inspection, cell matching, welding, assembly, BMS programming, aging and OQC.	05 Delivery & support UN 38.3 / MSDS files, packing, shipment records, warranty and technical support.
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What can be customised

Electrical	Voltage, capacity, charge / discharge current, BMS protection values	MOQ	10 units (sample from 1 unit)
Communication	CAN, RS485, RS232, Bluetooth, WiFi, inverter protocol matching	Sample lead time	7–10 days
Enclosure	Format, housing colour, terminal and connector type	Production lead time	25–35 days after order confirmation
Branding	Logo, model label, carton print, user manual	HS code	8507.60.00
Documentation	Datasheets, compliance files, project packaging list	Engineering response	Within one business day

Production and inspection control

Stage	Checkpoint
Incoming material control	Cells, BMS, enclosure, wiring and purchased components verified against the approved configuration
Electrical performance test	Voltage, current, capacity, protection functions and communication per the inspection plan
Aging & functional verification	Configured systems run through defined charge / discharge and communication checks before release
Final configuration inspection	Firmware, label, terminals, accessories, manuals, carton marks and project-specific details
Export packing	Protective packaging with project-approved pallet or carton arrangement for the order and route

Lithium batteries are UN 3480 / UN 3481 dangerous goods. State air, sea or rail freight at enquiry stage — the packing specification, state of charge at despatch and documentation set differ by mode and by destination market.



SAFECLOUD BATTERY

LIFEPO4 & ENERGY STORAGE

Send the project conditions, not just a request for price.

A useful quotation starts from the load, not the capacity. Share the information below and an engineer will map it onto a model code and come back within one business day.

- › Model code and required quantity
- › Inverter brand and exact model
- › Continuous and peak power, daily energy
- › Ambient temperature and enclosure / IP needs
- › Target market and certification scope
- › Series / parallel count and current requirement
- › OEM branding and optional functions
- › Trial quantity and expected annual volume

FEATURED RANGE



LD-48300

300 Ah · 15.36 kWh



LD-48314

314 Ah · 16.08 kWh



LD-48684

684 Ah · 35.02 kWh

Also supplied: 12.8 V / 25.6 V drop-in replacements · wall-mounted, stacked and rack-format home ESS · all-in-one battery + inverter · 256 V high-voltage modules · solar street light batteries · portable power stations · containerised BESS to 2.4 MWh.

QUALITY & COMPLIANCE

ISO 9001

CE

FCC

UN 38.3

MSDS

IEC 62619

UL 1973

RoHS

SEDEX

Certificate scope varies by model, production configuration and destination market. Test reports and certificate copies are released on request against a signed enquiry.

CONTACT

www.safecroudbattery.com

info@safecroudbattery.com

WhatsApp / Tel **+86 132 4240 7897**

OFFICES & PLANTS

Building 17, Zhongpengcheng Industrial Park,
Matian Street, Guangming District, Shenzhen
Production bases: Henan · Anhui