PDDN

Luoyang Datang Energy Technology Co., Ltd.

Battery Cells & Modules

Reliable battery manufacturing and customized solutions for global applications - from cell selection to module integration.

2026 PRODUCT CATALOG

CELL PORTFOLIO

01 Prismatic LFP

02 Prismatic NMC

03 Cylindrical

04 Pouch

05 Blade

06 Sodium-ion

07 LTO

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About PDDN

Luoyang Datang Energy Tech Co., Ltd. is a battery manufacturer specializing in battery cells and battery modules for global markets. With our own battery cell manufacturing facility, we are committed to providing reliable battery products and customized solutions for diverse industrial and energy storage applications.

Our product portfolio covers prismatic LFP battery cells, prismatic NMC battery cells, cylindrical battery cells, pouch cells, blade battery cells, sodium-ion battery cells, and lithium titanate (LTO) battery cells. We also offer a range of battery modules, including LFP, NMC, cylindrical, sodium-ion, and customized modules to meet different technical and application requirements.

With a focus on manufacturing, product quality, and customer needs, we work to deliver consistent product performance, flexible customization options, and dependable technical support. We serve battery pack manufacturers, energy storage system integrators, equipment manufacturers, and industrial customers worldwide.

Reliable battery technology starts with quality cells.

We strive to build long-term partnerships by providing dependable products, professional service, and battery solutions tailored to our customers' needs.

Our core advantages

01

In-house manufacturing

Our own battery cell manufacturing facility enables us to focus on production quality, manufacturing processes, and consistent product performance.

02

Diverse battery solutions

Multiple battery cell chemistries and formats, along with battery modules, to meet a variety of technical and application requirements.

03

Flexible customization

Solutions evaluated on required voltage, capacity, dimensions, configuration, and application needs.

04

Quality-focused manufacturing

Process control, product inspection, and testing in line with applicable product specifications and quality requirements.

05

Global B2B support

Product information, technical communication, quotation assistance, and export coordination for international customers.

Products quick view

Seven cell chemistries and formats, five module families. Selection depends on duty cycle, energy density, operating temperature and certification market - not chemistry reputation alone.

Battery cells

Prismatic LFP

3.2 V class. Long cycle life and high thermal stability for ESS and industrial packs.

3.2 V · ESS

Prismatic NMC

3.6-3.7 V class. High energy density where space and weight are constrained.

3.6 V · High energy

Cylindrical

18650 / 21700 / 26650 / 32700 / 4680 formats for tools, mobility and packs.

Standard sizes

Pouch

Flexible dimensions, highest gravimetric energy density in the NMC class.

Flexible · Lightweight

Blade

Long, flat large-format cells for high integration efficiency pack platforms.

Sodium-ion

~3.0 V. Strong low-temperature behaviour and favourable safety profile.

LTO

2.3-2.4 V. Zero-strain anode, fast charging, extreme cycle life.

Module building

Cells supplied for in-house pack assembly, with configuration support.

Battery modules

LFP modules

12.8 / 25.6 / 48 V nominal, plus high-voltage stacks for rack systems.

Formats
Rack, wall-mount, stackable

6,000+ cycles

NMC modules

Compact, energy-dense strings for EV and mobile equipment.

Example
16S1P · 59.2 V · 218 Ah

High energy

Cylindrical modules

Built from 18650 / 21700 / 26650 / 32700 / 4680 cells.

Build
Spot-weld + nickel strip

Custom BMS

Sodium-ion modules

12-48 V class, cold-climate oriented designs.

Low temp
85% capacity at -40 °C

-40 °C

Custom modules

Voltage, capacity, BMS, enclosure, connector and protocol to spec.

Scope
OEM / ODM projects

OEM / ODM

How to shortlist: start from the duty cycle and ambient temperature window, then the certification market (UN 38.3 / IEC 62619 / UL 1973 / UL 9540A), then the format. Chemistry choice follows from these, not the other way round.

Cell chemistry comparison

Typical cell-level ranges for orientation. Exact values vary by manufacturer and test condition; confirm against the specific datasheet before design lock.

Chemistry	Nominal voltage	Energy density (cell)	Cycle life (to 80%)	Thermal runaway threshold	Temperature window	Typical formats
LFP	3.2-3.22 V	160-193 Wh/kg	**6,000-7,000+ cycles**	~270 °C	Discharge -35 °C to 65 °C; charge -10 °C to 65 °C	Prismatic, cylindrical, blade
NMC	3.6-3.82 V	**220-240 Wh/kg**	1,500-3,000 cycles @ 80% DoD	~210 °C	Usability declines below -20 °C and above 45 °C ambient	Prismatic, cylindrical, pouch
Sodium-ion	~3.0 V	>160 Wh/kg (energy-optimised grade)	**>8,000 cycles; 20-year calendar life**	Chemistry-dependent; generally favourable	**-40 °C to +65 °C**	Prismatic, pouch
LTO	2.3-2.4 V	60-110 Wh/kg	**6,000-45,000 cycles (design- and condition-dependent)**	Lower risk due to zero-strain anode	Wide; tolerates high-temperature cycling	Prismatic, cylindrical

Format parameters

Prismatic capacity typically spans **50-300+ Ah**, with large-format ESS cells at **267-587 Ah** and volumetric energy density up to **434 Wh/L**. Cylindrical covers standardized sizes including 18650, 21700, 26650 and 4680. Pouch offers flexible dimensions and the highest gravimetric energy density in the NMC class (~240 Wh/kg). Sodium-ion prismatic and pouch cells are available at 50-300 Ah.

Certification and transport

UN 38.3 is the baseline transport requirement for lithium-ion cells. Sodium-ion cells from at least one supplier are classified as **Non-Dangerous Goods (Class 9 Exempt)** and can ship at 0 V. **IEC 62619 / 62620** apply where stationary or industrial use is claimed.

UN 38.3 · IEC 62619 · IEC 62620 · UL 1973 · UL 9540A · CE · RoHS · MSDS / SDS

Which chemistry for which job

shaving, off-grid, industrial packs.

space-constrained packs.

cycles.

Module-level ranges: cycle life ~3,000 to >10,000 cycles depending on chemistry and depth of discharge; voltage classes from 12-48 V nominal to high-voltage stacks via series/parallel configuration. Certification pathways: UN 38.3 (transport), IEC 62619 (industrial module safety), UL 1973 (North America), UL 9540A (system fire propagation where required).

Battery cells - featured models

Battery cells are the electrochemical building blocks of every battery system. Full specifications, drawings and test reports are provided per model on request.

3.2 V 440 Ah · PT-6887 Blade

Blade-format cell for automotive battery systems and customized power applications. Technical details and customization options available on request.

Blade · Automotive

3.2 V 210 Ah · LF280K Sodium-ion

Prismatic sodium-ion cell for energy storage and power applications. OEM labeling and customization options available.

Sodium-ion · Energy storage

46950 · 3.2 V 32 Ah Cylindrical LFP

Large cylindrical format for battery pack manufacturers and energy storage applications. Integrates into customized packs for power and ESS.

Cylindrical · Pack building

3.7 V 71 Ah · E71 Pouch Li-ion

Lithium-ion pouch cell for electric mobility, industrial power and energy storage. Custom development and sample testing available.

Pouch · Mobility

3.7 V 62.5 Ah · Prismatic NMC

High-capacity prismatic cell with flat, non-swollen appearance, suitable for pack assembly across power and energy storage applications.

NMC · High energy

LTO40 · 2.4 V 45 Ah Lithium Titanate

Lithium titanate cell for industrial power, electric mobility and energy storage. Outstanding cycle life and discharge capability.

LTO · Fast charge

Prismatic LFP series · 3.2 V, 50-300+ Ah

The standard choice for stationary storage: 6,000-7,000+ cycles to 80% SoH, 160-193 Wh/kg. Large-format ESS grades available up to 587 Ah.

LFP · ESS · Large format

Cylindrical LFP series · 18650 to 46950

Standardized cylindrical formats for pack builders. Capacity and tab configuration selected against the target pack design.

18650 · 21700 · 26650 · 4680

Full model list

Current capacity grades, dimensional drawings, cycle test data and certificate copies are issued per model. Tell us the application and we will send the matching datasheets.

sales@pddn.com →

Battery modules - featured models

Modules for system integrators, OEMs and project buyers, organized by chemistry and format.

96 V / 144 V / 192 V LiFePO4 rack modules

Scalable high-voltage rack modules, 6,000+ cycles, seamless inverter compatibility. Factory-direct configuration to the host system's voltage class.

Voltage 96 / 144 / 192 V · **Cycles** 6,000+ · **Use** C&I, off-grid

LFP | High voltage | C&I storage

16S1P NMC module · 59.2 V 218 Ah

High-energy module supporting fast charging to 80% in 45 minutes, 2,000+ cycles. For EV conversions, marine and solar storage.

Config 16S1P · **Charge** 80% in 45 min · **Cycles** 2,000+

NMC | Fast charge | Marine

24 V 160 Ah sodium-ion module · 1P8S

3.84 kWh pack that retains 85% of capacity at -40 °C. 5,000 cycles, CE certified - built for cold-climate stationary storage.

Config 1P8S · **Energy** 3.84 kWh · **Cycles** 5,000 · **CE**

Sodium-ion | Cold climate | 3.84 kWh

3.7 V cylindrical Li-ion module

Custom capacities from 4 Ah to 50 Ah for golf carts, EVs and wheelchairs. CE and UN 38.3 certified.

Capacity 4-50 Ah · **Cert.** CE, UN 38.3

Cylindrical | Light EV

Custom 18650 LiFePO4 pack · 1S-4S

3.7 V to 24 V, 6,000 cycles, A-grade cells, custom BMS and connectors (XT60, Anderson). CE, KC and BIS certified.

Voltage 3.7-24 V · **Cycles** 6,000 · **Cert.** CE, KC, BIS

Build a module to your spec

Voltage class, capacity, series/parallel layout, BMS logic, enclosure and IP rating, connector type and communication protocol are all specified against the host system.

Module-level ranges: cycle life ~3,000 to >10,000 cycles depending on chemistry and depth of discharge; voltage from 12-48 V nominal to high-voltage stacks via series/parallel configuration. Certification pathways: UN 38.3 (transport), IEC 62619 (industrial module safety), UL 1973 (North America), UL 9540A (system fire propagation where required).

Application scenarios

Matching chemistry and format to the duty cycle, temperature window and certification market of the end application.

By cell type

Cell type	Typical applications
Prismatic LFP	Residential solar storage, C&I energy storage, grid storage, backup power; low-speed EVs and industrial transport
Prismatic NMC	Passenger EVs and hybrid vehicles; high-energy battery packs requiring compact design
Cylindrical	Cordless power tools, e-bikes and scooters, robotics, portable power stations
Pouch	Consumer electronics, drones and robotics, custom packs needing flexible shapes
Blade	Passenger and commercial EVs; pack platforms designed for long, flat cells
Sodium-ion	Stationary storage and microgrids; low-speed EVs; cold-climate systems
LTO	Fast-charging systems, high-power industrial equipment, electric buses and specialized vehicles

By module type

Module type	Typical applications
LFP modules	Residential solar storage and backup, C&I peak shaving, off-grid systems and microgrids
NMC modules	EV and hybrid battery systems, robotics and mobile equipment
Cylindrical modules	Cordless tools and industrial equipment, e-bikes and scooters, AGVs
Sodium-ion modules	Stationary storage and renewable integration, low-speed EVs, selected industrial power
Custom modules	Industrial automation, robotics and AGVs, marine and specialized transport, OEM projects

Who we supply

Battery pack manufacturers · energy storage system integrators · equipment manufacturers · industrial customers worldwide.

Energy storage systems | Battery pack manufacturing | Industrial equipment | Electric mobility | Backup power

Customization & OEM / ODM

From cell selection to custom module design - we help businesses find battery solutions tailored to their application, performance requirements and integration needs.

How a custom project runs

1. **Requirement intake**
   Application, duty cycle, voltage, capacity, dimensions, target market and certification needs.
2. **Chemistry & format selection**
   Shortlist candidates against energy density, cycle life, temperature window and certification pathway.
3. **Technical proposal**
   Configuration, BMS logic, enclosure concept, connector and communication protocol defined.
4. **Sample build & testing**
   Prototype or sample modules produced and tested against the agreed specification.
5. **Validation & certification**
   Test reports and certification documentation prepared for the destination market.
6. **Production & export**
   Batch production, inspection, packaging and shipment coordination.

OEM / ODM scope: customized module configurations, product structures and application-specific requirements are discussed for eligible products. Available scope depends on product type, technical feasibility and order quantity.

What can be customized

- Chemistry
- Nominal voltage
- Capacity (Ah / kWh)
- Cell format
- Dimensions
- Series / parallel configuration
- BMS & protection logic
- Enclosure & IP rating
- Connectors
- Communication protocol
- OEM labeling
- Thermal management

Send us your drawings

The inquiry form accepts PDF, STEP and STP files. Technical drawings, datasheets or a reference model let us evaluate a suitable solution far faster than a written description.

Sample-first development

Where the configuration is new, we build and test a sample against the agreed specification before committing to a production batch.

What we need from you

Target voltage and capacity, physical envelope, connector and protocol, expected annual volume, destination country and required certification.

Quality, testing & certification

We emphasize process control, product inspection and testing in line with applicable product specifications and quality requirements.

Quality control across the build

1. **Incoming material inspection**
   Cell materials and components verified against specification before release to production.
2. **In-process checks**
   Process control at key manufacturing stages to keep output consistent batch to batch.
3. **Finished product testing**
   Capacity, internal resistance, voltage consistency and safety testing according to applicable specifications.
4. **Documentation**
   Relevant test reports and quality documentation discussed per product and project requirement.
5. **Batch traceability**
   Production lots are recorded so a delivered module can be traced back to its cell batch and test data.

What we can share before you order

Product datasheet, cycle test summary, certificate copies for the destination market, and a factory walkthrough on video call.

Factory images, capacity figures and certificate scans

Issued as a separate pack on request - ask your sales contact for the current set.

Certification pathways

Standard	Scope
UN 38.3	Baseline transport requirement for lithium-ion cells and batteries
IEC 62619	Safety for secondary cells and batteries for industrial applications
IEC 62620	Secondary cells and batteries for use in industrial applications
UL 1973	Batteries for stationary, vehicle auxiliary power and light electric rail applications (North America)
UL 9540A	Test method for evaluating thermal runaway fire propagation, where required by the system
CE / RoHS	European market conformity and hazardous substance restriction
MSDS / SDS	Material safety data for transport, handling and customs clearance

Transport note: sodium-ion cells from at least one supplier are classified as Non-Dangerous Goods (Class 9 Exempt) and can ship at 0 V - a meaningful logistics advantage for certain destinations.

Documentation pack per shipment

Datasheet · UN 38.3 test summary · MSDS / SDS · certificate copies · packing list · commercial invoice and HS code reference.

Frequently asked questions

01 · What types of battery cells do you provide?

Prismatic LFP, prismatic NMC, cylindrical, pouch, blade, sodium-ion and lithium titanate (LTO) cells, in different chemistries and configurations.

Formats Prismatic · Cylindrical · Pouch · Blade

02 · What types of battery modules do you manufacture?

LFP, NMC, cylindrical, sodium-ion and customized modules, tailored to specific electrical parameters, structural requirements and applications.

Voltage classes 12-48 V nominal · high-voltage stacks

03 · Can you provide customized cells or modules?

Yes. Share your technical specifications or drawings and we will evaluate chemistry, voltage, capacity, dimensions, connection configuration and application environment.

Best input Drawing (PDF / STEP) plus target specification

04 · What applications are your products suitable for?

Energy storage systems, battery pack manufacturing, industrial equipment, electric mobility, backup power systems and more, depending on chemistry, specification and design.

Markets ESS · Industrial · Mobility · Backup power

05 · How do you ensure product quality?

Quality control throughout manufacturing, including material inspection, production checks and product testing according to applicable specifications. Test reports and quality documentation can be discussed per project.

Documents Test reports · inspection record · certificate copies

06 · Do you support OEM and ODM?

We can discuss OEM and ODM cooperation for eligible products, including module configurations, product structures and application-specific requirements, subject to feasibility and order quantity.

Depends on Product type · technical feasibility · volume

07 · What information should I provide for a quotation?

Battery type, chemistry, voltage, capacity, dimensions, required quantity, intended application and destination country. Drawings, datasheets or reference models help.

Minimum set Type · voltage · capacity · quantity · country

08 · How do I request a quotation?

Through the website inquiry form or by email. Share your requirements, estimated order quantity and target delivery destination - our team will follow up with product information and a quotation.

Reply Within one working day

How to order & commercial terms

Everything we need to quote you accurately - and what you can expect back.

Eight things to send with your inquiry

- Battery type
- Chemistry
- Voltage
- Capacity
- Dimensions
- Required quantity
- Intended application
- Destination country

Optional but valuable

Technical drawings, datasheets, a reference model, target certification market and your expected annual volume. The more context, the tighter the first quote.

What you get back

Matching datasheet, configuration proposal, quotation with Incoterms, lead time and the applicable certification documents for your destination market.

Packaging & dangerous-goods handling: lithium batteries ship as Class 9 dangerous goods with UN 38.3 test documentation and UN-certified packaging. Sodium-ion cells may qualify for Class 9 Exempt. We coordinate documentation for sea, air and land freight to your destination.

Commercial terms

Item	Terms
Minimum order quantity	By model - confirm with sales for cells and for modules
Samples	Available for evaluation; lead time on request
Lead time - samples	Confirm with sales
Lead time - bulk	Confirm with sales (depends on model, quantity, configuration)
Payment terms	T/T; L/C for qualifying orders
Incoterms	EXW / FOB / CIF - per destination
Warranty	Per product specification
Documentation	Datasheet, UN 38.3, MSDS / SDS, certificate copies, test reports

Items marked in orange are commercial variables - confirm the current figures with your sales contact before issue to customers.

Response commitment

Inquiries are reviewed and answered within one working day. Include the destination country and we will quote the correct Incoterm in the first reply.

Send your inquiry today

From battery cell selection to custom module design, we help businesses find battery solutions tailored to their application, performance requirements and integration needs.

Place QR code here

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WHY PDDN
Own cell manufacturing facility - quality controlled from incoming material to finished module.

ONE SUPPLIER
Seven cell chemistries and formats plus five module families, sourced and specified together.

WHAT HAPPENS NEXT
Send your requirement - matching datasheet, configuration proposal and an Incoterm-based quotation within one working day.

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Typical values shown are for orientation. Final specifications are subject to the official datasheet of the ordered model.