

LiFePO4 Import Checklist

12 sourcing mistakes buyers make with lithium batteries from China, and the check that prevents each one. Print it, tick it, send it with your RFQ.

Written from the coordinator's side. We are a Shenzhen-based LiFePO4 supplier and OEM/ODM supply-chain coordinator, not a factory. We source from manufacturing partners and coordinate specifications, documents, samples, inspection and export, so we see where orders go wrong before the container leaves. These are the twelve mistakes we see most, with the evidence to ask for. Use them on any supplier, including us.

01 Taking "Grade A cells" as a word, not evidence

What we see: A cell brand on the label is a claim. Cell makers warn about unauthorised resellers: EVE Energy North America tells buyers that cells sold without its written certificate are not covered by its quality assurance or warranty programme. QR codes can be re-printed.

- ☐ Cell maker authorisation letter for the seller, or the batch purchase invoice / delivery note (prices may be redacted)
- ☐ Cell maker outgoing test data for your batch: capacity, voltage, internal resistance
- ☐ Written requirement: new, unused, same production batch, with matching limits (capacity, IR, voltage spread)

More: ljyenergy.com/grade-a-vs-grade-b-lifepo4-cells/

02 Comparing cycle-life numbers that have no test conditions

What we see: Quotes say "6,000+ cycles" next to datasheets that state, for example, a cycle count at 80% DoD, 25 °C, 0.5C/0.5C to 80% end-of-life. A bare number cannot be compared with a conditioned one.

- ☐ Cycles to what end-of-life %, at what DoD, C-rate and temperature
- ☐ Taken from the cell maker / partner manufacturer datasheet for your project, not a sales page
- ☐ The same basis written into the warranty (years, cycles, throughput or end-of-life capacity)

More: ljyenergy.com/how-to-verify-lifepo4-cycle-life-claims/

03 Trusting rated capacity without the test basis

What we see: Ah figures mean little without discharge rate, temperature and cut-off voltage, and Wh must equal V x Ah. We regularly see title, label and spec sheet disagree. A 16S LiFePO4 pack is 51.2V nominal (48V class): 51.2V x 100Ah = 5.12kWh.

- ☐ Capacity test basis in writing: discharge rate (e.g. 0.2C or 0.5C), temperature, cut-off voltage
- ☐ Check V x Ah = Wh on the label, the spec sheet and the quotation
- ☐ Capacity and internal-resistance test on your samples at the stated conditions

More: ljyenergy.com/how-to-test-lifepo4-battery-capacity-internal-resistance/

04 Accepting a UN38.3 summary that is not for your model

What we see: The most common document gap: a cell-level report, or a "similar" model, offered for a pack. Without a pack-level UN38.3 test summary for the exact shipped model, forwarders and carriers can refuse the cargo.

- ☐ UN38.3 test summary at pack level, for the exact model and configuration you ship
- ☐ Model name, rating and issuer on the summary match your label and invoice
- ☐ SDS (current revision) for the same battery

More: ljyenergy.com/battery-certification-verification-guide/

05 Checking certificates through the supplier's own link or screenshot

What we see: Screenshots prove nothing. Holder, model and standard edition must match the battery you are quoting, not "the factory" in general. An ISO 9001 certificate covers a quality system at a site; it is not a product test.

- ☐ Search the issuer's own database: IECEE (CB), TÜV Certipedia, Intertek, CSA, SGS, UL Product iQ, IAF CertSearch (ISO)
- ☐ Right standard for the product, e.g. IEC 62619 (industrial / stationary) is not IEC 62133-2 (portable)
- ☐ If a document does not exist for your model, it can be arranged per project; testing and certification fees are borne by the buyer, so budget time and cost

More: ljyenergy.com/lifepo4-battery-safety-certifications/

06 Assuming "works with any inverter"

What we see: Pylontech-style emulation is the common path, but every brand uses a different setting (e.g. Deye CAN 00, Growatt L52, Luxpower CAN 2, Solis PYLON_LV, Voltronic PYL). Emulation is not a listing: some inverter brands (e.g. SMA, Sofar, GoodWe) only support batteries on their own approved lists. Most field failures are physical: RJ45 pinouts differ by brand.

- ☐ Give the exact inverter / controller model and firmware version
- ☐ Ask for the protocol setting, cable pinout and a pairing log or screenshot with that model
- ☐ Check whether your inverter brand requires a listed battery for its warranty

More: ljyenergy.com/51-2v-lifepo4-battery-inverter-communication-guide/

07 Not testing the BMS on samples

What we see: Capacity tests tell you about the cells; BMS checks tell you whether the protection behaves as written. Set-points in the app often differ from the spec sheet.

- ☐ Low-voltage cut-off under a controlled load; low-temperature charge block if specified
- ☐ Over-current trip, done by a qualified person or a lab; never short-circuit, crush or over-charge on a bench
- ☐ Protection set-points read from the BMS app or log vs the written specification

More: ljyenergy.com/lifepo4-battery-incoming-inspection-guide/

08 Ordering without the duty cycle, temperature and mounting written down

What we see: RV, marine, golf-cart and outdoor storage projects fail on details nobody wrote down: charging below 0 °C, vibration, IP rating, terminal size, surge current at motor or inverter start.

- ☐ Continuous and peak current (A and duration) at your ambient temperature
- ☐ Charge temperature range; low-temperature protection or self-heating if you need it
- ☐ IP rating, vibration requirement, terminals and torque, max dimensions and weight

More: ljyenergy.com/oem-odm/

09 Letting the spec live in chat messages

What we see: When a dispute comes, the only reference is what was confirmed in writing. Silent changes of cell, BMS or firmware between sample and mass production are a known pattern.

- ☐ One confirmed specification (RFQ) with a written model-number mapping
- ☐ Sealed golden sample kept by both sides
- ☐ Change-control clause: notice before any change of cell, BMS, firmware or enclosure

More: ljienergy.com/battery-moq-sample-order-guide/

10 Paying the balance before inspection evidence

What we see: A Verified Supplier badge is a company snapshot on an audit date; the company can still be a trading company. A bank beneficiary that "changes" by email is a known fraud pattern.

- ☐ Balance tied to a passed pre-shipment inspection you appoint and pay (sampling usually ISO 2859-1, Level II; AQL agreed for critical / major / minor)
- ☐ Document set for the shipped model before release: UN38.3 test summary, SDS, packing list
- ☐ Beneficiary name = contracting company; confirm any bank change by phone on a number you already had

More: ljienergy.com/how-to-verify-lifepo4-battery-supplier-china/

11 Booking air samples or freight without the 2026 rules

What we see: From 1 January 2026 (IATA DGR 67th ed., ICAO TI 2025–2026), batteries packed with equipment (UN3481, PI 966) must also fly at ≤30% state of charge, like batteries shipped alone (UN3480, PI 965). Samples arrive part-charged. Sea export from China needs the dangerous-goods packaging certificate (危包证).

- ☐ UN number and packing instruction written into the order documents
- ☐ State of charge at handover, and how it was set and checked
- ☐ Forwarder accepts lithium batteries for your mode; plan a full charge before testing samples

More: ljienergy.com/china-lithium-battery-export-rules-explained/

12 No written after-sales and RMA path before the first order

What we see: Many "dead battery" reports are a BMS protection or sleep state, or a charger setting. Returns are dangerous goods: UN-rated packaging, labels and documents. Agree the process before you need it.

- ☐ Warranty basis and term, DOA window and the test method that decides it
- ☐ Spare units or parts, first-response and decision times, BMS data access
- ☐ Who arranges and pays return freight and dangerous-goods handling

More: ljienergy.com/lifepo4-battery-warranty-terms-importers-guide/

Pre-order evidence log

Keep one line per item. If a box is empty, it is still a claim, not evidence.

#	Evidence	Received (date)	Document / rev.	OK
01	Cell evidence: authorisation letter or batch invoice + cell maker test data			☐
02	Cycle-life basis: DoD, C-rate, temperature, end-of-life %, source datasheet			☐
03	Capacity test basis and your sample result (Ah, Wh, IR)			☐
04	UN38.3 test summary, pack level, exact model; SDS current revision			☐
05	Certificates checked in the issuer database: holder, model, standard			☐
06	Inverter / controller pairing: model, firmware, protocol setting, pinout, log			☐
07	BMS sample checks: cut-offs, low-temperature charge block, set-points			☐
08	Confirmed specification (RFQ) rev., model mapping, golden sample sealed			☐
09	Change-control clause in the contract			☐
10	Pre-shipment inspection report (your inspector); bank beneficiary confirmed			☐
11	UN number, packing instruction and SoC in the shipping documents			☐
12	After-sales / RMA terms signed: basis, DOA test, spares, return freight			☐

Want a second pair of eyes on a quote? Send your RFQ or a supplier's spec sheet and we will mark which lines are evidenced and which are still claims. WhatsApp +86 159 8945 0735 · ljienergy.com/contact/?product=Import-Checklist-RFQ-review

About these terms. MOQ, price, lead time and warranty terms are confirmed per order in the quotation. Certificates are available or arranged per project; certification and testing fees are borne by the buyer. LJY Energy is not listed on any inverter maker's approved battery list unless confirmed in writing for your order.

Sources (accessed 2026-10-28): IATA Battery Guidance Document, revised for the 2026 regulations; EVE Energy North America notice on unauthorised sellers; IECCE, Certipedia, Intertek, CSA, SGS and IAF CertSearch public databases; inverter makers' published battery lists and protocol documents (Deye, Growatt, Luxpower, Solis, Voltronic, SMA, Sofar, GoodWe); Alibaba.com "Introducing Verified Suppliers". Industry practice summaries are not standards; check current rules with your forwarder and compliance advisor.