

OEM/ODM LiFePO4 Battery Specification Request (RFQ) Template

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You don't need to fill every line to start. Mark each line **Required**, **Preferred** or **Open (advise me)**. A supplier that confirms each line in writing, and flags what it cannot confirm, saves you a re-quote, a failed sample or a disputed shipment. Keep the confirmed version: it is the reference for samples, mass production, inspection and warranty claims.

LJY Energy is a supplier and OEM/ODM coordinator, not a factory. MOQ, price, lead time, warranty and capacity are confirmed per project in the quotation. Certificates are available or arranged per project; testing and certification fees are borne by the buyer.

Project / company: _____ Contact: _____ Date: _____

A. Project and application

#	Field (what to write)	Your requirement	Req. / Pref. / Open	Supplier confirmation	Evidence (doc, rev.)
A1	Company type and role: OEM equipment maker / brand owner / distributor / integrator / installer				
A2	Application and duty cycle: e.g. golf cart, RV house bank, marine trolling, telecom backup, home ESS, AGV; hours per day, cycles per day, float vs cycling				
A3	Equipment the battery must work with: inverter/charger/controller/motor brand and exact model , firmware if known				
A4	Operating environment: indoor/outdoor, vibration (vehicle/boat), altitude, humidity/salt spray				
A5	Target markets (countries): list every country of sale				

B. Electrical

#	Field (what to write)	Your requirement	Req. / Pref. / Open	Supplier confirmation	Evidence (doc, rev.)
B1	Nominal voltage: 12.8 / 25.6 / 38.4 / 51.2 V or other; series count if known				
B2	Capacity / energy: Ah and Wh/kWh; usable vs nominal				
B3	Operating voltage window: min/max V at the equipment terminals				
B4	Continuous discharge current: A, at what ambient temperature				

#	Field (what to write)	Your requirement	Req. / Pref. / Open	Supplier confirmation	Evidence (doc, rev.)
B5	Peak / surge current: A and duration (e.g. 2× for 10 s, motor inrush, inverter start)				
B6	Charge current and charger: max charge A, charger type (alternator, DC-DC, solar MPPT, inverter-charger)				
B7	Capacity test basis: discharge rate (e.g. 0.2C/0.5C), temperature, cut-off voltage, charge method				
B8	Cycle-life claim basis (if requested): cycles to what end-of-life % at what DoD, C-rate and temperature				
B9	Series/parallel expansion: max units in parallel/series, and whether the BMS supports it				
B10	Self-discharge / storage: expected storage time before use, storage SoC				

C. Cells

#	Field (what to write)	Your requirement	Req. / Pref. / Open	Supplier confirmation	Evidence (doc, rev.)
C1	Cell chemistry: LiFePO4 (LFP)				
C2	Cell format: prismatic / cylindrical (e.g. 32700) / pouch; preferred capacity (e.g. 100/105/280/314Ah)				
C3	Cell brand/model preference: named brand and model, or "supplier to propose, in writing"				
C4	Cell grade and new/unused requirement: new, unused, same production batch; matching criteria (capacity, IR, voltage spread)				
C5	Cell traceability: QR/serial readable and recorded per pack; batch test report				
C6	Cell test evidence: cell maker datasheet; cell UN38.3; cell IEC 62619 / UL 1642 if applicable				

D. BMS and communication

#	Field (what to write)	Your requirement	Req. / Pref. / Open	Supplier confirmation	Evidence (doc, rev.)
D1	BMS rating: continuous/peak A, MOSFET or relay/contactors				

#	Field (what to write)	Your requirement	Req. / Pref. / Open	Supplier confirmation	Evidence (doc, rev.)
D2	Protection set-points: over-/under-voltage per cell, over-current, short-circuit, over-temperature, low-temperature charge cut-off				
D3	Balancing: passive/active, balance current				
D4	Communication protocol: CAN / RS485 / RS232 / Bluetooth / none; protocol name (e.g. "Pylontech-compatible CAN"), baud rate, ID setting				
D5	Equipment pairing evidence: wanted: test log or screenshot with your exact inverter/controller model and firmware				
D6	Monitoring / app: Bluetooth app, display/SOC meter, data export				
D7	Firmware: who holds it, update method, change notification				
D8	Wake-up / shutdown behaviour: sleep mode, wake by charge or button, standby drain				

E. Temperature

#	Field (what to write)	Your requirement	Req. / Pref. / Open	Supplier confirmation	Evidence (doc, rev.)
E1	Operating range: charge °C range, discharge °C range				
E2	Self-heating: required / not required; heating power and trigger temperature; heating energy source				
E3	High-temperature derating: max ambient, enclosure ventilation				

F. Mechanical, enclosure and terminals

#	Field (what to write)	Your requirement	Req. / Pref. / Open	Supplier confirmation	Evidence (doc, rev.)
F1	Max dimensions L×W×H and weight: mm/kg; group size (e.g. BCI 24/27/31, 8D, GC2) if replacing lead-acid				
F2	Enclosure material: ABS/PC, steel, aluminium; colour				
F3	Ingress protection: IP rating needed (e.g. IP65/IP67)				

#	Field (what to write)	Your requirement	Req. / Pref. / Open	Supplier confirmation	Evidence (doc, rev.)
F4	Mounting and orientation: upright only / any orientation; rack 19-inch; wall mount; fixing points				
F5	Vibration / shock requirement: vehicle or marine; standard or test you require				
F6	Terminals: stud size (M6/M8/M10), terminal type, polarity layout, torque spec				
F7	Breaker / switch / fuse: built-in breaker, on/off switch, fuse requirement				
F8	Handles, cable kit, accessories: handles, cables, comms cables, brackets				

G. Branding, labelling and documentation

#	Field (what to write)	Your requirement	Req. / Pref. / Open	Supplier confirmation	Evidence (doc, rev.)
G1	Private label scope: logo on case, rating label, model naming, colour				
G2	Label content by market: rating label fields, warnings, symbols, languages, serial/date code, QR				
G3	Manual and documents: user manual, installation guide, spec sheet, in which languages				
G4	Model-number control: your model name ↔ supplier model, written mapping				

H. Packaging and shipping

#	Field (what to write)	Your requirement	Req. / Pref. / Open	Supplier confirmation	Evidence (doc, rev.)
H1	Shipping classification: UN3480 (batteries alone) / UN3481 (packed with or contained in equipment)				
H2	Transport mode: sea (IMDG) / air (IATA DGR) / road / rail; FCL or LCL				
H3	Shipping documents required: UN38.3 test summary (pack-level, your model), SDS, DG declaration, packing certificate if required by carrier				
H4	Packaging spec: carton/wood case, drop/stack requirement, pallet type, units per carton/pallet, SoC at shipment				

#	Field (what to write)	Your requirement	Req. / Pref. / Open	Supplier confirmation	Evidence (doc, rev.)
H5	Incoterm and ports: EXW/FOB/CIF/DAP/DDP + Incoterms 2020 , origin/destination port				

I. Certifications and compliance (by market)

List what your market requires. The supplier answers per model and project: available or arranged per project, with testing and certification fees borne by the buyer.

#	Field (what to write)	Your requirement	Req. / Pref. / Open	Supplier confirmation	Evidence (doc, rev.)
I1	Required standards by market: examples, check with your compliance advisor: UN38.3 (transport, all markets); IEC 62619 (industrial/ESS); IEC 62133-2 (portable); UL 1973 (stationary/auxiliary incl. RV); UL 9540/9540A (ESS systems, US); UL 2271 (light EV incl. golf/LSV); CE + EU Battery Regulation 2023/1542 (EU); market listings such as Australia CEC				
I2	Who holds each certificate: named holder on each certificate/report (cell maker, pack maker, brand)				
I3	Witness or own testing: will you test samples at your own lab or a third party?				
I4	Budget and timeline owner: who pays and when; re-test if the design changes				

J. Quantities, forecast and commercial

#	Field (what to write)	Your requirement	Req. / Pref. / Open	Supplier confirmation	Evidence (doc, rev.)
J1	Sample quantity: e.g. 2–5 units per configuration				
J2	Trial / pilot order: quantity band				
J3	Annual forecast: quantity band per year, seasonality, number of SKUs				
J4	Quantity tiers for pricing: e.g. 50 / 200 / 1000 units				
J5	Payment preference: T/T split, L/C, other				
J6	Target price or budget band (optional): band per unit or per kWh				

K. Samples, QC and inspection

#	Field (what to write)	Your requirement	Req. / Pref. / Open	Supplier confirmation	Evidence (doc, rev.)
K1	Sample acceptance tests: capacity at stated conditions, IR, cell voltage spread, BMS protection check, comms pairing with your equipment, fit check				
K2	Golden sample: sealed reference unit kept by both sides				
K3	Production QC records: per-pack test record (OCV, IR, capacity or charge/discharge check, insulation, BMS function), serial list				
K4	Third-party inspection: pre-shipment inspection by an agency you appoint (e.g. SGS, BV, TÜV, Intertek, QIMA); sampling plan (e.g. ISO 2859-1 Level II); AQL for critical/major/minor				
K5	Change control: supplier must notify before changing cell, BMS, firmware or enclosure				

L. Warranty terms to negotiate (not fixed numbers)

#	Field (what to write)	Your requirement	Req. / Pref. / Open	Supplier confirmation	Evidence (doc, rev.)
L1	Warranty basis: years / cycles / throughput (MWh) / end-of-life capacity %, whichever comes first				
L2	Who issues and who receives claims: issuing party, contact, language				
L3	Exclusions: misuse, wrong charger settings, storage, physical damage				
L4	Remedy options: repair / replace / credit; advance replacement or not				
L5	DOA window: days after arrival and the test method				

M. After-sales and RMA

#	Field (what to write)	Your requirement	Req. / Pref. / Open	Supplier confirmation	Evidence (doc, rev.)
M1	First-line diagnosis: what the distributor/installer checks before raising a claim				
M2	Claim evidence: serial, date code, photos, voltages, BMS screenshot/log, install details				

#	Field (what to write)	Your requirement	Req. / Pref. / Open	Supplier confirmation	Evidence (doc, rev.)
M3	Response and decision time: target time for first reply and for decision				
M4	Spare units / parts: spare share with the order, BMS boards, cables				
M5	Returns logistics: whether the unit must return; who arranges DG return and pays				

Why each line matters: ljienergy.com/oem-odm/#oem-rfq-checklist