

ZHGPOWER CUSTOMER SUPPORT STANDARD

After-Sales Service & Warranty Support Procedure

Our promise

We do not promise that equipment will never have a problem. We promise that when a problem is reported, there is a named contact, a defined evidence list, a predictable response process, and a documented closure.

Document owner	Amy Wang, ZHGPOWER
Applies to	LiFePO ₄ batteries, battery systems, inverters and solar modules supplied by ZHGPOWER
Audience	Distributors, installers, project partners and end users
Version	1.0 — September 2026
Controlling terms	Signed sales contract, PI and approved project specifications

This procedure explains how support is handled. It is not a substitute for the product datasheet, installation manual, sales contract or local law.

1. Purpose and service principles

This procedure makes risk ownership visible before an order is placed. It covers claim intake, safety escalation, technical diagnosis, responsibility assessment, remedy approval, corrective action and case closure.

- One-window intake: customers may submit all system-related issues to ZHGPPOWER first when the complete system was supplied by us.
- Evidence before conclusions: neither side should assume the battery, inverter, panel or installation is at fault before data is reviewed.
- Safety first: any smoke, fire, swelling, abnormal smell, liquid leakage or uncontrolled overheating must be treated as urgent.
- No unauthorized return: lithium batteries must not be returned or transported without written routing instructions from ZHGPPOWER.

2. Scope and warranty basis

Product	Warranty basis	Important distinction
ZHGPPOWER LiFePO ₄ battery packs and systems	Warranty period stated in the quotation, PI or contract,	Design life and cycle-life figures are engineering expectations under specified conditions, not an extension of the warranty period.
Third-party inverters supplied by ZHGPPOWER	Original manufacturer warranty and the model-specific quotation/contract.	ZHGPPOWER coordinates the claim, while final warranty authorization may require the inverter manufacturer's diagnosis.
Solar modules supplied by ZHGPPOWER	Original manufacturer product/workmanship and performance warranty stated for the selected model.	Performance warranty, product warranty and transport-damage claims are different processes.
Complete ESS/BESS supplied by ZHGPPOWER	Approved BOM, single-line diagram, commissioning settings, operating conditions and project contract.	System-level support does not automatically make one component responsible for every system symptom.

3. Named contact and support channels

Amy Wang, the person in charge of ZHGPPOWER, remains the commercial escalation contact. Technical cases are assigned to an engineer, but the customer does not need to search for the correct internal department.

Customer action

Send the order/PI number, product serial number and a short problem description through the agreed WhatsApp or email channel. For urgent safety events, write "URGENT SAFETY ISSUE" at the beginning of the message.

4. Response targets

Priority	Examples	Acknowledgement	Next update
P1 — Safety critical	Smoke, fire, swelling, leakage, abnormal smell, uncontrolled overheating	As soon as practicable during business hours; safety instructions take priority	Initial technical assessment after minimum evidence is received; updates until containment
P2 — System unavailable	Battery or inverter cannot operate; repeated protection shutdown; complete communication loss	Within 1 business day	Initial assessment normally within 2 business days after complete evidence
P3 — Performance or intermittent	Shorter runtime, abnormal SOC, occasional alarm, unstable communication	Within 1 business day	Assessment or test plan normally within 3 business days after complete evidence
P4 — Cosmetic/documentation	Label, housing appearance, manual, accessory or non-functional issue	Within 2 business days	Proposed handling after evidence review

5. Immediate safety actions

Stop and isolate

If there is smoke, fire, swelling, leakage, abnormal smell or rapid temperature rise: stop charging/discharging if it is safe to do so; isolate the equipment and surrounding combustibles; follow the site emergency plan; contact local emergency services when needed; and do not open, puncture, move or ship the battery without professional guidance.

After the site is safe, photograph the installation from a safe distance and preserve inverter/BMS logs. Safety containment comes before evidence collection.

6. Claim submission checklist

Required information	What to provide
Order identification	Customer/company name, PI or invoice number, shipment date, product model and quantity affected
Product traceability	Clear photos of serial-number label, battery/BMS label, inverter model and firmware version
Problem description	When the issue began, frequency, operating mode, recent changes and whether the problem can be reproduced
Electrical evidence	Pack and module voltage, SOC, charge/discharge current, temperatures, alarm code, BMS/app screenshots and inverter event logs
Installation evidence	Photos/video of cable size, polarity, breakers/fuses, grounding, parallel/series arrangement, communication cable and environment
System configuration	Inverter settings, battery protocol, PV configuration, grid/generator information, connected loads and operating schedule
Transport damage	Unloading photos/video, outer packaging, pallet/wooden case, impact marks and delivery document notation before unpacking is completed

Incomplete evidence does not cancel a claim, but it may delay diagnosis. ZHGPOWER will identify the missing minimum information rather than repeatedly asking for unrelated documents.

7. Diagnostic workflow

- Claim logged and case number assigned.
- Safety priority and evidence completeness checked.
- Remote diagnosis: settings, wiring, logs, voltage/current and communication reviewed.
- Controlled test or part-swap plan issued when remote evidence is inconclusive.
- Responsibility and remedy proposed in writing.
- Customer confirms restoration; case is closed with a short record.
- For material or repeat issues, ZHGPOWER issues a corrective-action report.

8. Responsibility matrix

Cause	Primary responsibility	Normal handling
Confirmed manufacturing or material defect within warranty	ZHGPOWER for ZHGPOWER-manufactured battery products	Remote support, approved repair, warranted replacement component, or other written remedy according to the claim decision
Inverter or solar-module defect	Original equipment manufacturer; ZHGPOWER coordinates when supplied by us	Evidence collection, manufacturer diagnosis and remedy under the applicable model warranty
Incorrect system design or settings provided by ZHGPOWER	ZHGPOWER within the approved design scope	Corrected settings/design and agreed remedial support
Installation, wiring, local code or commissioning error	Installer/system integrator	Technical guidance may be provided; site labor/material is not automatically covered
Incorrect use, overload, reversed polarity, unauthorized series connection or bypass of protection	Customer/installer	Paid repair/parts may be offered after safety assessment

Cause	Primary responsibility	Normal handling
Transport damage before agreed delivery point	Party bearing transport risk under the agreed Incoterm and carrier claim process	Preserve packaging/evidence; notify immediately; follow carrier/insurance claim
Damage after delivery, storage or secondary transport	Customer/logistics party controlling the goods	Paid support may be offered; dangerous-goods routing must be approved
Unconfirmed or mixed cause	Shared investigation; no premature admission	Controlled testing, agreed temporary measure and written update

9. Available remedies

The remedy is selected according to safety, technical feasibility, warranty coverage, product value, dangerous-goods logistics and local service capability. A claim does not automatically require return of the complete battery.

- Remote configuration, firmware/settings correction or commissioning guidance.
- Replacement accessory or serviceable component, with video guidance where appropriate.
- Local repair authorization or service allowance only when approved in writing before work begins.
- Replacement unit, credit or other commercial solution when specifically approved after responsibility assessment.
- Corrective-action report for confirmed material, recurring or batch-related issues.

Freight and duty

Replacement-part cost, urgent courier cost, lithium-battery dangerous-goods freight, import duty, local labor and return logistics are separate cost items. Their allocation follows the signed contract and the written claim approval. No party should arrange return shipment or incur third-party repair cost expecting reimbursement without prior written authorization.

10. Warranty exclusions and limitations

The following are normally outside warranty unless the contract expressly states otherwise:

- Normal capacity degradation within the product's specified performance limits.
- Operation outside specified voltage, current, SOC, temperature, humidity, altitude or ingress-protection limits.
- Improper storage, long-term low SOC, failure to recharge during storage, or damage after deep over-discharge.
- Unapproved disassembly, modification, welding, firmware change, BMS bypass or repair.
- Incorrect polarity, cable sizing, protection devices, grounding, parallel/series connection or inverter settings.
- Use with an inverter/protocol not confirmed for the supplied configuration, or third-party firmware changes after testing.
- Accident, impact, water ingress beyond the rated protection, fire from an external source, pests, theft, force majeure or local grid events.
- Consequential loss, lost profit, customer penalties, site downtime or local labor unless expressly accepted in writing.

11. System compatibility and commissioning

Battery voltage compatibility alone does not prove closed-loop communication compatibility. CAN/RS485 protocol, firmware version, inverter battery profile, charge/discharge limits and cable pin definition must be confirmed.

- Compatibility is confirmed only for the tested or documented model/firmware/configuration.
- For matched battery-and-inverter packages, ZHGPPOWER can perform communication and charge/discharge testing before shipment and provide test records when agreed.
- The installer remains responsible for site wiring, protection, local electrical code and final commissioning.
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12. Distributor and installer support program

Support item	ZHGPOWER support	Partner responsibility
Pre-sales	Model selection, load/runtime review, protocol check, system proposal and technical documents	Provide accurate application, load, site and local compliance information
Pre-shipment	Inspection, serial-number record, agreed communication test and packing evidence	Approve final BOM, drawings, labels, settings and destination requirements
Training	Remote product, installation, commissioning and basic diagnosis training	Nominate technical staff and retain training records
Local first line	Decision tree, remote engineer support and approved spare-part guidance	Perform safe inspection, collect evidence and communicate with end user
Spare parts	Recommend a starter spare-parts kit based on installed base and model mix	Maintain agreed local stock and track parts used by serial number
Case review	Review recurring issues and issue corrective action where required	Share complete case data and confirm field result

13. Batch issues, shortage and change management

Potential batch issues are not defined by a universal percentage. Severity, safety impact, common root cause, affected serial-number range and actual failure pattern are assessed together. A batch remedy is approved only after evidence supports a shared cause.

During supply constraints, ZHGPOWER does not promise unlimited supply. For strategic partners, rolling forecasts, material reservation, agreed safety stock and early-warning updates may be established in a separate supply agreement.

Tariff, tax and regulatory changes are handled under the agreed Incoterm and contract. Existing and new orders may be treated differently. Cost-sharing, reclassification, semi-finished shipment or alternative routing is never assumed; it must be legal, technically feasible and agreed in writing.

14. Corrective action and closure

For confirmed material, safety-related, recurring or batch-related issues, ZHGPOWER may issue a concise corrective-action report covering:

- Problem statement and affected serial-number/batch range.
- Verified root cause or current investigation status.
- Containment action for goods already shipped or installed.
- Corrective and preventive action in design, material, process, testing or documentation.
- Verification method and responsible owner.

A case is closed when the agreed action is completed and the customer confirms restoration, or when the written claim decision states that no further action is required. The case record is retained for traceability.

15. What this procedure does not promise

Transparent boundaries

This procedure does not promise zero failures, instant root-cause analysis, unconditional refund, automatic whole-unit replacement, reimbursement of unapproved local costs, unlimited supply, tariff absorption, or compatibility with every third-party device. Any exceptional commercial commitment must be written into the applicable order contract.

16. Customer acknowledgement

By placing an order, the customer confirms that the applicable datasheet, installation manual, approved system configuration, quotation/PI and warranty terms have been reviewed. Where these documents differ, the signed sales contract and model-specific written terms prevail.

Appendix A — After-sales claim form

Field	Customer information
Case number	To be assigned by ZHGPPOWER
Customer/company	
Contact	
PI/invoice/order no.	
Product model	
Serial number(s)	
Installation date/location	
Inverter model & firmware	
Issue first observed	
Alarm code	
Issue description	
Operating condition	
Safety symptoms?	Smoke / fire / swelling / leakage / smell / overheating / none
Evidence attached	Photos / video / BMS data / inverter log / wiring diagram / delivery record
Temporary action taken	
Requested support	

Appendix B — Quick evidence checklist

- Do not delete alarms or reset equipment before screenshots are taken, unless required for safety.
- Photograph the complete installation first, then close-ups of labels, terminals, protection devices and communication ports.
- Record pack voltage with the BMS/app reading visible when possible.
- For runtime complaints, record starting SOC, ending SOC, load power, elapsed time and inverter efficiency/alarms.
- For transport damage, stop unpacking, preserve all packaging and note damage on the delivery record.

Appendix C — Corrective-action summary

Item	Record
Problem and scope	
Containment	
Root cause	
Corrective action	
Preventive action	
Verification	
Owner and due date	
Customer confirmation	