



WARRANTY LETTER

FOR ZRGIP

ENERGY STORAGE SYSTEM

Object region: Europe/USA

Effective date: 2025.00.00



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Object products:

Table1. Object products list

Product Item	Model No.
LiFePO4	

This limited warranty letter (hereinafter referred to as the “Warranty”) is applied for the lithium iron phosphate battery module and master controller (hereinafter referred to as the “Products”) provided by ZHONGRUI GREEN ENERGY TECHNOLOGY (SHENZHEN) CO., LTD. (hereinafter referred to as “ZRGP”).

Products include the above models and shall be authorized and provided by ZRGP to users.

Unless otherwise specified herein, the details of the Warranty shall be as follows:

1. Warranty Period

1.1 Basic product warranty

1.1.1 The “Warranty Start Date” is the earlier of (i) the date falling 90 days after FAT (Factory Acceptance Test) date or (ii) the date, as acknowledged by buyer in writing, on which the product has finished SAT (Sample acceptance test).

1.1.2 In the time stipulated in the first article of this section (i.e within 90days of the project not completing the SAT acceptance), the project is considered that have been approved by the SAT for the reason of the buyer, which resulted in the project not completing the SAT on time. In the future the supplier will cooperate with the buyer for commissioning and SAT test, and the buyer shall not impose additional fines on the Supplier.

1.1.3 The product warranty period shall commence from the warranty start date. Basic product warranty period is 3 warranty year. In the period, ZRGP is responsible for maintenance of the product.

1.1.4 The basic warranty period ends by the date which reaches earlier, the calendar year or the specified maximum throughput energy value for each year.



1.2 Extended product warranty

1.2.1 If the buyer requests to extend the warranty period and the buyer (or owner/user) follows the Standard operating conditions during the basic warranty period, the buyer can choose to purchase different warranty services for another extended period.

1.2.2 Maximum warranty period is 15 years, including 3 years of basic warranty period and 12 years of extended warranty period.

1.2.3 The extended warranty period ends by the date which reaches earlier, the calendar year or the specified throughput energy value for each year.

2. Performance Warranty

2.1 Lifetime

1) The battery modules that consist of 280Ah cells will have lifetime of 6000 cycles (EOL = 60%) from the warranty start date if the products work at the condition of 0.5C charge and 0.5C discharge at the constant temperature $25^{\circ}\text{C}\pm 2^{\circ}\text{C}$, 100%DOD. (8000 cycles@80%DOD).

2.2 Energy Performance

2.2.1 Definition

1) Nominal Capacity: by the nameplate.

2) Max. Aggregate Discharge Throughput Energy: On the condition of 1 cycle per day, the total discharge throughput per warranty year on the condition 0.5C charge and discharge at the constant temperature $25^{\circ}\text{C}\pm 2^{\circ}\text{C}$.

3) Min. Remained Energy: At the end of every warranty year, the minimum usable energy of the battery. By different C-rate of charge of discharge, the remained percent will be various as below:

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Table2. The trend of minimum remained energy(by different times and C-rates)

Warranty Year	0~0.33C	0.34~0.66C	0.67~0.9C
0	100%	100%	100%
1	90.0%	89.8%	89.0%
2	86.0%	85.0%	84.0%
3	82.0%	82.0%	81.0%
4	79.0%	78.0%	77.0%
5	77.0%	74.0%	73.0%
6	74.0%	73.0%	72.0%
7	72.0%	71.0%	69.0%
8	69.0%	67.0%	65.0%
9	67.0%	65.0%	63.0%
10	65.0%	63.0%	60.0%

Table 3. The trend of minimum remained energy of battery product

Item No.	Nominal Capacity (kWh)	Warranty Year	Max. Aggregate discharge Throughput Energy (MWh)	Min. Remained Energy %	Min. Remained Energy (kWh)
PBM233125A0	232.96	1	80.96	93.36%	217.50
		2	159.39	91.13%	212.30
		3	243.36	89.02%	207.38
		4	310.96	87.14%	203.00
		5	384.35	85.38%	198.90
		6	456.23	83.74%	195.07
		7	526.85	82.09%	191.25
		8	595.95	80.45%	187.42
		9	663.54	78.81%	183.59
		10	729.87	77.28%	180.04



2.2.2 If the actual annual aggregate discharge energy in any one warranty year is greater than the annual aggregate discharge energy specified in the given year, the Energy warranty will be automatically entering the next warranty year.

2.2.3 If the actual aggregate discharge energy reaches the total 15-years' accumulative value within basic warranty period (3 warranty years), the ESS warranty will be ended.

* Note: the standard test condition is defined as in the Appendix 1. (Temperature, C-rate, etc.)

2.2.4 Energy prediction accuracy

The energy storage system may have a certain error in predicting the battery attenuation curve about 2%:

- 1) During the Energy acceptance and warranty period, if the test energy is less than 2% of the target energy (including 2%), the buyer shall be deemed to have passed the energy acceptance.
- 2) Compared with the target energy, the difference is more than 2%, and the supplier will restore the target energy.
- 3) During the energy acceptance and warranty period, if the test energy is larger than the target energy, the supplier will not charge for the excess energy.

3. Limited Warranty

3.1 Warranty Preconditions

- 1) The defect of the Product occurs within the Product warranty period as determined above.
- 2) Any product failure, fault or warning which had rendered the system inoperable or work abnormally, the relevant information must be reported in the form of Warranty Claim (stated in Clause 5) below to ZRGP and ZRGP Authorized Service Partner (stated in Clause 5 below) within 2 weeks of occurrence.
- 3) Product shall be installed by skilled personnel recognized or Partner certified by ZRGP. Skilled personnel recognized is a trained and qualified electrician or installer defined in Installation Guidance.
- 4) Installer and end-user shall correctly operate and use the product according to User Manual and Installation Guidance.
- 5) The purchase document (Commercial Invoice) shall be provided when initiate the Warranty Claim process.
- 6) The product installation shall be completed within in 30 calendar days from the date of receiving product.



- 7) The ambient operating temperature of the product shall not exceed the range -20°C - 55°C . The product shall not be exposed or stored in an environment where the temperature is higher than 50°C . The installation area must be ventilated in accordance with the requirements of the user manual and installation guide.
- 8) This Warranty is subject to the working condition of one full cycle per day. Full cycle means that discharge the usable capacity of a fully charged battery and fully charge it afterwards. Partial cycles sum up to a full cycle according to energy charged and discharged.
- 9) The product is not suitable for supplying life-sustaining medical devices.
- 10) Once the product is shipped, the product is not required to meet new policies or standards upgrade.

3.2 Warranty Exclusion

- 1) Warranty Period specified above has already expired.
- 2) Product damage and defect caused by End User's improper use, misuse, abuse, which unconflicting with the User Manual.
- 3) Abuse, neglect, or accident occurs during storage, transport, handling, installation, application, and service.
- 4) Use of unauthorized wiring and faulty or incompatible devices.
- 5) Arbitrarily modify the product or its functions without permission from ZRGP.
- 6) Change the installation method that not in accordance with the installation manual.
- 7) Product damages caused by maintenance and other services by unauthorized operators by ZRGP.
- 8) Failure to provide the correct product serial number and failure to decipher the product serial number.
- 9) External abnormal physical or electrical stress effects (power interruption surges, spring currents, lightning, floods, fires, catastrophic damages, etc.)
- 10) External forces, force majeure (causes of natural disasters, unforeseen, unavoidable, insurmountable objective events, wars, strikes, riots, terrorism, or other activities involving governments, suitable and sufficient labor and materials)
- 11) Product damage caused intentionally or by deliberate action.



- 12) Product failures have not been reported to ZRGP within two weeks of discovery.
- 13) Purchase and installation of products outside Europe/USA.
- 14) The buyer refuses to provide the network on the project site or cannot provide ESS effective operation data, and the supplier cannot remotely monitor the operation data of ESS.

3.3 Warranty Limitation

- 1) Any authorized service partner, distributor, agent, or their employees have no right to modify, extend or replenish this Warranty.
- 2) If any provision in this Warranty is held to be illegal or unenforceable, the legality and enforceability of the remaining provisions herein will not be affected.
- 3) Except as otherwise stipulated in this Agreement, within the maximum scope permitted by applicable law, ZRGP shall not be liable for any direct, indirect, special, incidental, or non-initiative damages arising from the purchase or use of products and their related production. Loss of use, loss of earnings, loss of actual or previous earnings (comprehensive joint use), loss of use of funds induced by any reason, loss of long-term savings, loss of work, loss of opportunity, loss of business, loss of reputation, personal injury, or consequential damage; Comprehensive but not limited to labor or aftereffect loss.
- 4) Under any circumstances, the total responsibility of quality warranty ZRGP bears shall not exceed the buyer's payment for products by Commercial Invoice.
- 5) In the event of any inconsistencies between this Warranty letter and Technical Agreement, the technical agreement shall prevail.

3.4 Warranty Expiration

Regarding the service of products that expire the warranty period, ZRGP agrees to provide certain after-sales services to the user upon written request of ZRGP authorized service partners. All costs and expenses, including but not limited to materials, parts, or labor, shall be borne entirely by the User. If the User requests out-of-warranty service in writing, the User must provide a detailed description of the defect so that the defect can be detected and repaired by ZRGP'S authorized service partner. For the avoidance of doubt, ZRGP will not be responsible for out-of-warranty service under any circumstances.



3.5 Warranty Inapplicability

If the reported warranty claim is invalid, the owner or the user is responsible for any warranty costs incurred as the warranty claim does not apply. Except that this inapplicability is not found in certain cases.

4. Warranty Scope of Work

4.1 Normal Scope of Work

The warranty scope of work (in this project) includes two parts: basic warranty, enhanced warranty. The service scope is shown in the table below.

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(continued)

Table 4. Service scope

Service Scope Summary	Basic Warranty scope
Factory training	√
Site training	√
Remote installation instruction	√
Remote commissioning instruction	√
Supply three-month cloud data service	√
Supply three-month cloud data service, and supply monthly system health state, and correct any potential issue	√
PCS maintenance instruction	√
Battery maintenance instruction	√
Fire suppression system maintenance instruction	√
Auxiliary system maintenance instruction	√
Provide maintenance and diagnostic report	√

4.2 Replace or Repair

4.2.1 If any product covered by this Warranty and confirmed by an authorized ZRGP service partner is found defective or nonconforming, ZRGP will replace or repair the defective products in sole discretion. Any replacement or repair shall not be considered as an extension or recalculation of the warranty period.

4.2.2 ZRGP will be responsible for the approved repair or replacement fees which relates to the above Clause 4.2.1.

4.2.3 In case that the Products or the related parts are discontinued, ZRGP may replace them with products or parts that are not brand new, but the quality is up to standard, which doesn't affect normal use.



4.3 Unincluded Service & Fees

The following items are not included in the normal scope of work of ZRGP. They can be negotiated separately according to the actual situation.

4.3.1 Send personnel from ZRGP side to replace or install the Products or spare parts at the site.

4.3.2 On-site diagnosis of specific problems requested by the customer to ZRGP.

4.3.3 Shipping charges for delivery the defective products to a location designated by ZRGP are not included in this Warranty.

4.3.4 Recycle of the battery system and the batteries and the recycle cost is not included in this Warranty. The customer himself shall recycle them according to the local policies.

4.4 Response to after-sales service

4.4.1 During the 3 years of basic Warranty Period, ZRGP will provide 5 days per week and 8 hours per day (5*8) (from 9:00 A.M. to 17:00 P.M. local time, Monday through Friday, excluding holidays) technical and phone support.

4.4.2 If the User requires 24*7 after-sale services, both parties can negotiate separately in the commercial terms.

4.4.3 ZRGP requires 24*7 data collection of read only remote monitoring access to the ESS, these data is required to support the Warranty.

4.4.4 The service period of ZRGP cloud platform lines with the agreed warranty period. If User requires expanded period, both parties can negotiate separately in the commercial terms.

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5. Warranty Claim

Warranty Claim shall be reported to ZRGP in the following format:

Table 5. Warranty claim

No.	Item	Detail
1	Product Model Number	
2	Main Control Serial Number	
3	Battery Module Serial Number	
4	Installation Date (SAT Date)	
5	Invoice Number	
6	Fault code	
7	Fault description	

ZRGP Authorized Service Partner:

6. Arbitration

1) In case of any dispute regarding Warranty Claims, with mutual consent, ZRGP and the user will entrust an international testing agency for third party verification and opinion. Unless otherwise agreed, all costs and expenses must be borne by the requesting party conducting the inspection.



Appendix 1 - Energy Test Conditions

Ambient temperature: 23-27°C, Humidity: 25%-85%, Ambient air pressure: 86kPa-106kPa Charging/discharging method:

- i. Use constant current (0.2C) to discharge the battery until the battery is automatically protected.
- ii. Let the batteries sit for 10 minutes.
- iii. Use constant current (0.2C) to charge the battery until to the recommended charge voltage, then use the constant recommended charge voltage to charge the battery until the current decrease to 0.02C or when the battery is automatically protected.
- iv. Let the battery rest for 10 minutes.
- v. Discharge the battery at a constant current (0.2C) until the battery is automatically protected. Calculate the discharged capacity. Monitor the current in real time. (When the current is constant).
- vi. The formula is: Current Capacity = Discharge Time x Constant Current Value.
- vii. Charge the battery with constant current (0.2C) to 45~60% SOC.



Appendix 2 - Contact

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