Growatt Battery Warranty Terms & Conditions

Apply to the following models:

Growatt Hope series Cobalt Free Lithium Iron Phosphate Battery (Cobalt free LiFePO4), including battery Module:Hope 14.3L-A1 (14.3kWh, 51.2V, 120kg) and Hope 14.3L-R1 (14.3kWh, 51.2V, 122kg), Hope 16.0LM-A1(16kWh, 51.2V, 120kg) ,Herein after refers as “the battery”.

Growatt New Energy Technology Co., Ltd provides a non-transferable warranty for a period of 5/10 years for the integrated lithium iron phosphate batteries (the battery). The battery warranty is provided by Growatt only for cooperating usage with Growatt Storage Devices, (hereinafter referred to as "GROWATT STORAGE DEVICES"). This standard warranty validates from the date of customer purchase, and no more than 5/10 years and 3 months from the date of delivery from Growatt.

These warranty terms & conditions only apply for devices originally purchased from Growatt for selling and installation in the defined destination set forth in the purchase orders in the EU market (out of China), unless specifically stipulated otherwise.

Warranty Period subjects to the Warranty terms & conditions, as well as the exclusions describes below. This warranty does not include any accessories and tool kit items provided with the product.

Growatt warrants that the warranted battery retains at least 70% of Nominal Operation Energy (The Nominal Operation Energy is 14.3 kWh for each Hope 14.3L Cobalt free LiFePO4 battery, 16 kWh for each Hope 16.0LM Cobalt free LiFePO4 battery, hereinafter referred to as Nominal Operation Energy) for the 5/10 years warranted

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period after under proper conditions of the use during the period of battery performance warranty, The term "Nominal Operation Energy" herein means the initially rated operation capacity of the battery, stated on the battery specification or battery User Manual.

Growatt warrants a certain number of charge cycles of the battery for 5/10 years under the following conditions:

Battery model	Charge/Discharge Current(A)	Ambient temperature	DOD	Charge Cycles
Hope 14.3L-A1	Constant Current ≤ 0.5C	25±2℃	80%	6000
Hope 14.3L-R1	Constant Current ≤ 0.5C	25±2℃	80%	8000
Hope 16.0LM-A1	Constant Current ≤ 0.5C	25±2℃	80%	6000

Note: battery warranty period or reaching the charge Cycles, whichever comes first.

For claiming Warranty of Performance, proof of accumulated data shall be submitted. Proof of accumulated data can represent as: Growatt device monitoring data, pictures of GROWATT STORAGE DEVICES LCD display showing the total discharge energy and device SN. In addition, in the event of no proof of battery accumulated data can be provided, the Warranty of Battery performance is NOT valid or covered.

In addition, after the battery warranty had expired, customer (installer or end user) is required to remove the battery from the storage system, contact the supplier and replace it with a new or proper one under warranty. Growatt does not responsible for unexpected hurt, damage or sequence (electric shock, fire, etc) for warranty expired or void batteries.

Exclusion of Warranty

This warranty includes defects of design, components and manufacturing, but excludes the following damage due to:

· Breaking the product seal (opening the casing);

· Transport damage, or other kind of physical damage, example, damage from falls;

· Use with other devices instead of GROWATT STORAGE DEVICES, constantly or temporarily; For example, charge with other devices instead of GROWATT STORAGE DEVICES, use as DC source for other devices;

· Outdoor installation or outdoor usage without proper shelter.

· Failure to observe the user manual, the installation guide, and the maintenance regulations;

· Unauthorized Modifications, changes, or attempted repairs;

· Incorrect use or inappropriate operation; Connect or mix with different type of battery modules

· Insufficient ventilation of the device; Installation under the direct sun light; Installation adjacent to thermal source;

· Fail to meet the storage temperature requirement

· Fail to meet the operating temperature specified in the User Manual; Humidity range 15% to 85%RH , no condensation, installation altitude should be less than 2000 meters.

· Failure to observe the applicable safety regulations;

· Defects or non-conformities which are caused by normal wear and tear,

· The serial number on the Product can no longer be identified or has been modified.

· Force majeure and any other such defects caused by external influences including unusual physical or electrical stress (power failure surges, lightning, flood, fire, storm, accidental breakage);

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The warranty does not apply if the obligations and exclusions described above are not complied or not observed.

Warranty condition

It is required that the battery system (charge & discharge device and the battery itself) have to be monitored on Growatt monitoring platform. The battery warranty would reduce to 3 years without monitoring.

Growatt monitoring platform would monitor the battery' s performance constantly, report battery failure when it occurs. The monitoring allows us to diagnose and fix the problem remotely. Each time if a warranty claim is made for a battery that without monitoring, then the installer or the end user is obliged to organize qualified personnel to conduct an onsite inspection & data collection under the instruction of Growatt.

A warranty case occurs when the battery shows a malfunction which no longer enables the intended use. Please report defective devices with a detailed error description and the error code displayed on GROWATT STORAGE DEVICES LCD screen.

If a device becomes defective during the agreed Growatt factory warranty period and provided that it will not be impossible or unreasonable, the device will be, as selected at discretion of Growatt:

- Repaired by Growatt, or
- Repaired on-site, or
- Exchange for a replacement device of equivalent value according to the model and age.

In the latter case, the remainder of the warranty entitlement will be transferred to the replacement device. In this case, you do not receive a new warranty card or certificate since your entitlement is documented at Growatt.

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In any event, a replacement or repair shall not justify the renewal or new beginning of the warranty period. In the event of the warranted battery model is not available in the market anymore, then Growatt, it’s eligible to at its own discretion, replace it with different kind of product with equivalent functions and performances.

In any event, the installation of the battery for customer shall be completed within 3 (THREE) months from the date of delivery from Growatt.

Excessiveness in the meaning above exists in particular if the cost of the measures for Growatt would be unreasonable

- In view of the value that the device would have without the defect,
- Taking into account the significance of the defect, and
- After consideration of alternative workaround possibilities that Growatt customers could revert to without significant inconvenience.

In the event that the reported defect or malfunction is caused by installation errors or incorrect connection of the equipment the customer will be required to pay the costs related to the unduly performed assistance activity.

This warranty does not cover superficial or cosmetic defects, dents, marks or scratches, which do not affect the proper function of the battery, especially for warranty replacement devices.

Due to the technological progress, the replacement part or replacement device provided may not be compatible with the system monitoring or monitoring device, or other components installed on-site. Costs incurred as a result are not part of this warranty service and will not be covered by Growatt.

Except as herein expressly stated, there are no warranties or conditions, express or implied, by operation of law or otherwise, for any Growatt warranted battery thereof furnished hereunder. The parties agree that the implied

warranties of merchantability and fitness for a particular purpose and all other warranties and/or guarantees, express or implied, are excluded from this transaction and shall not apply for the warranty of battery.

All other claims are excluded. In no event shall Growatt be liable for any special, incidental or consequential damages of any nature whatsoever for any reason (including, without limitation, lost profits, loss of use, loss of equipment or loss of revenues) , regardless of the legal theory on which any such claim may be made, even if advised of the possibility of such damages. Claims that go beyond to get a warranty replacement, in particular claims for compensation for direct or indirect losses including (by not limited to) labor cost and other kind of expenditures for carrying out the battery warranty, logistics fees, loss of electricity profits, etc, are also not covered by this warranty, unless Growatt is subject to statutory liability. In such cases, please contact the company that sold you the device. Possible claims in accordance with the product liability law remain unaffected.

This warranty does not restrict the warranty claims of the purchaser arising from the purchasing contract entered into with the seller of the batteries.

Warranty Claim documents

Please report the defective device to your supplier with the warranty card completed, in no later than 14 days after signs arise of a problem that might lead to a claim.

Supplier or end user is required to send the warranty claim form to Growatt or Authorized service partner with all the necessary information.

The warranty shall be performed if all of the following conditions are met:

The warranty card is present in its original form.

The original purchase & installation invoice of the battery, indicating the date of purchase or installation. And, a commissioning report signed by the end user and the installer, for the product installing and commissioning.

Growatt`s User manual provided with the battery has been followed.

The battery has consistently been used as intended at all times.

The capacity of the battery is under 70% of the Nominal Operation Energy within 5/10 years from the date of warranted period. Customer cooperates in determining whether or not the Nominal Operation Energy has been achieved by providing Growatt evidence via the monitoring system or GROWATT STORAGE DEVICES or it can be measured and calculated using the following testing method and values:

①Ambient temperature: 25±2℃

②Initial temperature detected by BMS: 25±2℃

③Charge and discharge test method:

Testing method: Test environment: 25±2℃

1) Discharge at 0.5C to a minimum cell voltage of 2.7V, let stand for 60 seconds.

2) Discharge at 0.05C to a minimum cell voltage of 2.7V, let stand for 0.5 hours.

3) Charge at 0.5C constant current to a total voltage of 57.6V or a maximum cell voltage of 3.6V, let stand for 60 seconds.

4) Charge at 0.3C constant current to a total voltage of 57.6V or a maximum cell voltage of 3.6V, let stand for 60 seconds.

5) Charge at 0.15C constant current to a total voltage of 57.6V or a maximum cell voltage of 3.6V, let stand for 60 seconds.

6) Charge at 0.05C constant current to a total voltage of 57.6V or a maximum cell voltage of 3.6V, let stand for 0.5 hours.

7) Let stand for 1 hour.

8) Discharge at 0.5C to a minimum cell voltage of 2.7V, let stand for 60 seconds, and record the discharge capacity C1.

9) Discharge at 0.05C to a minimum cell voltage of 2.7V, let stand for 0.5 hours, and record the discharge capacity C2. Record the total discharge amount(C1+C2)during the discharge process (Q01 is calculated in Ah);

10) Let stand for 30min or according to the shelf time specified by Growatt (stand still until the battery cell temperature reaches 25±2℃);

11) Repeat steps 3-9, the discharge capacity is Q02, Q03 respectively, then the arithmetic average of the three discharges capacity is Q0. If the deviations of the test results Q01, Q02, Q03 and Q0 are all less than 1%, then Q0 is the available capacity of the battery system. If the deviation of the test results Q01, Q02, Q03 and Q0 is not less than 1%, it is necessary to repeat the available capacity test process until the discharge capacity for three consecutive times meets the conditions for the available capacity confirmation.

And the warranty condition is not affected by the Exclusion of Warranty stated above.

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To make a warranty claim under this warranty, the installer or the end user must contact us, submit a Warranty Claim Form with help of distributor or Growatt local service agent publicly known, or via email address service@growatt.com.

In any event, submit the warranty claim form to Growatt within **1** (ONE) month on the failure of the battery.

Growatt will examine the submitted evidencing documents and then will decide whether to collect the battery and conduct a further inspection to verify the remaining capacity of the battery. In the case of the inspection of the remaining capacity indicates that the guaranteed capacity was not fallen short of, the costs and expenses associated with such inspection shall be reimbursed by Customer.

Growatt may contact customer for further details, in regards to the defective battery, requiring to complete root cause analysis testing of the product, or provide further evidence that can support the warranty claim.

Please store this warranty terms&conditions in a safe place together with the original purchasing & installation invoice, and other related materials for the warranted battery. To determine the warranty entitlement, please submit copies of the warranty claim documents listed in above. Otherwise, Growatt is entitled to refuse warranty services.

Applicable Law

The products sold to the territory of EU by Growatt EU offical distributor will follow the warranty we offered to

Europe union. And this warranty is governed by EU law.

The Conditions are limited to SHENZHEN GROWATT NEW ENERGY CO.,LTD

Please note Growatt reserve the ultimate explanation right on this battery warranty terms & conditions.

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