

# **Growatt Battery Warranty Card**

### Apply to the following models:

Growatt ARK series Cobalt Free Lithium-Ion Phosphate Battery (Cobalt free LiFePO4), including battery Module: ARK 2.5L-A1 (2.56 kWh, 51.2V, 30kg) and ARK 2.5H-A1 (2.56kWh, 51.2V, 28kg); high voltage controller: HVC60050-A1 and BDC 95045-A1

Herein after refers as "the battery".

Growatt New Energy Technology Co., Ltd provides a non-transferable warranty for a period of **10** years for the integrated lithium-ion phosphate batteries (the battery). The battery warranty is provided by Growatt only for cooperating usage with Growatt Storage Devices, (hereinafter refers to as "GROWATT STORAGE DEVICES"), for example, Growatt SPA, SPH Series, XH battery ready series, SPF off grid series (if applicable). This standard warranty validates from the date of customer purchase, and no more than **10** years and 3 months from the date of delivery from Growatt.

These warranty terms & conditions are **only applied for batteries originally purchased from Growatt for selling and installation in Australia & New Zealand** set forth in the purchase orders unless there are specially stipulated.

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.

# **Warranty of the Battery Performance**

Growatt warrants that the warranted battery retains at least 60% of \*initial usable energy for ten years (120 months) from customer purchase date and no more than ten years and three months (123 months) from the date of delivery from Growatt, or for a Minimum Energy Throughput below, whichever comes first.

Model	*Nominal Operation Energy (kWh)	*Minimum Energy Throughput (MWh)
ARK 2.5L-A1	2.56	6.67
ARK 2.5H-A1	2.56	6.67

#### Note:

# The precondition of the valid performance warranty shall be as follows:

- (1) Operating Ambient Temperature Range for Warranted Battery: -10°C to 50°C; for storing, the ambient temperature must not fall below -20°C or exceed 45°C; and
- (2) The warranted battery should not be exposed to a temperature exceeding 50 °C at any times; and
- (3) The charging and discharging current should not exceed 0.5C (25A); and
- (4) Shelf life of the batteries: Up to six months; and

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<sup>\*</sup>Nominal Operation Energy: the initially rated operation capacity of the battery, stated on the battery specification or battery User Manual.

<sup>\*</sup>Initial available usable energy: 2.3 kWh for ARK 2.5L-A1 and ARK 2.5H-A1.

<sup>\*</sup>Energy Throughput: The cumulative discharged energy during the warranty period, based on specified usage conditions outlined in the battery's specification sheet.

<sup>\*</sup> The calculation method for battery Model with several ARK 2.5L-A1 (2.56 kWh, 51.2V, 30Kg) Modules would be accordingly. The Minimum Energy Throughput would be N\*6.67 MWh, N stand for number of ARK 2.5L battery modules).



(5) The battery should be used according to the conditions specified in the user manual.

Customer cooperates in determining whether or not the usable 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°C
- ②Initial temperature detected by BMS:  $25\pm2^{\circ}$ C
- 3 Charge and discharge test method:

Testing method: Test environment:  $25\pm2^{\circ}$ C

- 1) Discharge at a constant current of 0.2C (10A) until the lowest cell voltage is less than or equal to 2.5V or discharge according to the discharge mechanism recommended by Growatt to the discharge cut-off condition specified by Growatt;
- 2) Let stand for 30min or according to the shelf time specified by Growatt (stand still until the battery cell temperature reaches  $25\pm2^{\circ}$ C);
- 3) Charge with a constant current of 0.2C (10A) to a total voltage of 56.4V, and charge with a constant voltage until the current is less than 0.02C (1A) or the highest cell voltage up to 3.65V. Or according to the charging mechanism recommended by Growatt to charge until reach to cut-off condition specified by the manufacturer;
- 4) Let stand for 30min or according to the shelf time specified by Growatt (stand still until the battery cell temperature reaches  $25\pm2^{\circ}$ C);
- 5) Discharge at a constant current of 0.2C (10A) to the lowest cell voltage ≤ 2.5V, or discharge according to the discharge mechanism recommended by Growatt to the discharge cut-off condition specified by Growatt; Record the total discharge amount during the discharge process (Q01 is calculated in Ah);
- 6) Let stand for 30min or according to the shelf time specified by Growatt (stand still until the battery cell temperature reaches  $25\pm2^{\circ}$ C);
- 7) Repeat steps 2-6, the discharge capacity is Q02, Q03 respectively, then the arithmetic average of the three discharge 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.

For claiming Warranty of Performance, proof of accumulated date shall be submitted. Proof of accumulated date can represent as: Growatt device monitoring date, pictures of Growatt storage devices LCD display showing the total discharge energy. 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 from the following damage due to:

• Breaking the product seal (opening the casing);

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- 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;
- 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: -20°C to +50°C;
- Fail to meet the operating environmental requirement according to the Growatt installation manual;
- 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);

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

### **Warranty Terms & Conditions**

- It is required that the battery system (charge & discharge device and the battery itself) should under monitoring 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.
- 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 the latter 5 years, Growatt have the exclusive right to determine how to carry out the remained battery warranty, including buy it back with a pro rata / proper price according to its remaining warranty period or performance conditions, or renew it by a recent technology brand new battery with a reasonable price payable by the customer. In case Growatt provide

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replacement for customers, Growatt are not responsible for any other sorts of costs during the service procedure in that period, including (but not limited to) logistics fare, labor cost, any kind of compensation. Also, the replacement may have a little flaw on its surface, and the warranty excludes any general defects, if battery is still can be charging and discharging.

- 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.
- 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 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**

- In any event, the installation of the battery for customer shall be completed within 6 (SIX) months from the date of delivery from Growatt.
- Please report the defective device to your supplier with this 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.
- This 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.
- The battery has consistently been used as intended at all times.

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To make a warranty claim under this warranty, the installer or the end user must contact us as below, submit a Warranty Claim Form on the website warranty.growatt.com, or via email address australia@ginverter.com.

**Growatt New Energy Australia Pty Ltd** 

ABN: 72 153 030 052 Tel: 1800 476 928

ADD.: Unit 4&5/ 378 Parramatta Road, Homebush west NSW 2140

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

Please refer to the Growatt official website for further details regarding the procedures for issuing a warranty claim.

https://au.growatt.com/upload/file/Growatt Warranty Claim Procedures AU&NZ.pdf

In Australia, our goods come with guarantees that cannot be excluded under the Australian Consumer Law. You are entitled to a replacement or refund for a major failure and compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure.

Please note Growatt reserve the ultimate explanation right on this battery warranty card.

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