

# **Renac Power Limited Warranty for Battery System**

---For Global

#### **Overview**

Renac Power Technology Co., LTD. (hereinafter referred to as Renac) warrants that, subject to the exclusions and limitations set out below, the Renac Turbo H1 Series battery system TB-H1-3.74,TB-H1-7.48,TB-H1-11.23,TB-H1-14.97, TB-H1-18.7, Turbo H3 Series battery system TB-H3-7.1,TB-H3-9.5 Turbo H4 Series battery system TB-H4-5,TB-H4-10,TB-H4-15,TB-H4-20,TB-H4-25,TB-H4-30,Turbo H5 Series battery system TB-H5-30,TB-H5-35,TB-H5-40,TB-H5-45,TB-H5-50,TB-H5-55,TB-H5-60, Turbo L1 Series battery system TB-L1-5.3 and Turbo L2 series battery system TB-L2-5.12,TB-L2-10.24,TB-L2-14.3come with a Manufacturer's warranty which includes

#### 1. 5 years of product warranty:

Renac warrants that the hardware of electronics and enclosure (including battery cover, micro circuit breaker, BMS PCBA) will be free of defects caused by improper workmanship of defective materials and it will be starting from the original end user purchase date, if the customer is unable to provide adequate documentation of the original purchase, the warranty starting date shall be the earlier one of installation date or 6 months after the product was manufactured.

#### 2. 10 years of performance warranty:

Renac warrants that the battery system retains either seventy percent (70%) of Usable Energy for ten(10) years, or for a Minimum Through Output Energy which is calculated from the earlier one of installation date or 6 months after battery system production date, whichever comes first.

| Model       | *Nominal Energy(kWh) | Minimum Through Output Energy (MWh) |
|-------------|----------------------|-------------------------------------|
| TB-H1-3.74  | 3.74                 | 8.75                                |
| TB-H1-7.48  | 7.48                 | 17.50                               |
| TB-H1-11.23 | 11.23                | 26.3                                |
| TB-H1-14.97 | 14.97                | 35.0                                |
| TB-H1-18.7  | 18.7                 | 43.7                                |
| TB-H3-7.1   | 7.1                  | 16.7                                |
| TB-H3-9.5   | 9.5                  | 22.3                                |
| TB-H4-5     | 5                    | 11.7                                |



|             | T T   |       |
|-------------|-------|-------|
| TB-H4-10    | 10    | 23.4  |
| TB-H4-15    | 15    | 35.1  |
| TB-H4-20    | 20    | 46.8  |
| TB-H4-25    | 25    | 58.5  |
| TB-H4-30    | 30    | 70.2  |
| TB-H5-30    | 30    | 70.2  |
| TB-H5-35    | 35    | 81.9  |
| TB-H5-40    | 40    | 93.6  |
| TB-H5-45    | 45    | 105.3 |
| TB-H5-50    | 50    | 117   |
| TB-H5-55    | 55    | 128.7 |
| TB-H5-60    | 60    | 140.4 |
| TB-L1-5.3   | 5.3   | 12.48 |
| TB-L2-5.12  | 5.12  | 12.05 |
| TB-L2-10.24 | 10.24 | 24.10 |
| TB-L2-14.3  | 14.3  | 33.65 |

# **Preconditions for Warranty**

- 1. The defect of the battery system shall occur within the battery system warranty period as determined above.
- 2. Any battery system fault or warning which leads to system not working or working abnormally, must be reported by following the terms described in "HOW TO MAKE A CLAIM UNDER THE RENAC LIMITED WARRANTY" within two weeks of appearance.
- 3. The battery system shall be installed by a skilled person or 3<sup>rd</sup> party installer.
- 4. End User shall correctly operate and use the battery system according to the User Manual and installation Guide.
- 5. End User shall provide the proof of the original purchase of the battery system.
- 6. The installation of the Battery system for the End User shall be completed within maximum 6 months from the production date.



- 7. The charging temperature of the **Turbo H1** battery system must NOT exceed  $0^{\circ}C^{\sim}40^{\circ}C$  and discharging temperature of **Turbo H3** battery system must NOT exceed  $-10^{\circ}C^{\sim}55^{\circ}C$ , The charging temperature of **Turbo H3** battery system must NOT exceed  $-20^{\circ}C^{\sim}55^{\circ}C$  and discharging temperature of **Turbo H3** battery system must NOT exceed  $0^{\circ}C^{\sim}55^{\circ}C$ , The charging temperature of the **Turbo H4** battery system must NOT exceed  $0^{\circ}C^{\sim}55^{\circ}C$ , and discharging temperature of **Turbo H5** battery system must NOT exceed  $0^{\circ}C^{\sim}55^{\circ}C$ , The charging temperature of **Turbo H5** battery system must NOT exceed  $0^{\circ}C^{\sim}55^{\circ}C$ , The charging temperature of the **Turbo H5** battery system must NOT exceed  $0^{\circ}C^{\sim}55^{\circ}C$ , The charging temperature of **Turbo L1** battery system must NOT exceed  $0^{\circ}C^{\sim}40^{\circ}C$  and discharging temperature of **Turbo L1** battery system must NOT exceed  $0^{\circ}C^{\sim}40^{\circ}C$  and discharging temperature of the **Turbo L2** battery system must NOT exceed  $0^{\circ}C^{\sim}50^{\circ}C$ , The charging temperature of the **Turbo L2** battery system must NOT exceed  $0^{\circ}C^{\sim}50^{\circ}C$  and discharging temperature of the **Turbo L2** battery system must NOT exceed  $0^{\circ}C^{\sim}50^{\circ}C$  and discharging temperature of the **Turbo L2** battery system must NOT exceed  $0^{\circ}C^{\sim}50^{\circ}C$  and discharging temperature of the **Turbo L2** battery system must NOT exceed  $0^{\circ}C^{\sim}50^{\circ}C$  and discharging temperature of the **Turbo L2** battery system must NOT exceed  $0^{\circ}C^{\sim}50^{\circ}C$  and discharging temperature of the **Turbo L2** battery system must NOT exceed  $0^{\circ}C^{\sim}50^{\circ}C$  and discharging temperature of the **Turbo L2** battery system must NOT exceed  $0^{\circ}C^{\sim}50^{\circ}C$  and discharging temperature of the **Turbo L2** battery system must NOT exceed  $0^{\circ}C^{\sim}50^{\circ}C$  and discharging temperature of the **Turbo L2** battery system must NOT exceed  $0^{\circ}C^{\sim}50^{\circ}C$  and discharging temperature of the **Turbo L3** battery system must NOT exceed  $0^{\circ}C^{\sim}50^{\circ}C$  and discharging temperature of the **Turbo L3**
- 8. This Warranty covers a capacity equivalent to one full cycle per day. The Battery system is not suitable for supplying life-sustaining medical devices or automotive application.
- 9. The battery system shall be installed with Renac Brand inverter. If you want to use any other brand inverters, please check the Renac to make sure it's compatible in advance.
- 10. It is required that all Battery System have internet connection for monitoring. For those Battery Systems that failed to meet this condition, Renac Limited Warranty for Battery System may become null and void.

#### Remedies

If a claim is received within the warranty period and a fault with the battery system is discovered that is covered under the warranty, Renac will, at its sole option, apply one or more of the following solutions:

- 1. Alter the configuration or upgrade the software to solve issues.
- 2. Replace defective parts to repair the battery system.
- 3. Replace the defective product with new or refurbished product of equivalent or higher performance. In case that the defective product model is no longer available on the market, Renac can replace it with product of different model with the same function and level of performance. If the replacement is within the specified warranty period, the remaining warranty period will be automatically transferred to the replaced new product.
- 4. If it's proven that the problem was caused by faulty installation, Renac reserves the right to contact the original installer and request that they provide a solution to fix the issue before



Renac's intervention and may charge the subsequent cost to the original installer if they fail to provide a proper solution to fix this issue.

5. All parts of the battery system that Renac replaces shall become Renac's property. If the battery system is found not to be covered by this Limited Warranty, Renac reserves the right to charge a handling fee.

### **Exclusions of of Warranty**

The following circumstances may cause device defects, but are NOT covered by Renac's limited warranty.

- 1. Normal wear and tear(including ,without limitation , wear and tear of batteries)
- 2. The brand and model of the inverter or charger matched when installing this product have not been approved by Renac.
- 3. Any malfunction or failure caused by third-party inverters or chargers.
- 4. Any defects that occur when the battery system warranty period has expired(excluding additional agreements of warranty extension).
- 5. Improper installation , operation or maintenance which are not accordance with the user manual.
- 6. Damages caused by irregular transportation, including but not limited to dropping, trampling, shape altering, hitting or stabbing the product with sharp objects.
- 7. Disassembly, repair or modifications performed by a third-party company /person not authorized by Renac. Battery system modifications, design changeds or part replacements not approved by Renac.
- 8. Faults or damages due to unforeseen circumstances, man-made factors ,or examples of force majeure including but not imited to stormy weather, flooding , overvoltage , pests , inappropriate handling, misuse, neglect , fire, water, lightning or other acts of nature.
- 9. Vandalism, engraving, labels, irreversible marking or contamination of theft.
- 10. Faults or damage caused by other factors not related to battery system quality issues.
- 11. Any rust that appear on the device's enclosure caused by harsh environmental conditions, accidents and external influences. Faults or damage caused by exposure to sea coasts/saltwater or other aggressive atmospheres or environmental conditions without Renac's written confirmation/approval prior to the installation.
- 12. End User fails to provide correct product serial number or product serial number is undecipherable or has been modified without permission by Renac.



- 13. Defects of product arise due to renewal of the national or regional laws or regulations.
- 14. Product failures is not reported to Renac within 14 days of appearance.

#### **Out-of-warranty Case**

Any defects that occur after the expiry of the warranty period, or which occur within the warranty period but which falls into the warranty exceptions conditions above, are known by RENAC as out-of-warranty cases. For all out-of-warranty cases, RENAC may charge an on-site service fee, a parts fee, labor costs and a logistics fee to customer, including any/all of:

- 1. On-site service fee: cost of travel and time for the technician to deliver on-site service and labor cost for the technician, who is repairing, performing maintenance on, installing (hardware or software) and debugging the faulty battery system.
- 2. Parts/materials fee: cost of replacement parts/materials (including any shipping/admin fee that may apply).
- 3. Logistics fee: cost of delivery and any other expenses incurred when defective battery systems are sent from the user to RENAC or/and repaired battery systems are sent from RENAC to the user.

### **How to Make a Warranty Claim**

To make a Warranty claim under this voluntary warranty, the end-user must contact us by email at <a href="mailto:service@renacpower.com">service@renacpower.com</a>

When contacting us by the online monitoring, please fill in the relevant form;

When contacting us by email, please have the following information to hand:

- Your name, address, postcode and a telephone number where you can be contacted
- The model designation and serial number of the Product (you can find both on the Product)
- Proof of purchase with date and address of the vendor
- Installation date and installation address
- Signed commissioning report or protocol
- Contact details of the installer
- A complete and detailed list of observed faults and other information



# **Applicable Law**

The product warranty is subject to the local laws. Our goods come with guarantees that cannot be excluded under the local Consumer Law. You are entitled to a replacement or refund for a major failure if you can demonstrate there exists major failure and such major failure is solely and directly caused by us and we have no objection towards such identification of major failure. You are also entitled to ask us to repair or replace goods if you have evidence to prove that the goods fail to be of acceptable quality and the failure does not amount to a major failure. If any provision of this Warranty shall be declared void or unenforceable by any court and administrative body of competent jurisdiction, such provision shall be deemed to be amended to achieve as nearly as possible the same economic effect as the original provisions of this Warranty and the amended provisions and other provisions of this Warranty shall continue in full force and effect.

#### **Limitation of Renac's Liability**

This limited warranty applies to the battery system which is sold and installed after January, 2022. It is the end user's sole and exclusive remedy against Renac and Renac's sole and exclusive liability in respect of defects in battery system. This limited warranty replaces all other Renac warranties and liabilities, whether oral, written, (non-mandatory) statutory, contractual, in tort or otherwise, including, without limitation, and where permitted by applicable law, any implied conditions, warranties or other terms as regards satisfactory quality or fitness for purpose. However, this limited warranty shall neither exclude nor limit any of your legal (statutory) rights under the applicable national laws. To the extent permitted by applicable law(s), Renac does not assume any liability for any loss of, damage to or corruption of data, for any loss of profit, loss of use of battery systems or functionality, loss of business, loss of contracts, loss of revenue or loss of anticipated savings, increased costs or expenses or for any indirect loss or damage, consequential loss or damage or special loss or damage, or punitive loss or damage. To the extent permitted by applicable law, Renac's liability shall be limited to the purchase value of the battery system. The above limitations shall not apply in case of gross negligence or intentional misconduct of Renac or in case of death or personal injury resulting from Renac's proven negligence.

\*Nominal Energy (kWh) needs to be measured by following the testing conditions and methods in Appendix A

#### Appendix A

Capacity measurement condition: Ambient temperature: 25~28°C

Charge / Discharge method:

- 1. Discharge the battery with constant current until the battery reaches end of discharge voltage or battery self-protection automatically.
- 2. Lay aside the battery for 10mins.
- 3. Charge the battery with constant current and constant charge voltage until battery self-

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#### protection automatically.

- 4. Lay aside the battery for 10mins.
- 5. Discharge the battery with constant current until reach end of discharge voltage or battery self-protection automatically. Calculate discharged capacity. Monitor current timely. (If it's constant current.)
- 6. Calculate formula: Current Capacity = Discharge time × Constant current value.
- 7. Charge the battery with Constant current and constant charge voltage until battery self-protection automatically.