PV Module Limited Warranty

Tongwei Co., Ltd.

https://www.tongwei.cn/

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Preface

Tongwei Co., Ltd. (hereinafter referred to as "Tongwei") undertakes to provide a limited warranty (hereinafter referred to as "Limited Warranty") as described below to the Buyer or Purchaser (hereinafter referred to as "Buyer") as identified in the sales contract for the purchase of the Modules. (crystalline silicon half-cell PV modules, hereinafter referred to as "Modules" or "Module")

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01 Definition

The Modules referred to herein means only Grade A modules (not including the downgraded and scrapped modules) produced by Tongwei and its authorized manufacturers and legally marked with the Tongwei trademark.

02 Warranty Start Date

The "Warranty Start Date" referred to herein means the earlier of initial installation date of Tongwei Modules or 90th calendar day after the delivery (Incoterms 2020) of Tongwei Modules to the Buyer.

03 Limited Warranty

3.1 Limited Product Warranty (hereinafter referred to as "Limited Product Warranty")

After Tongwei has delivered the Modules to the Buyer, in the event if any defects of the Modules appearance (including but not necessarily limited to abrasions, scratches, stains, mechanical wear, rust, mildew, color difference and optical attenuation, the changes of EL images, normal wear and tear during use, etc.) or other changes of the Modules shall not be deemed as the defects stipulated under this Limited Warranty (i.e. such defects/changes shall not be covered under the scope of this Limited Warranty).

3.1.1 12 Years Limited Product Warranty

Tongwei warrants that for a period of twelve (12) years since the Warranty Start Date, the following types of Modules will be free from any defect in design, material, workmanship or manufacturing attributed to Tongwei that will materially affect the power generation function or cause any non-operation.

Product	Type
TNC-G12	TWMNF-66HSxxx, TWMNF-66HDxxx
TNC-G12R	TWMNH-66HSxxx, TWMNH-66HDxxx
TNC-M10	TWMND-78HSxxx, TWMND-78HDxxx, TWMND-72HSxxx, TWMND-72HDxxx, TWMND-60HSxxx
TPC-G12	TWMPF-66HSxxx, TWMPF-66HDxxx, TWMPF-60HSxxx, TWMPF-60HDxxx
TPC-M10	TWMPD-78HSxxx, TWMPD-78HDxxx, TWMPD-72HSxxx, TWMPD-72HDxxx, TWMPD-66HDxxx, TWMPD-66HSxxx, TWMPD-60HDxxx, TWMPD-60HSxxx

3.1.2 15 Years Limited Product Warranty

Tongwei warrants that for a period of fifteen (15) years since the Warranty Start Date, the following types of the Modules will be free from any defect in design, material, workmanship or manufacturing attributed to Tongwei that will materially affect the power generation function or cause any non-operation.

Product	Type
TNC-G12R	TWMNH-48HDxxx, TWMNH-48HCxxx, TWMNH-54HDxxx
TNC-M10	TWMND-54HSxxx, TWMND-54HBxxx
THC-G12	TWMHF-66HDxxx
TPC-M10	TWMPD-54HSxxx, TWMPD-54HBxxx

3.2 Limited Power Warranty (hereinafter referred to as "Limited Power Warranty")

Tongwei warrants the loss of module power output during the corresponding Limited Product Warranty period as stipulated under Article 3.1.1 or Article 3.1.2 (as the case maybe), and such is based on a comparison of the minimum value of the nominal power tolerance of the Module specified on the Module nameplate and the maximum peak output power of the actual Module measured under standard test conditions (STC).

Peak power is the maximum power of the Module measured under STC. Standard test conditions: Spectrum AM1.5, light intensity 1000W/m^2, temperature 25±2℃. All measurements of actual output power shall be performed in accordance with IEC 60904, the effects of test uncertainty shall be taken into account. The final power test value is recognized as being in compliance with the guaranteed power value if it meets within the deviation limits.

The "Attenuation Rate" is the positive ratio of the attenuation of the Modules calculated according to the following formula: Attenuation Rate = 100% * (Nominal Power - Peak Power)/Nominal Power. For the avoidance of disputes, it is hereby declared that the Attenuation Rate under this Limited Warranty refers to the annual attenuation rate from the Warranty Start Date, and the Attenuation Rate of less than 1 year is calculated for the full year.

3.2.1 Single Glass Module

> TPC Single Glass Module:

Tongwei warrants that the Attenuation Rate of the following types of Modules over a period of 25 years since the Warranty Start Date is:

The first year of power loss will be within 2%, and the loss from the 2nd to the 25th year shall be within 0.55% annually. The power output of the last year is not less than 84.8%.

Product	Type
TPC-G12	TWMPF-66HSxxx, TWMPF-60HSxxx
TPC-M10	TWMPD-78HSxxx, TWMPD-72HSxxx, TWMPD-66HSxxx, TWMPD-60HSxxx TWMPD-54HSxxx, TWMPD-54HBxxx

> TNC Single Glass Module:

Tongwei warrants that the Attenuation Rate of the following types of Modules over a period of 30 years since the Warranty Start Date is:

The first year of power loss will be within 1%, and the loss from the 2nd to the 30th year shall be within 0.4% annually. The power output of the last year is not less than 87.4%.

Product	Type
TNC-G12	TWMNF-66HSxxx
TNC-G12R	TWMNH-66HSxxx
TNC-M10	TWMND-78HSxxx, TWMND-72HSxxx, TWMND-60HSxxx, TWMND-54HSxxx, TWMND-54HBxxx

3.2.2 Double Glass Module

> TPC Double Glass Module:

Tongwei warrants that the Attenuation Rate of the following types of Modules over a period of 30 years since the Warranty Start Date is:

The first year of power loss will be within 2%, and the loss from the 2nd to the 30th year shall be within 0.45% annually. The power output of the last year is not less than 84.95%.

Product	Type
TPC-M10	TWMPD-78HDxxx, TWMPD-72HDxxx, TWMPD-66HDxxx, TWMPD-60HDxxx
TPC-G12	TWMPF-66HDxxx, TWMPF-60HDxxx

> TNC Double Glass Module:

Tongwei warrants that the Attenuation Rate of the following types of Modules over a period of 30 years since the Warranty Start Date is:

The first year of power loss will be within 1%, and the loss from the 2nd to the 30th year shall be within 0.4% annually. The power output of the last year is not less than 87.4%.

Product	Type
TNC-G12	TWMNF-66HDxxx
TNC-G12R	TWMNH-66HDxxx, TWMNH-48HDxxx, TWMNH-48HCxxx, TWMNH-54HDxxx
TNC-M10	TWMND-78HDxxx, TWMND-72HDxxx

> THC Double Glass Module:

Tongwei warrants that the Attenuation Rate of the following types of Module over a period of 30 years since the Warranty Start Date is:

The first year of power loss will be within 1%, and the loss from the 2nd to the 30th year shall be within 0.375% annually. The power output of the last year is not less than 88.12%.

Product	Type
THC-G12	TWMHF-66HDxxx

04 Repair, Replacement or Refund

> If, during the term of the Limited Product Warranty or Limited Power Warranty, a Module incurs a power loss exceeding the guaranteed value, and (i) such defect is caused by reasons solely attributable to Tongwei as analyzed and determined by Tongwei; or (ii) if reasonably required by the Buyer, is confirmed to be caused by reasons solely attributable to Tongwei by the reputable domestic or international third-party testing organization (which is selected by both the Buyer and Tongwei) (the cost shall be borne by the party with more deviation in results, and the decision in this regard shall be final and binding of both the Buyer and Tongwei) (hereinafter referred to as "Defected Module"), Tongwei will, at its sole discretion, elect either of the following relief measures:

1) Repair the defective solar modules. In such case, Tongwei shall prepare the repair project plan and carry out the repair project for the affected modules, or

2) Replace the defective modules or provide additional module(s) to make up for the output gap between the guaranteed output and the actual power output of the defective module(s), or

3) Refund the residual value of the defective modules or refund the value equivalent of the output gap between the guaranteed power output and the actual power output of the defective module(s).

a. Residual value = current market price (price-per-watt)* nominal power, * left-over service life/ guaranteed service life

b. Value Equivalent of Output Gap = current market price (price-per-watt)* (guaranteed power output-actual power output).

> If Tongwei chooses to take the remedy of free repair or free replacement of the defective module, Tongwei shall bear the direct cost of repairing, replacement and the freight charges incurred in shipping the additional products to the Buyer, but excluding insurance, air freight, customs clearance, tariffs, and other additional costs not caused by Tongwei (e.g., demurrage, warehousing, etc. due to the Buyer's or the end-user's negligence). Costs incurred due to dismantling, repacking, installation or reinstallation the module(s) and other related expenses shall be borne by the Buyer.

> If the residual value refund program is selected and implemented, the limited product warranty ends immediately.

> Unless instructed by Tongwei or required by law, the Buyer shall dispose of out-of-use module(s) in accordance with applicable regulations on electronic waste treatment and disposal at its own cost. If Tongwei decides or is required by law to retrieve these defective modules, the ownership of the relevant module(s) belong to Tongwei. In the event the Buyer returns the Solar Modules to the Tongwei without the prior written consent of Tongwei, the risks (including but not limited to damage or loss of the Solar Modules) and expenses related to the Solar Modules shall be borne by the Buyer, and Tongwei is entitled to refuse to deal with the related claims and demands without any liability therefrom. Unless with written authorization from Tongwei, any replaced module(s) shall not be resold, reworked or reused in any way.

> Regarding the defective Module which is repaired or replaced by Tongwei, the corresponding period of the Limited Product Warranty and the Limited Power Warranty of such Defective Module shall not be extended or renewed accordingly, i.e. the warranty period of such Defective Module shall be the remaining period of the warranty period corresponding to the same batch of Module which was purchased by the Buyer.

> The above remedies are the sole and exclusive available remedies provided by Tongwei to the Buyer under the Limited Warranty, and Tongwei shall not be liable for any special, indirect, consequential, or incidental losses (including any loss of production, loss of profit, loss of goodwill, loss of business reputation, or loss of delay), etc., regardless of whether the relevant claim for losses is based on a claim of contract, warranty, tort, or strict liability.

> Buyer has the right to make claims in accordance with the terms of this Limited Warranty. If the Buyer raises multiple claims in connection with the same issue/subject matter, Tongwei shall be deemed to have settled all applicable claims arising from such issue/subject matter after Tongwei has indemnified the Buyer regarding such issue/subject matter in accordance with the above provisions as stipulated under this Limited Warranty (i.e. the Buyer shall not be entitled to repeated indemnification in connection with the same issue/subject matter).

05 Liability Exemptions and Limitations

Tongwei and Buyer shall hereby expressly agree that this Limited Warranty shall not apply to any of the following Modules or circumstances:

> The Buyer has not made the full amount of payment to Tongwei in accordance with the contract or purchase order entered into between Tongwei and the Buyer regarding the Module;

> The quality class of the module is not Tongwei Grade A (e.g. downgraded and scrapped module) ;

> The Buyer fails to comply with all the requirements of the Tongwei Installation Manual;

- The type, nameplate or barcode of the Module has been altered, erased or unable to be recognized (except proven that such alterations or variations are caused by any act or omission of Tongwei);
- Modules which have been installed near extreme heat or in extreme or volatile environmental conditions, causing the module(s) to corrode, oxidize, or to suffer from chemical materials in the environment ;
- Modules which have been installed on mobile equipment (except for photovoltaic tracking systems) such as vehicles, ships, etc.;
- The building where the Module is placed is defective;
- The Module is damaged due to any of the following: intentional damage, unauthorized modification or connection, unauthorized commencement, repair with unauthorized spare parts, accidents, effects of chemical products, and other acts beyond the reasonable control of Tongwei;
- Although the Module is affected by the thermal expansion of the physical properties of the materials and may be warped to some extent or sunk after installation, it does not affect the installation, use and reliability of the Module;
- Modules which have been subject to system voltage over the rated maximum system voltage or surges ;
- The use or parallel import of the Modules in a way that infringes intellectual property rights (such as patents rights of inventions, trademarks) of Tongwei or any third party;
- The service technician servicing the Module is not a qualified person according to the relevant laws and regulations of the place of installation;
- Other damages or non-use of the Modules caused by reasons not attributable to Tongwei.

06 Claim and Performance of Warranty

6.1 When the Buyer makes any claim against Tongwei under this Limited Warranty ("Claim"), the Buyer shall first give written notice to Tongwei or its authorized distributor(s), together with the description of the claims, description of defective Modules, picture of the barcode and nameplate, copy of the commercial invoice and the delivery date of the Module.

Tongwei customer service center: Tongwei Co., Ltd

Address: No. 588, Middle Section of Tianfu Avenue, Chengdu High-tech Zone, Sichuan Province

Post Code: 610041

Customer Service Telephone Number: 4000566888

After-Sales E-mail: twcustomerservice01@tongwei.com

Web: https://www.tongwei.cn/

6.2 Any Claim shall be raised within 30 days (natural day) from the date on which the breach is found.

6.3 In the event of a dispute over the technical facts of the Claim, the Buyer and Tongwei shall jointly confirm the selection of a reputable domestic or international third-party testing institution to make the ruling, which shall be final, decisive and binding, and may be enforced in any proceedings brought under this Limited Warranty. All costs and expenses incurred in the adjudication process shall be borne by the losing party, unless otherwise provided in the judgment. For the avoidance of doubt, Tongwei and the Buyer confirm and agree that the parties shall not apply this Article 6.3 in respect of the same matter if the relevant matter has already been decided by the third party under Article 4.

6.4 If it is determined in accordance with Article 6.3 that the defect of the Tongwei Module falls within the scope of this Limited Warranty, then Tongwei will make the compensation in accordance with Article 4. If it is determined that the defects of the Tongwei Module are not covered by this Limited Warranty, Tongwei shall not be liable for any compensation, including but not limited to insurance, transportation, customs clearance and any other cost incurred in the return of defective Modules, and Tongwei shall not be obligated to repair, replace or refund Defective Module.

6.5 The Buyer may contact the Tongwei Customer Service Center to inquire about the cost of the Module and related maintenance services in the event that(i) the Module is defective due to reasons other than Tongwei during the relevant warranty period as stipulated herein or (ii) the Module needs to be repaired or replaced after the expiry of the relevant warranty period.

07 Assignment of Rights

This Limited Warranty applies to the Buyer and its lawful successors or assignees (and the Buyer shall provide proof to the reasonable satisfaction of Tongwei), in which Buyer shall satisfy the following conditions of assignment before assigning its rights under this Limited Warranty to any third party:

- The Modules remains intact and unchanged at the initial installation site;
- There are no remaining arrears or other payables (e.g. liquidated damages) of the Module based on the sales contract or purchase order entered between the Buyer and Tongwei;
- The Buyer shall assign all (but not part) of its rights and obligations;
- The proposed assignee agrees to be bound by all of the terms of this Limited Warranty;

If required by Tongwei, the Buyer shall provide reasonable evidence to prove the corresponding succession or assignment of the ownership within 15 working days from the date of receipt of the Tongwei's notice, otherwise Tongwei shall be entitled to refuse to process the relevant claims raised by any successor or assignee of the Buyer without any liability, and the Buyer shall indemnify Tongwei for all losses incurred thereby.

Except as set out above, this Limited Warranty shall not be assigned. Any assignment that does not comply with this Article shall not be binding on Tongwei, and Tongwei shall be entitled to refuse to process the relevant claims raised by the assignee of the Buyer without any liability, and the Buyer shall indemnify Tongwei for all losses incurred thereby.

08 Severability

If any part of this Limited Warranty is deemed to be invalid, void or unenforceable, or if the application of this Limited Warranty to certain person or under certain circumstances is deemed to be invalid, void or unenforceable, such shall not affect the validity of any other parts of the Limited Warranty. The unaffected part of this Limited Warranty or this Limited Warranty shall be deemed to be independent and valid.

09 Dispute

Any disputes relating to this Limited Warranty (including but not limited to the disputes regarding the survival, validity, breach or termination of it) shall be resolved in accordance with the dispute settlement as stipulated under the contract entered between Tongwei and Buyer. Tongwei reserves the right of final interpretation of the Limited Warranty.

10 Force Majeure

In the event of force majeure caused by fire, flood, blizzard, hurricane, lightning, changes in public policy, terrorism, war, riots, strikes, lack of appropriate or sufficient labor, materials or production capacity, technical or physical events, epidemic and any unforeseen events beyond the reasonable control of Tongwei, Tongwei shall not be liable in any way to Buyer or any third party for any failure or delay in the performance of its obligations under this Limited Warranty.

11 Miscellaneous

In accordance with PRC laws and regulations and relevant policies, Tongwei may update the above product warranty terms and policies from time to time and the relevant updates shall be considered as part of this Limited Warranty. To obtain the latest version, please visit Tongwei's official website: https://www.tongwei.cn/.