

P Type Standard Solar Module Limited Warranty

Hanover Solar GmbH (hereafter “Hanover Solar”), provides following limited warranty on the terrestrial photovoltaic modules (hereafter “modules”) produced by it, according to the items stipulated below.

1 Basic Rules

1.1 Warranty Period

1.1.1 The limited product warranty period is twelve (12) years.

The limited power warranty is thirty (25) years.

1.1.2 The warranty commence from the date of delivery.

1.2 Limited Power Warranty

1.2.1 P type monocrystalline module: Within the first year from the date of warranty, the output power of modules shall not be less than 97.5% of the minimum nominal peak power as set forth in the specifications. Thereafter the loss of average output power shall not exceed 0.6% per year. After twenty-five (25) years, the output power of the modules shall not be less than 83.10% of its minimum nominal peak power as set forth in the specifications.

1.2.2. P type polycrystalline module: Within the first year from the date of warranty, the output power of modules shall not be less than 97.5% of the minimum nominal peak power as set forth in the specifications. Thereafter the loss of average output power shall not exceed 0.7% per year. After twenty-five (25) years, the output power of the modules shall not be less than 80% of its minimum nominal peak power as set forth in the specifications.

1.3 Acceptance Period

1.3.1 If have any disagreement with the number, or the appearance, or the size, or the peak power, the feedback should be delivered to Hanover Solar in writing after the arrival of the module(s) within 30 days.

1.3.2 If there is no objection in writing (including E-mail, registered letter, express, and fax), within the specified period, the module(s) will be considered acceptance.

1.3.3 Beyond the specified period, the objection will be treated with as the used module(s).

1.4 Power Testing

1.4.1 The power of the module(s) must be tested under the standard condition (STC).

1.4.2 STC: light spectrum of AM1.5, irradiation of 1000 W/m², cells temperature of 25°C.

2 Limited Product Warranty

2.1 Hanover Solar warrants that the PV modules are free from defects caused by the modules themselves, under normal conditions of use, installation, and maintenance, within a period of the 12-year limited product warranty period from the date of delivery. (The defect is as follows: result in module not work normally, or very obvious and approved by Hanover Solar.)

2.2 Within the 12-year limited product warranty period, the modules do not work normally caused by supply-side, or defects are found very obviously and approved by Hanover Solar, these modules will be repaired free of charge, or replacement, or supply additional modules, or refund to the customer in the market price at the time of



treatment. The selection right shall belong to Hanover Solar. For replacement, or supply additional modules, Hanover Solar only undertakes modules that need to be provided.

- 2.3 Repair, replacement, supply additional modules, or refund remedy shall be the sole and exclusive performances guaranteed under this Limited Product Warranty and shall not extend beyond the period set forth herein.
- 2.4 As for the modules beyond the product warranty period, Hanover Solar provide paid services: repair, or replacement, or supply modules. The related business should be determined through mutual consultation.

3 Limited Power Warranty

- 3.1 Hanover Solar warrants that (a) within a period of 12 years from the date of warranty, the peak power of modules are not less than 90%[polycrystalline module] / 90.9%(monocrystalline module) of the minimum nominal peak power as specified as of the delivery date or (b) within a period of 25 years from the date of warranty, the peak power of modules are not less than 80% (polycrystalline module)/ 83.10% (monocrystalline module) of the minimum nominal peak power as specified as of the delivery date.
- 3.2 The power must be measured at the standard conditions (STC).
- 3.3 If the peak power of module(s) beyond the scope of the clause 3.1, Hanover Solar will, at its sole discretion, repair or replace the defective module(s), or supply additional module(s) to compensate the power loss, or refund the cost of the module(s) according to the power difference (according to the market price at the time of treatment), provided such a loss in peak power is attributable to defects in material and /or workmanship by the diagnosis of Hanover Solar. The selection right shall belong to Hanover Solar.
- 3.4 Loss of the power output or power loss: Within twelve (12) years, the value is the difference between the actual power and the 90% (polycrystalline module) / 90.9%(monocrystalline module) of minimum nominal peak power. Within twenty five (25) years, the value is the difference between the actual power and the 80% (polycrystalline module)/ 83.10% (monocrystalline module) of minimum nominal peak power.
- 3.5 If applicable, Hanover Solar has right to compare the actual power generation with the design power generation to measure the power loss caused by the modules.
- 3.6 Repair, replacement, supply additional modules, or refund remedy shall be the sole and exclusive performances guaranteed under this Limited Power Warranty and shall not extend beyond the period set forth herein.

4 Obtaining Warranty Performance

- 4.1 If the Customer has a justified claim covered by this limited warranty. An immediate notification shall be delivered to Hanover Solar in writhing (including the E-mail, the registered letter, the express, and the fax).
- 4.2 Together with the notification, the customer should enclose the evidence of the claim (such as photos, power test report, etc), the information of the module(s) type/ serial number, the date of purchase, and the warranty.
- 4.3 If the claim is applicable, Hanover Solar will give advice on handling the claim.
- 4.4 The return of any PV-module will not be accepted unless prior written authorization has been given by Hanover Solar.
- 4.5 In connection with the Limited Warranty, Hanover Solar shall reimburse customer for reasonable, customary and documented transportation charges by sea freight for both the return of the modules and reshipment of any repaired or replaced modules, only if this cost is authorized by Hanover Solar.

5 Warranty Exclusions and Limitations

5.1 The above limited warranty is not applicable as follow cases determined by Hanover Solar, at its sole discretion, such as:

- (1) Improperly operated or improperly used.
- (2) Presume to modify the installation program.
- (3) Negligence with storage, transportation or or other transshipment.
- (4) Damaged by repaired or modified (in whatever manner) by anyone other than Hanover Solar.
- (5) Installed not in accordance with module installation instruction provided by Hanover Solar.

5.2 Hanover Solar doesn't take any responsibility for the second-hand module(s), which be got from the disassembled or resold module which have been installed.

5.3 Further exclusions of the limited warranty include following case:

- (1) Caused by external impacts, for example, the system components (such as bypass diodes, junction box, connector, etc.) coupled with the module(s) non-by Hanover Solar, or the module(s) defects caused by defective system design, configuration, and structure diagram or installation program.
- (2) Caused by faulty wiring or installation, or faulty handling during these modules work.
- (3) Caused by operation in inappropriate environment or with inappropriate methods, which deviates from the instructions in product specification, or operational manual or product label;
- (4) Caused by other external impacts such as mud or leaves on the front glass, shade, pollution or damage due to smoke, salt, salt fog settlement, acid rain, seawater, etc;
- (5) When the distance from the seaside is less than 500m, the mechanical load performance of the modules, due to the corrosion of aluminum frame splashed by seawater, the corrosion of the glass surface, and the power attenuation caused by the corrosion of the module surface.
- (6) Caused by use on mobile objects such as automobiles, ship, etc;
- (7) Caused by force of nature, force majeure, or other unforeseeable circumstances outside of the range of the influence of Hanover Solar, for instance, earthquake, typhoon, whirlwind, volcanic eruption, flood, lightening, snow damage, fire, war, riot, strike, etc.
- (8) Caused by customer specified material or by customer provided OEM material, or caused by customer specified design, not by process.
- (9) The color gradation difference between cells and modules.

5.4 These "Limited Warranties for PV Modules" as set forth herein are expressly in lieu of and exclude all other express or implied warranties, including but not limited to warranties of merchantability and of fitness for particular purpose, use, or application, and all other obligations or liabilities on the part of Hanover Solar, unless such other obligations or liabilities are expressly agreed to in writing signed and approved by Hanover Solar.

5.5 Under no circumstances shall Hanover Solar be liable for incidental, consequential, punitive or special loss or damages, howsoever caused.

5.6 Limited warranty does not bear the following costs: including but not limited to the costs of module(s) installation, dismantling, re-installation and / or removal, the storage costs of unrepaired or repaired module(s), the costs of product land transport, the costs incurred by self-arrangement-test, the customs clearance or other costs for return of the module(s).

5.7 Hanover Solar's aggregate liability, if any, in damages or otherwise, shall not exceed the invoice value as paid by the customer, for the single unit of module.

5.8 If the module(s) type / serial number has been altered, moved or cannot be identified, then the customer will no longer have the appropriate warranty.



5.9 If the modules corresponding to the period during which the buyer has not settled the payment, Hanover Solar shall not be responsible for the warranty. After the payment is settled, the module's warranty period will be calculated from the delivery date

6 General Terms

- 6.1 Hanover Solar has the right to deliver another type of module with difference in size, form, color, and/or power in case Hanover Solar discontinued producing the replaced modules at the time of the claim.
- 6.2 The repaired or replaced modules or supply of additional modules neither renews nor extends the period of the warranties.
- 6.3 Any replaced module is the property of Hanover Solar.
- 6.4 In principle, the limited warranty only applies to the original client (including the first buyer and the owner of the PV modules' initial installation site). When the ownership of the PV modules has been changed and the PV modules were still reserved on initial installation site and not be modified, the limited warranty can be transferred to the new owners of the PV modules, and please notify Hanover Solar at the first time and submit the declaration to the local tax authorities.

7 Severability

If a part, provision or clause of this Limited Warranty, or the application thereof to any person or circumstance, is held invalid, void or unenforceable, such holding shall not affect and shall leave all other parts, provisions, clauses or applications of this Limited Warranty, and to this end such other parts, provisions, clauses or applications of this Limited Warranty shall be treated as severable.

8 Disputes

- 8.1 No action, regardless of form, arising out of or in any way connected with this Limited Warranty, may be brought against Hanover Solar less than three (3) months after the cause of action has accrued.
- 8.2 In case of discrepancy in a warranty-claim, the test result of a first-class international test institute such as Fraunhofer ISE or TUV or ASU shall be involved as a technical evidence to judge the claim finally.
- 8.3 Hanover Solar have right to choose the above mentioned test institute.

The version of this warranty is 3.1, which is applicable to products manufactured by Hanover Solar after January 1, 2021.

P Type Standard Solar Module Limited Warranty Ver. 3.1