Phono® Solar

Product Warranty

Dual Glass

PV-Modules



EN 2019.V1

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Phono Solar Dual Glass PV Modules with the Model Names covered under this warranty are:

Monocrystalline Products

- PSXXXMG-20/U (XXX = 265-320, in steps of 5)
- PSXXXMGF-20/U (XXX = 265-320, in steps of 5)
- PSXXXMGH-20/U (XXX = 265-320, in steps of 5)
- PSXXXMGFH-20/U (XXX = 265-320, in steps of 5)
- PSXXXMG-20/UH (XXX = 300-335, in steps of 5)
- PSXXXMG-24/TH (XXX = 360-400, in steps of 5)
- PSXXXMGF-20/UH (XXX = 300-335, in steps of 5)
- PSXXXMGF-24/TH (XXX = 360-400, in steps of 5)
- PSXXXMGH-20/UH (XXX = 300-335, in steps of 5)
- PSXXXMGH-24/TH (XXX = 360-400, in steps of 5)
- PSXXXMGFH-20/UH (XXX = 300-335, in steps of 5)
- PSXXXMGFH-24/TH (XXX = 360-400, in steps of 5)

Polycrystalline Products:

- PSXXXPG-20/U (XXX = 250-290, in steps of 5)
- PSXXXPGF-20/U (XXX = 250-290, in steps of 5)
- PSXXXPGH-20/U (XXX = 250-290, in steps of 5)
- PSXXXPGFH-20/U (XXX = 250-290, in steps of 5)

The product (hereinafter the "Product") in this Warranty means the Dual Glass PV Module(s) manufactured by Phono Solar Technology Co., Ltd. (hereinafter the "Phono Solar"). The Phono Solar warrants its Product(s) in compliance with the terms and conditions as stipulated below.

Linear peak power guarantee is only applicable to the front generation of the bifacial modules.

The Customer in this Warranty means the individual person or company who purchases Phono Solar Product.

This "Limited Warranty for Dual Glass PV-Modules" is valid for all Dual Glass Modules delivered from Phono Solar since August 1st, 2018





1 Limited Product Warranty –Repair or Replacement

Twelve (12) years

Phono Solar warrants that the Product including factory-assembled DC connectors and cables, if any, will be free from defects in material and workmanship under normal application, installation, operation, and use and service conditions. If Product fails to conform to this warranty, within a period of twelve (12) years from the date of delivery by Phono Solar to its first buyer, Phono Solar will, at its sole discretion, either repair the defective Product(s) at no charge; or replace the defective Product(s) or part thereof by a new or remanufactured equivalent at no charge, within the above specified period. This repair or replacement remedy shall be the sole and exclusive remedy provided under the "Limited Product Warranty" and shall not extend beyond the twelve (12) years period set forth herein.

This "Limited Product Warranty" does not warrant a specific power output, which shall be exclusively covered under clause 2 hereinafter ("Limited Linear Peak Power Warranty").

2 Limited Linear Peak Power Warranty - Limited Remedy

Phono Solar guarantees that during the first (1st) year from the date of delivery by Phono Solar to the first buyer,

For **Monocrystalline Products:** 3.0% of the "Peak Power at STC"-1 as specified as of the Phono Solar´s product label in the first year, thereafter the actual annual power decline no more than 0.5% per year, ending with 82.5% of the "Peak Power at STC"-1 as specified as of the Phono Solar´s product label in the 30th year after the Warranty Start Date.

For **Polycrystalline Products:** 2.5% of the "Peak Power at STC"-1 as specified as of the Phono Solar´s product label in the first year, thereafter the actual annual power decline no more than 0.5% per year, ending with 83% of the "Peak Power at STC"-1 as specified as of the Phono Solar´s product label in the 30th year after the Warranty Start Date.

Provided that such loss in power is determined by Phono Solar (at its sole and absolute discretion) to be due to defects in material or workmanship, Phono Solar will, at its sole option, replace such loss in power by either (a) providing additional Product(s) to the Customer to make up for such loss in power or (b) replacing the defective Product(s) at the option of Phono Solar.

The remedies set forth in this clause 2 shall be the sole and exclusive remedies provided under the "Limited Linear Peak Power Warranty".

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3 Exclusions and Limitations

(1) In any event, all warranty claims must be received within the applicable warranty period for this warranty to be effective.

(2) The "Limited Product Warranties" and the "Limited Linear Peak Power Warranties" do not apply to any Product(s) which have been subjected to:

- Misuse, abuse, neglect or accident;
- Alteration, improper installation or application;
- Non-observance of Phono Solar's installation manual;
- Impairments caused by external effects, such as e.g., dirt stains, smoke, damages caused by salt, by chemicals not explicitly authorized for use, e.g. for cleaning. Repair or modifications by someone other than an approved service technician of Phono Solar;
- Power failure surges, lightning, flood, fire, accidental breakage or other events out of Phono Solar' s control;
- Caused by external events including but not limited to defective equipment parts, appliances, system components like, connecting cables, invertors, or the like, which have been coupled with the Module by anyone other than Seller, or caused by defective system design, configuration, or installation planning;
- Removal of Modules and reinstallation at a new site;
- Installation on mobile platforms or in a marine environment; direct contact with corrosive agents or salt water; pest damage; or malfunctioning system components;
- Alteration, removal or obliteration of the original Module label;
- Other events that are reasonably beyond the control of Phono Solar.

(3) Both the "Limited Product Warranties" and "Limited Linear Peak Power Warranties" do not cover any costs associated with installation, removal or re-installation of the PV-modules and (except as explicitly set forth in the final paragraph of Section 5) customs clearance or any other costs for return of the Product(s); .

(4) Both the "Limited Product Warranties" and "Limited Linear Peak Power Warranties" do not cover cosmetic blemishes associated with installation, or the normal wear and tear of Phono Solar Modules.



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4 Limitation of Warranty Scope

These warranties as set forth herein are expressly in lieu of and exclude all other warranties of any kind whatsoever, whether express or implied, including but not limited to warranties of merchantability, of fitness for particular purpose, use, or application, of non-infringement and all other obligations or liabilities on the part of Phono Solar, unless such other obligations or liabilities are expressly agreed to in writing signed and approved by Phono Solar to the broadest extent permitted by law.

Phono Solar shall have no responsibility or liability whatsoever for damage or injury to persons or property, or for other loss or injury resulting from any cause whatsoever arising out of or related to the Product(s), including, without limitation, any defects in the Product(s), or from use or installation. Under no circumstances shall Phono Solar be liable for any special punitive, incidental, or consequential damages, howsoever caused, including but not limited to loss of use, loss of profits, loss of production, or loss of revenues, arising, directly or indirectly from the sale or use of any Product(s), whether such claim is based on warranty, contract, negligence, strict liability or otherwise, Phono 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 Product(s) involved. The rights and limitations herein shall leave unaffected any legal rights existing under mandatory applicable laws.

5 Obtaining Warranty Performance

If the Customer has a justified claim covered by this "Limited Warranties for Dual Glass PV Modules", an immediate notification directly to Phono Solar shall be filed by mailing a registered letter in writing to the address of Phono Solar listed hereunder, or by, sending an email letter to the email account of Phono Solar Service Center listed hereunder as soon as becoming aware of the circumstances which constitute a warranty case. Together with the notification, the Customer should enclose the following information:

- The necessary contact information of the Customer, including its name, address, telephone, email, etc.,
- The corresponding serial number of the Product(s)
- The date on which the Product(s) have been delivered and installed
- The pictures of the defective Module which show the defect and/or the pictures which show the shadowing situation at the installation location

The timely receipt of the notification by Phono Solar shall be decisive.

The return of any PV-modules will not be accepted unless prior written authorization for the return and evaluation of the claimed defect has been given by Phono Solar. To the extent necessary for processing the return request Phono Solar or its authorized person shall be given commercially reasonable access to the Product(s) for inspection and analysis of the claimed defect. In connection with both the "Limited Product Warranties" and "Limited Linear Peak Power Warranties", Phono Solar shall reimburse Customer for reasonable, customary and documented transportation charges by sea freight for both the return of the Product(s) and reshipment of any repaired or replaced Product(s), only if this cost is authorized by Phono Solar customer service department.



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6 Severability

If a part, provision or clause of this "Limited Warranty for Dual Glass PV-Modules", 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 for Dual Glass PV-Modules", and to this extent such other parts, provisions, clauses or applications of this "Limited Warranty for Dual Glass PV-Modules" shall be treated as severable.

7 Disputes

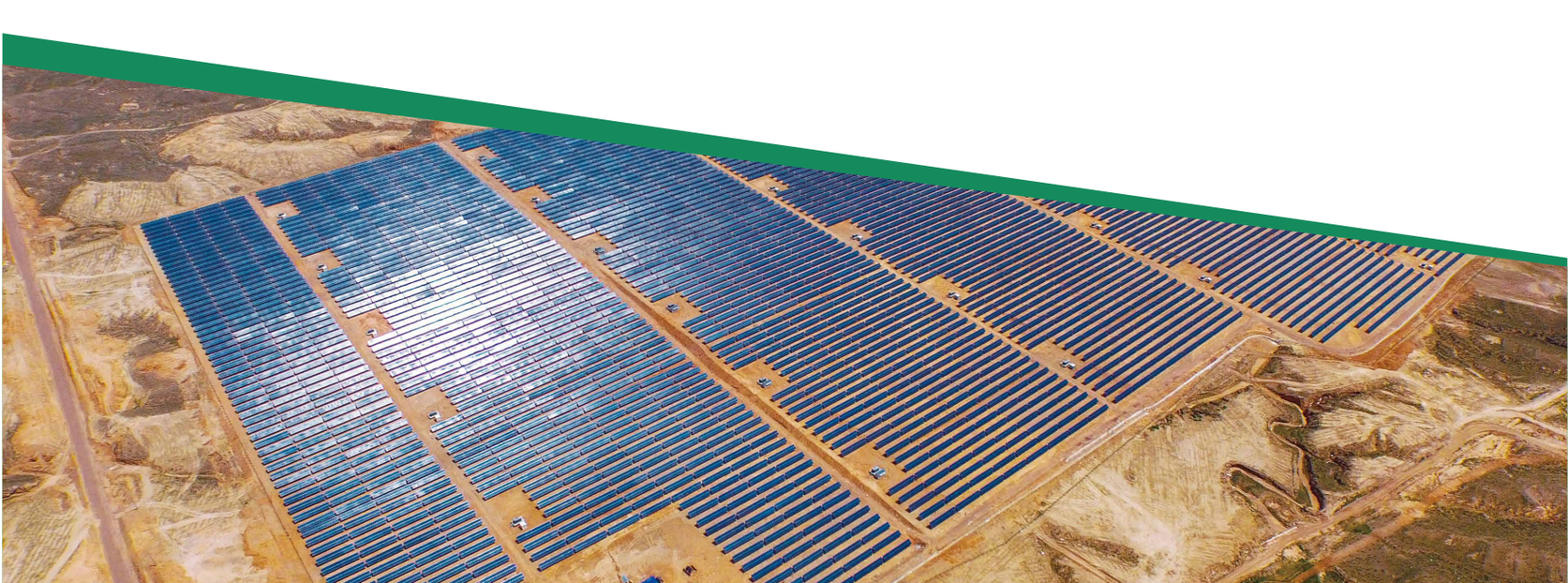
In case of any discrepancy in a warranty-claim, a first-class international test-institute such as Fraunhofer ISE in Freiburg/ Germany, TÜV Rheinland in Cologne/ Germany or ASU Arizona State University shall be involved to judge the claim finally. All fees and expenses shall be born by the losing party, unless otherwise awarded. The final explanation right shall be borne by Phono Solar.

8 Various

The repair or replacement of the Product(s) or the supply of additional Product(s), does not cause the beginning of new warranty terms, nor shall the original terms of this "Limited Warranty for Dual Glass PV-Modules" be extended. Any replaced Product(s) shall become the property of Phono Solar made for their disposal. Phono Solar has the right to deliver another type (different in size, color, shape and/or power) in case Phono Solar discontinued producing the replaced Product(s) at the time of the claim.

9 Warranty Transfer

This warranty is transferable from the original Customer to any assignee and remains in effect for the time period remaining under the limited warranties, provided the Product remains installed in its original location at the warranty registration.



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10 Force Majeure

Phono Solar shall not be responsible or liable in any way to the customer or any third-party arising from any non-performance or delay in performance of any terms and conditions of sale, including this "Limited Warranty for

Dual Glass PV-Modules ", due to acts God, war, riots, strikes, warlike conditions, plague or other epidemics, fire, flood, or any other similar cause or circumstance beyond the reasonable control of such Phono Solar. In such cases, performance by Phono Solar of this Limited Warranty shall be suspended without liability for the period of delay reasonably attributable to such causes.

1 "Peak Power at STC" is the power in Watt peak that a PV- Module generates in its Maximum Power Point. "STC" are as follows:

Light spectrum of AM 1.5, (b) an irradiation of 1000 W per m2 and (c) a cell temperature of 25 degree centigrade at right angle irradiation.

The measurements are carried out in accordance with IEC 61215 as tested at the connectors or junction box terminals – as applicable – per calibration and testing standards of Phono Solar valid at the date of manufacture of the PV-modules. The power output shall be measured by a laboratory approved by Phono Solar.



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