

### SINOTEC SOLAR

### PHOTOVOLTAIC MODULES LIMITED WARRANTY



Revision Date: 2024.1.29

### SOLAR

Thank you for choosing Sinotec Solar modules. Our "Limited Warranty" on materials and workmanship for Single glass modules is 25 years (see Table 1). This warranty extends to the original buyer and any subsequent owner confirmed by Sinotec Solar as per the provisions of this Limited Warranty.

Sinotec Solar's warranty on its photovoltaic solar modules (referred to as Modules) commences from either the date of sale to the first customer who installs it for their own use (Date of Sale) or 90 days after shipment from our factory, whichever date comes first, marking the Warranty Start Date.

Modules Covered by this Limited Warranty						
Series	Module/Cell Type	Limited Products Warranty	Limited Power Warranty	Degradation Year 1	Degradation Year 2 to End of Warranty	Output at End of Power Warranty
STS-3xxP STS-4xxP STS-5xxP	Monocrystalline single glass; P-Type cells	25 years	25 Years	≤2.0%	≤0.55%	>84.80% of Nominal Power

Table 1: Types of Modules Covered by this Limited Warranty

### 1. Limited Product Warranty

Sinotec Solar ensures that the solar photovoltaic modules, including factory-assembled DC connectors and cables, if any, are free from material and workmanship defects for a period of 25 years from the Warranty Start Date under normal application, proper installation as per Sinotec Solar installation guides, and reasonable use and service conditions. Proper installation and use following the latest safety, installation, and operational best practices and/or manuals provided by Sinotec Solar is necessary; failure to comply will render this Warranty void.

If a module encounters failure or becomes inoperative due to material or workmanship defects within the 25-year period from the Warranty Start Date, Sinotec Solar, at its option, will choose from the following remedies: repairing or replacing the faulty module, or reimbursing the customer with an equivalent cost to the market price at the time of affirmative resolution of the warranty claim. These mentioned remedies constitute the only available options under this Limited Product Warranty and shall not be extended beyond the period set forth herein. The "Limited Product Warranty" does not encompass the power output of the Modules, which is expressly detailed in Section 2 as the "Limited Peak Power Warranty."

### 2. Limited Peak Power Warranty

Sinotec Solar provides a power output guarantee for its Modules as follows: Twenty-five (25) years for single glass modules from the Warranty Start Date. The loss of power output is calculated on the basis of the ratio between the nominal power output specified on the module nameplate and the actual power output of the module under standard test conditions. Standard test conditions refer to an irradiance intensity of 1000W/m<sup>2</sup>; a spectral AM of 1.5; and a module cell temperature of 25°C at direct angle irradiation.

1) Modules using P-type cells:

Sinotec Solar warrants monocrystalline single-glass P-type cell module (STS- 3XXP-XXBB, STS-3XXP-XXDD, STS- 4XXP-XXBB, STS-4XXP-XXDD, STS- 5XXP-XXBB, STS-5XXP-XXDD series) degradation to

# SOLAR

be within 2.0% in the first year of the Warranty Start Date, and the average degradation is within 0.55% per year between the second and the twenty-fifth year of the power warranty period. The output of Modules is greater than 84.8% of the nominal power output in the last year of the twenty-five-year power warranty period.

During the Power Warranty Period of twenty five years for single-glass P-Type Modules from the Warranty Start Date, Sinotec Solar guarantees that the power of the qualified Modules sold meets the above power warranty values, provided that the measurements of the actual output power are carried out under standardized conditions, and performed by a third-party testing agency confirmed by Sinotec Solar or appointed by it. The uncertainty of the measuring test instrument shall be included in all actual output power measurements. In the event of any loss of power in excess of the guaranteed value as verified by Sinotec Solar, Sinotec Solar will, at its sole discretion, elect either of the following remedies: (1) repair or replace the defective module; or (2) refund to the Customer the same proportion of the cost of the Modules (calculated on the basis of the market price of the Modules at the time of the Customer's claim) for the difference between the actual power output and the nominal power specified by Sinotec Solar; or (3) provide the Customer with additional Modules to make up for the loss of power described above.

Proper installation following the latest safety, installation, and operation best practices or manuals provided by Sinotec Solar is necessary; failure to comply will render this Warranty void.

Standard test conditions refer to an irradiance intensity of 1000W/m<sup>2</sup>; a spectral AM of 1.5; and a module cell temperature of 25°C at direct angle irradiation.

These mentioned remedies constitute the only available options under this Limited Peak Power Warranty.



### 3. Exclusions and Limitations

1) All warranty claims must be submitted within the corresponding warranty period to be deemed valid.

2) The "Limited Product Warranty" and "Limited Peak Power Warranty" for Modules do not apply to modules subject to:

- Misuse, abuse, neglect or accidental damage or mishandling;
- Modification, improper installation or usage that deviates from Sinotec Solar's guidelines;
- Failure to adhere to the installation and maintenance instructions of Sinotec Solar;
- Repairs or modifications by technicians not approved by Sinotec Solar;
- Power outages, lightning, flood, fire, accidental breakage, or other occurrences beyond the control of Sinotec Solar;
- Damage caused by abnormal environmental conditions, including but not limited to improper voltage, acid rain, variables in marine environments, pollution, or damage arising from the installation of components on structurally deficient buildings or containing flawed materials;
- Non-conformity in system installation or use conditions, including but not limited to unreasonable installation or use of brackets, improper design, installation or use of other system components, or similar occurrences;
- Damage caused by external corrosion or similar conditions;
- Damage resulting from relocation of modules or changes in the original installation location.

3) Neither the "Limited Product Warranty" nor the "Limited Peak Power Warranty" cover the following costs: costs related to the installation, removal or reinstallation of PV modules; customs clearance or any other costs incurred during the return or replacement of PV modules.

4) Warranty claims will be denied if the component model number or serial number has been altered, removed, or rendered illegible.

### 4. Scope of Warranty

# SOLAR

Unless explicitly acknowledged in writing by Sinotec Solar, the Limited Warranty outlined for PV Modules explicitly replaces and excludes all other warranties, whether expressed or implied. This exclusion encompasses warranties of merchantability, suitability for specific purposes or applications, and any additional obligations or liabilities of Sinotec Solar.

Sinotec Solar shall not be held liable for personal injury, property damage, or any other loss or injury associated with the Modules, including but not limited to defects arising from their use or installation. Additionally, Sinotec Solar will not be responsible for losses related to utilization, production, revenue, or profits. In any case where liability applies, Sinotec Solar's total liability for damages or other customer liabilities will not surpass the invoice value of the individual Modules purchased by the Customer.

### 5. Warranty Fulfillment

In the event that the Customer deems a warranty claim applicable as per the terms outlined in the "Limited Warranty for Photovoltaic Modules", the Customer is required to promptly provide written notification by registered mail or email to the provided Sinotec Solar address. The Customer must attach the warranty duration, the corresponding module's serial number, and the date of purchase. Additionally, the submission should include an invoice that explicitly displays the date of purchase, purchase price, module model number, and bears the official seal or signature of Sinotec Solar or its authorized distributor, serving as substantiating evidence. Returned PV modules will not be accepted without prior written authorization from Sinotec Solar.

Customer shall bear the burden of establishing a claim under the Limited Product Warranty or Limited Power Warranty (collectively, "Warranties"), and if Customer believes that there has been a breach of the Warranties, Customer shall promptly and no later than thirty (30) days via email (<u>info@sinotecsolar.com</u>; please indicate "Warranty Claim" in the email title) after knowledge thereof, provide notice to Sinotec Solar setting forth the following evidentiary documents or information related to the claim:



- 1) Identifying information of the claimant
- 2) A detailed description of the claim
- 3) Supporting materials including photos of affected modules or testing reports
- 4) Serial number, types, and numbers of affected modules
- 5) Evidence of purchase of the affected module and Warranty Start Date
- 6) Installation location

The previous list is not exhaustive; Sinotec Solar may ask for other supplementary information to determine validity of claim. Sinotec Solar also reserves the right to request the actual module(s) claimed to be faulty.

#### 6. Severability

If any part, provision, or clause of this Limited Warranty, or its application to a person or circumstance, be deemed invalid or unenforceable, such determination shall not affect the validity of the remaining parts of this Limited Warranty. The invalidity or unenforceability of any part shall not impact the overall validity or enforceability of the other remaining provisions, clauses, or applications within this Limited Warranty.

### 7. Dispute

Any inconsistencies arising from warranty claims shall be subject to final adjudication by leading international testing organizations such as Fraunhofer ISE in Freiburg, Germany; TUV Rheinland in Cologone, Germany; Arizona State University in Arizona, USA; or other third-party testing organizations as mutually determined by the Customer and Sinotec Solar. All costs shall be borne by the unsuccessful party, unless otherwise specified in the adjudication terms. The final selection of the foregoing organization shall be determined in consultation with the Customer. Final selection, explanation right, and interpretation right shall be reserved by Sinotec Solar.

#### 8. Other

Repair, replacement, or provision of additional modules does not reset the Warranty Period, nor shall it extend the original term of this Limited Warranty. Sinotec Solar reserves the right, at its option, to have ownership of replaced modules revert back to Sinotec Solar for its



disposal.

In the event that Sinotec Solar discontinues production of the module model being replaced in the course of processing a claim, Sinotec Solar reserves the right to offer an alternative model of a different size, color, shape and/or power output.

### 9. Transfer of Warranty

Transferability of this warranty is contingent upon the product remaining installed at its original location and has not been disassembled.

### **10. Force Majeure**

Sinotec Solar shall not be liable to Customer or any third party for any failure or delay in the performance of the terms or conditions of sale (including this LIMITED WARRANTY) by Sinotec Solar due to acts of nature, war, riots, strikes, state of war, plague or other contagious diseases, fires, floods, or any other cause or circumstance beyond Sinotec Solar's reasonable control. In such event, Sinotec Solar's performance of this Limited Warranty shall be suspended and Sinotec Solar shall not be liable for reasonable delays due to such causes.



#### Annotation:

The unit of "peak power" is watt, which is the highest power produced by the Module at the point of maximum power point. STC test conditions are as follows: (a) Optical Spectrum of AM1.5; (b) Irradiance of 1000 W/m2; (c) Cell temperature at 25°C at direct angle irradiation;

(d) Measurement uncertainty. At the time of production of the Modules, measurement methods through junction box terminals are adopted in accordance with the testing standard of IEC 61215 in order to comply with the standard of the international accreditation organization.

Sinotec Solar reserves the right to final interpretation of the terms of this Warranty