

# WARRANTY

## Limited Warranty For Solar Photovoltaic (PV) Modules

High-efficiency Mono Facial  
PV Modules



Jinko Solar Co., Ltd. or its affiliates (hereinafter referred to as “Jinko” ) generally provide the Warranties set forth herein to the original purchaser and its permitted successors and assigns (hereinafter referred to as “Customer” ) with respect to any Solar Photovoltaic Module (hereinafter referred to as “Module” ) set forth herein sold by Jinko under purchase agreements signed on or after 1st November, 2022, subject to the terms and conditions herein (hereinafter referred to as “Limited Warranty” ). Jinko and Customer may hereinafter be referred to each as a “Party” and collectively as the “Parties” .  
 This warranty only applicable to Europe.

Modules and general condition under the scope of this Limited Warranty						
Series	Product Code	Limited product warranty period (Years)	Limited power warranty period (Years)	First year degradation rate	Annual degradation rate	Pmin at the end of warranty period
Tiger-Neo	JKMxxxN-54HL4R-(V)	15	30	1.00%	0.40%	87.40%
Tiger-Neo	JKMxxxN-54HL4R-B	25	30	1.00%	0.40%	87.40%
Tiger-Neo	JKMxxxN-60HL4R-(V)	12	30	1.00%	0.40%	87.40%
Tiger-Neo	JKMxxxN-72HL4-(V)	12	30	1.00%	0.40%	87.40%
Tiger-Neo	JKMxxxN-60HL4-(V)	12	30	1.00%	0.40%	87.40%
Tiger-Neo	JKMxxxN-54HL4-(V)	15	30	1.00%	0.40%	87.40%
Tiger-Neo	JKMxxxN-54HL4-B	25	30	1.00%	0.40%	87.40%
Tiger-Neo	JKMxxxN-78HL4-(V)	12	30	1.00%	0.40%	87.40%
Tiger Pro	JKMxxxM-72HL4-(V)	12	25	2.00%	0.55%	84.80%
Tiger Pro	JKMxxxM-60HL4-(V)	12	25	2.00%	0.55%	84.80%
Tiger Pro	JKMxxxM-54HL4-(V)	15	25	2.00%	0.55%	84.80%
Tiger N-type	JKMxxxN-6RL3-(V)	15	30	1.00%	0.40%	87.40%
Tiger N-type	JKMxxxN-6RL3-B	25	30	1.00%	0.40%	87.40%
Tiger N-type	JKMxxxN-6TL3-(V)	20	30	1.00%	0.40%	87.40%
Tiger N-type	JKMxxxN-6TL3-B	25	30	1.00%	0.40%	87.40%
Tiger P-type	JKMxxxM-7RL3-(V)	12	25	2.00%	0.55%	84.80%

Table 1. Limited warranty scope of PV modules and conditions applied

# 1. LIMITED WARRANTY

## 1.1 Definitions

### Warranty Start Date:

The Warranty Start Date shall be the earlier one of the following dates:

- A. 180 days following the Module manufacture date (indicated by the 7th-12th digit in serial number[YYMMDD], starting from the left)
- B. Delivery of a Module to the original purchaser thereof

### Standard Test Conditions (STC):

①Air mass 1.5, ②Irradiance 1000W/m<sup>2</sup>, ③Cell Temperature 25°C

### Nominal Power Output:

The original manufactured nameplate specification of power in the Module (Maximum Power, P<sub>max</sub>), expressed in Watts ( "W" ), measured at STC, excluding any specified positive tolerance.

### Actual Power Output:

Power output of the module, measured at STC, corrected for any measurement error, as per IEC 61215.

The Actual Power Output shall be verified by a neutral independent testing lab approved by both Jinko and the Customer (hereinafter referred to as "Independent Testing Lab").

### First Year Degradation Rate:

The maximum degradation rate of nominal power output in the first year since the **[Warranty Start Date]**.

### Annual Degradation Rate:

From the second year following the **[Warranty Start Date]** to the end of the **[Limited Power Warranty Period]**, the maximum Annual Degradation Rate of nominal power output.

### P<sub>1st year,%</sub>:

Jinko' s output commitment for the Module power output at the end of the first year from **[Warranty Start Date]**, as specified in the table 1.

$$P_{1st\ year,\%} = 100\% * (1 - \text{First Year Degradation Rate})$$

### P<sub>N year,%</sub>:

Jinko' s output commitment for the Module power output from the second year following the **[Warranty Start Date]** until the end of the **[Limited Power Warranty Period]**

$$P_{N\ year,\%} = 100\% * (1 - (\text{First Year Degradation Rate} + \text{Annual Degradation Rate} * (N-1))),$$

With N, 2 ≤ N ≤ Limited Power Warranty Period

## 1.2 Theoretical Residual Warranty Power Output Calculation Formulas

Theoretical Residual Warranty Power Output ≥ Nominal Power Output \* (1 - (First Year Degradation Rate + Annual Degradation Rate \* (N-1)))

Note: year N, 0 ≤ N ≤ Limited Power Warranty Period

### 1.3 Limited Product Warranty

Jinko warrants that the Modules and their accompanying DC connectors and cables (hereinafter referred to as the "Products" ) will be free from defects in material or workmanship which affects the normal installation or utilization of the Products, provided that the Products are installed, utilized and maintained according to the stipulations of the Installation Manual and O&M guideline provided by Jinko, during the period of **[Limited Product Warranty Period]** as described in Table 1 from **[Warranty Start Date]**. Defects do not include changes in appearance or normal wear and tear of the Products after the Modules is installed.

### 1.4 Limited Power Warranty

Jinko' s output commitment for the Module actual power output during the **[Limited Power Warranty Period]**, from **Warranty Start Date**: First Year Degradation Rate; Annual Degradation Rate;  $P_{1st\ year, \%}$ ,  $P_{N\ year, \%}$ . See clause 1.1 above for specific definitions.

From the **[Warranty Start Date]** to the end of the **[Limited Power Warranty Period]**, the actual power output shall be no less than the defined percentage (see clause 1.2) of the nominal power output.

## 2. Warranty Claim and Remedies

### 2.1 Warranty Claim Procedure

#### 2.1.1 Claim Notification

If the customer believes that, the Module has violated the relevant warranty terms of this "Limited Warranty" , the customer should notify Jinko via email [cs.eu@jinkosolar.com](mailto:cs.eu@jinkosolar.com) within 30 days after the claim is identified.

#### 2.1.2 Claims Evidence

The Customer shall provide necessary evidence documents for its claim. The notice should include the following information:

- 1) Claimant;
- 2) A detailed description of the claim;
- 3) Supporting materials, as indicated in Jinko Claim guideline, including photos of affected modules or testing reports;
- 4) Serial number, types, and numbers of affected module;
- 5) Evidence for purchase of the affected module;
- 6) Initial installation location;
- 7) Other supplementary information required by Jinko;

In the event the Customer fails to notify Jinko and provide the relevant information of (1)-(7) as described above, Jinko is entitled to refuse to process the relevant claim demand without any liability.

#### 2.1.3 Claims Validation

Jinko will review and evaluate alleged claims after receipt of the claim and full information as stipulated herein. If Jinko at its sole discretion considers it necessary, Jinko can request the module

be shipped to the Independent Testing Lab for testing. In the absence of written consent from Jinko, any returned Module will not be accepted by Jinko. In the event the Customer returns the Modules without written consent from Jinko, the risks (including but not limited to damage and loss of the Modules) and expenses related to the Modules shall be borne by the Customer.

For any claims on defective Modules, the relevant technical factual dispute shall be decided by the Independent Testing Lab approved by both parties. If both parties cannot agree, the testing lab appointed by Jinko shall prevail. In all measurements of actual power output, the effect of test uncertainty needs to be considered as per IEC 61215.

Jinko shall first bear the transportation costs arising therefrom, as well as the service costs incurred by the Independent Testing Lab pursuant to 2.1.3 hereto, including but not limited to shipping, testing services, insurance, etc. however, Customer shall promptly upon receipt of notice indemnify Jinko for all such costs on a dollar-for-dollar basis in the event the Independent Testing Lab is unable to confirm a breach of the Warranties or, if no Independent Testing Lab was utilized, Customer is otherwise unable to establish a breach of the Warranties.

## 2.2 Remedies for Claims

### 2.2.1 Remedies for Claims

In the event that the Module(s) fails to meet the "Limited Warranty", then Jinko shall, at its sole discretion, either

- 1) Repair the defective solar modules. In such case, Jinko shall prepare the repair project plan and carry out the repair project for the affected modules; or
  - 2) Replace the defective modules. In such case, the replaced modules actual power output shall be no less than the theoretical residual warranty 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** (Formula shown down below) between the theoretical residual warranty power output and the actual power output of the defective module(s); or
- A. **Residual value** = Current Price (price-per-watt) \* Nominal Power \* Left-over Warranty Period / Limited Warranty Period
- B. **Value Equivalent of Output Gap** = Current Price (price-per-watt) \* (Residual Warranty Power Output – Actual Power Output)
- The price-per-watt is based on the price provided by Jinko*
- 4) Provide additional module(s) to make up for the output loss

### 2.2.2 Remedies Description

If Jinko opts for repair as the remedy, Jinko shall cover reasonable material and labor costs related to the repair.

In any event, the costs and expenses for the removal, installation, and/or reinstallation of the Modules, including fees, levies, taxes or other financial duties due in relation to any applicable electronic waste disposal regulation, shall remain with the Customer. Jinko will not pay any cost of any fees, levies, taxes or other financial duties imposed on the remedies implemented by Jinko or imposed on the Modules subject to such remedies, that are due to regulatory, government or judicial decisions not existing at the time of purchase of the affected Modules.

Unless otherwise agreed by the Parties in written, the replaced module(s) will be delivered by Jinko

in accordance with the same Incoterms and destination as the relevant module supply contract. The insurance, freight, customs clearance fees and other reasonable expenses shall be borne in accordance with the Incoterms in the original module supply contract.

Unless other negotiations, the Customer shall dispose of out-of-use module (s) in accordance with applicable regulations on electronic waste treatment and disposal at its own cost. If Jinko decides retrieve these defective modules, the ownership of the relevant module(s) belong to Jinko, and Jinko shall bear the transportation costs.

Any repair or replacement of the affected Modules shall not increase the applicable warranty period. The warranty period for replaced or repaired Modules is the remainder of the warranty for the affected Modules.

### 2.2.3 Exclusions

The parties agree that Jinko is entitled to refuse to process the relevant claim demand without any liability for either:

- Full and final payment has not been received by Jinko; or
- Failure to provide proof of purchase or product information; or
- Altered, repaired or modified without the prior written consent of Jinko or otherwise inconsistent with Jinko' s written instructions; or
- Failure to use in a manner consistent with the version of Jinko Installation Manual available at <https://jinkosolar.eu> on the date the Module is manufactured; or
- Removed and re-installed at any location other than the physical location in which it was originally installed following purchase by Customer or receipt from Jinko as a replacement Module; or
- Subject to misuse, abuse, neglect, or accident except as may be caused by Jinko in the course of storage, transportation, handling, installation, application, use or service; or
- Subject to power surges, lightning, floods, fires, natural disasters and other force majeure or module damage due to war, intentional destruction tampering; or
- Installed on mobile platforms (other than single or dual-axis trackers) or in a marine environment, except for special contract; or
- Subject to direct contact with corrosive agents or salt water, pest damage, or malfunctioning PV system components; or
- Change, erasure or illegible-made of the Product's type, nameplate or serial number; or
- Defective components in the construction on which the module is mounted; or
- Exposure to voltage in excess to the maximum system voltage or power surges; or
- Use of the Products in such a manner as to infringe Jinko' s or any third party's intellectual property rights (including but not limited to patents, trademarks, etc.).

## 3. LIMITATION OF LIABILITY

Jinko assumes no warranties, express or implied, other than the warranties made herein and specifically disclaims all other warranties, including but not limited to, merchantability or fitness for a particular purpose, usage or application, or other obligations and responsibilities assumed by Jinko, unless Jinko expressly recognizes other obligations and responsibilities in a duly signed written document. The customer understands and agrees that Jinko shall not be liable for personal injury or property damage, and shall not be liable for other losses or injuries caused by or related to the module(s) (including but not limited to any module defect, or any defect arising from

improper use and installation of the module(s)). Jinko excludes all liabilities for any collateral, consequential or special damages. Losses caused by module defect, including but not limited to, loss of profit, loss of power, loss of business opportunity, loss of goodwill, increase of the operating cost or loss of income are clearly excluded here. If Jinko is liable for compensation to the customer, the total amount of compensation shall not exceed the invoice price of the defective module(s) paid by the customer.

You may have specific legal rights outside this warranty, and you may also have other rights that vary from state to state or country to country. This limited warranty does not affect any additional rights you have under laws in your jurisdiction governing the sale of consumer goods. Some states or countries do not allow the exclusion or limitation of incidental or consequential damages, so the limitations or exclusions in this limited warranty statement may not apply to some customer in those areas.

## 4. ASSIGNMENT

The Customer can transfer the rights and obligations under this "Limited Warranty" to the subsequent project owner by informing Jinko in writing of this transfer of rights, provided that:

1. The module(s) remain at the initial installation site without being tempered with; and
2. There is no remaining arrears or other payables (such as liquidated damages) under the sales contract of module(s); and
3. This transfer of rights covers all provisions of this "Limited Warranty" ; and
4. The transferee agrees to be bound by all terms of this "Limited Warranty".

If required by Jinko, the Customer shall provide reasonable evidence to prove the inheritance of ownership within 15 days upon receipt of the notice from Jinko, Otherwise, Jinko shall have the right to refuse to process the relevant claim and shall not be liable for it.

The rights of this "Limited Warranty" shall only be transferred if above mentioned requirements are fully met, otherwise such transfer shall not be binding upon on Jinko, and Jinko has the right to refuse to process the relevant demand for claims without any liability.

## 5. APPLICABLE LAW AND DISPUTE RESOLUTION

Any dispute relating to this "Limited Warranty" , including but not limited to, disputes relating to the survival, validity, breach or termination of the "Limited Warranty" , shall be resolved in accordance with the governing law and jurisdiction written in the Module supply contract. In case a consensus regarding the cause of any module defect cannot be reached between Jinko and the customer, authoritative testing facilities can be enlisted to participate in the final settlement. All costs shall be borne by the losing party, unless the court decided otherwise. Jinko reserves the right of final interpretation.

In case of any dispute related to warranty claims, such dispute shall be referred to and finally resolved pursuant to the dispute resolution procedures and location under the purchase agreement between the Customer and Jinko.

## 6. SEVERABILITY

If a certain section or clause of this "Limited Warranty" itself or its applicability to certain people or certain situation is deemed invalid, ineffective or unable to be implemented, this does not affect the validity of any other sections or clauses of this warranty. In such case, the applicability of other

sections or clauses of this shall be regarded as independent and effective.

## **7. MISCELLANEOUS**

The terms of this "Limited Warranty" are conditioned upon their incorporation in a contractual agreement between Jinko and Customer, and when incorporated to such contractual agreement, this "Limited Warranty" shall be subject to the terms thereof and subject to modification when incorporated therein. Jinko reserves the right to modify or update this "Limited Warranty" at any time, with or without notice.