



## LIMITED WARRANTY FOR CRYSTALLINE PV MODULES



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JINNENG Clean Energy Technology Limited (hereafter referred to as the “Jinergy”) provides limited warranty to purchasers (hereafter referred to as the “customer”) of Jinergy Crystalline products. The terms of the limited warranty are as follows:

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### 1. Limited Product Warranty – Ten Year or Twelve Year Repair, Replacement Remedy

Jinergy warrants its Crystalline photovoltaic solar modules (hereafter referred to as “modules”), including factory-assembled DC connectors and cables, if any, to be free from defects in materials and workmanship under normal application, conditions, use, installation, and maintenance, within a period of 120 months (Each model module in Table 1 applies) or 144 months (Each model module in Table 2 and 3 applies) from warranty start date (warranty start date: (1) The date of delivery of the product ownership (the date of receiving the product); or (2) three(3) months after delivery by Jinergy to the Buyer, whichever date is earlier.

If a module is found defective in material or workmanship, Jinergy will, at its sole discretion, repair or replace the module, within the above specified period according to the type of defect.

The options to repair or replace defective modules, are the only and exclusive remedies guaranteed under this Limited Warranty for Crystalline PV Modules and shall not extend beyond the period of 120 months (Each model module in Table 1 applies) or 144 months(Each model module in Table 2 and 3 applies) set forth here. Remedies will be performed directly to the customer only. This Limited Warranty for Crystalline PV Modules does not warrant a specific power output, which shall be exclusively covered under Clause 2 hereinafter (“Limited Peak Power Warranty– Limited Remedy”).

Tab 1

Cell size ≤ 158.75mm			
JNMP60-XXX (L)	JNMP72-XXX (L)	JNMM60-XXX (L)	JNMM72-XXX (L)
JNGP60-XXX	JNGP72-XXX	JNGM60-XXX	JNGM72-XXX
JNHM60-XXX	JNHM72-XXX	\	\
<p>"XXX" in each model represents the power in the relevant product specifications</p> <p>"L" after the module model indicates that the model is suitable for 1000V DC</p>			

Tab 2

Cell size : 158.75mm			
JNMP120-XXX (L)	JNMP144-XXX (L)	\	\
<p>"XXX" in each model represents the power in the relevant product specifications</p> <p>"L" after the module model indicates that the model is suitable for 1000V DC</p>			

Tab 3

Cell size ≥ 166mm			
JNMM96-XXX (L)	JNMM120-XXX (L)	JNMM132-XXX (L)	JNMM144-XXX (L)
JNBM96-XXX	JNBM120-XXX	JNBM132-XXX	JNBM144-XXX
JNHM144-XXX	JNHM132-XXX	JNHM120-XXX	JNMM108-XXX (L)
JNBM108-XXX	JNMN156-XXX	JNMN144-XXX	JNMN132-XXX
JNMN120-XXX	JNMN108-XXX	JNMN96-XXX	JNBN156-XXX

JNBN144-XXX	JNBN132-XXX	JNBN120-XXX	JNBN108-XXX
JNBN96-XXX	\	\	\
<p>"XXX" in each model represents the power in the relevant product specifications</p> <p>"L" after the module model indicates that the model is suitable for 1000V DC</p>			

## 2. Limited Peak Power Warranty – Limited Remedy

Depending on the specific product, Jinergy provides the following power output loss guarantee for 25 or 30 years from the date of the products delivery. The calculation of power output loss is based on a comparison between the minimum "module nominal power under standard test conditions (STC)" specified on the module nameplate (referred to as nominal power) and the actual module power for each model module in table 1

### (1) For modules with type in Tab 1

A. Single glass-Poly Crystalline: (i) degradation in the first year shall not exceed 2.5%, (ii) the average annual degradation from the 2nd year to the 25th year shall not exceed 0.7%.

The output power of the module shall not be less than 80.7% of the nominal power in the 25th year.

B. Single glass-Mono Crystalline: (i) degradation in the first year shall not exceed 3.0%, (ii) the average annual degradation from the 2nd year to the 25th year shall not exceed 0.7%. The output power of the module shall not be less than 80.2% of the nominal power in the 25th year.

C. Dual glass Poly Crystalline: (i) degradation in the first year shall not exceed 2.5%, (ii)

the average annual degradation from the 2nd year to the 30th year shall not exceed 0.5%.

The output power of the module shall not be less than 83.0% of the nominal power in the 30th year.

D. Dual glass Mono Crystalline: (i) degradation in the first year shall not exceed 3.0%, (ii) the average annual degradation from the 2nd year to the 30th year shall not exceed 0.5%.

The output power of the module shall not be less than 82.5% of the nominal power in the 30th year.

E. High-efficiency HJT Mono Crystalline: (i) degradation in the first year shall not exceed 2.5%, (ii) the average annual degradation from the 2nd year to the 30th year shall not exceed 0.45%. The output power of the module shall not be less than 84.45% of the nominal power in the 30th year.

(2) For modules with type in Tab 2

A. Single glass-Poly Crystalline: (i) degradation in the first year shall not exceed 2.0%, (ii) the average annual degradation from the 2nd year to the 25th year shall not exceed 0.6%.

The output power of the module shall not be less than 83.6% of the nominal power in the 25th year.

(3) For modules with type in Tab 3

A. Single glass-Mono Crystalline: (i) degradation in the first year shall not exceed 2.0%, (ii) the average annual degradation from the 2nd year to the 25th year shall not exceed 0.55%. The output power of the module shall not be less than 84.8% of the nominal power in the 25th year.

B. Dual glass Bifacial Mono Crystalline: (i) degradation in the first year shall not exceed



2.0%, (ii) the average annual degradation from the 2nd year to the 30th year shall not exceed 0.45%. The output power of the module shall not be less than 84.95% of the nominal power in the 30th year.

C. High-efficiency HJT Mono Crystalline: (i) degradation in the first year shall not exceed 2.0%, (ii) the average annual degradation from the 2nd year to the 30th year shall not exceed 0.4%. The output power of the module shall not be less than 86.4% of the nominal power in the 30th year.

D. High Efficiency N-TOPCon Single glass & Dual glass Solar Module: (i) degradation in the first year shall not exceed 1.0%, (ii) the average annual degradation from the 2nd year to the 30th year shall not exceed 0.4%. The output power of the module shall not be less than 87.4% of the nominal power in the 30th year.

Provided that power loss exceeding the guaranteed value, which is determined by Jinergy (at its sole and absolute discretion) to be due to defects in material or workmanship, is eligible for claim under this Limited Warranty for Crystalline PV Modules. Jinergy will replace such loss in power by either providing additional modules to the customer to make up for such loss in power, or by repairing or replacing the defective modules at the discretion of Jinergy. The remedies set forth in this Clause 2 shall be the sole and exclusive remedies provided under the “Limited Peak Power Warranty – Limited Remedy”.

Note: STC, defined as: (a) light spectrum of AM 1.5, (b) an irradiation of 1000 W /m<sup>2</sup> and (c) a cell temperature of 25 degrees Celsius at right angle irradiation.

When measuring the output power of modules, test uncertainty should be considered

according to IEC 60904.

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### 3. Warranty Exclusions and Limitations

A. In any event, all warranty requirements must be filed in accordance with the instructions outlined in Clause 4 of this Limited Warranty for Crystalline PV Modules, within the applicable warranty period.

B. The Limited Warranty for Crystalline PV Modules does not apply to any modules which have been subjected to:

- Misuse, abuse, neglect or accident;
- Alteration, disassemblage, reinstallation, and/or improper installation or application;
- Non-observance of Jinergy 's installation and maintenance instructions
- Repair or modifications by persons that have not been previously authorized or approved by Jinergy;
- Failures caused by surrounding equipment of the module;
- Use under unusual conditions or environments that deviate from the product specifications and installation manual;
- Use for purposes unrelated to the generation of solar power;
- Connection with any other manufacturer's PV modules, or Jinergy modules that are a different model or have different power output specifications;
- Defects occurring during transportation or storage after the modules have been delivered to the customer;



- Naturally occurring scratches, stains, mechanical wear, rust, degradation, discoloring, or other alteration occurring after the shipment from Jinergy that have no effect on the power generation performance or mechanical strength of the module
  - Power failure surges, flood, fire, accidental breakage or other events caused by force of nature, force majeure, or other unforeseeable circumstances outside the range of influence of Jinergy.
- C. The Limited Warranty for Crystalline PV Modules does not cover any transportation charges, customs clearance or any other costs for return of the modules, for reshipment of any repaired or replaced modules, or costs associated with installation, removal or reinstallation of the modules.
- D. Warranty requirements will not be honored if the type or serial number of the modules have been altered, removed or made illegible.
- E. Jinergy 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 modules, including, without limitation, any defects in the modules, or from use or installation. Under no circumstances shall Jinergy be liable for incidental, consequential, loss of use, loss of profits, loss of revenues, loss of production or special damages. Jinergy's aggregate liability, if any, in damages or otherwise, shall not exceed the invoice value against the affected modules as paid for by the customer.
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#### 4. Obtaining Warranty Performance

- A. Warranty requirements should be sent to (a) the dealer who sold the modules, or (b) the





authorized Jinery distributor who sold the modules, or (c) Jinery at the address above.

- B. Warranty requirements must be sent by registered mail or courier. The contents must include the serial number of the defective module(s), accompanied by a copy of the relevant invoice and purchase contract, and must state, "We hereby accept, and agree to, the choice of law, the choice of an expert appraiser and the choice of arbitration as set out in Clause 6 of your Limited Warranty for Crystalline PV Modules." Together with the notification, the customer should enclose evidence of the date of sale on which the modules were purchased. Requirement that do not meet the notification deadline of Clause 4, Section C will not be processed.
- C. Any Warranty requirements under this limited warranty shall be forfeited if (a) the customer does not notify Jinery or their distributors of such requirements in writing in accordance with Clause 4 paragraph A within twenty (20) days after discovering or after the customer should have discovered, the defect requirement under warranty; or (b) the customer does not commence court or arbitration action within six (6) months after proper notification of the Warranty requirements.
- D. Jinery reserves the right to deliver another type of module (different in size, form, color, shape and/or power) to replace the requirement one if it is no longer in production when the warranty requirement is received.
- E. The repair, replacement, or additional delivery of a module neither renews nor extends the period of the warranty.
- F. Any claimed/defective product that has been replaced by Jinery shall become the property of Jinery. The claimed/defective product shall be returned or otherwise disposed



of in accordance with the instructions of Jineryg and at the customer's expense.

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#### 5. Severability

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

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#### 6. Disputes

In the case of a dispute in a warranty requirements, a first-class international institute designated by Jineryg such as Fraunhofer ISE or TÜV shall be involved to judge the related content. All fees and expenses shall be borne by the losing party, unless otherwise awarded.

The final right of interpretation shall be borne by Jineryg.

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