

中南光电
ChinaLand

合肥中南光电有限公司
Chinaland Solar Energy Co., Ltd.

Address: No. 7 Jinqian East Road Feidong Economic Development Zone Hefei
City, Anhui Province, P.R. China
Tel: 0551-67758558 Fax: 0551-67758555
Web: www.sunergyworks.com E-mail: info@sunergyworks.com

产品质量保证书

Product quality guarantee

尊敬的客户:

Dear customers,

首先感谢您选择购买合肥中南光电的产品!

Firstly thank you for choosing to purchase products of Chinaland/Sunergy Solar Energy!

为保证产品质量,明确购销双方产品质量责任,确保产品质量合格,保证产品安全,特作如下承诺与保证:

In order to guarantee the product quality, clarify the responsibility of product quality of both parties, ensure product quality conformance and safety, we hereby make the following commitments and guarantees:

1. 有限产品质保:

1. limited warranty on panels:

1.1 十二年有限产品质保:

1.1 12 years limited warranty on panels:

(a) P 型多晶单玻组件 Polycrystalline PERC Single Glass Module:

SUNxxx-72P, SUNxxx-60P.

(b) P 型单晶单玻组件 Monocrystalline PERC Single Glass Module:

SUNxxx-78M-HFD, SUNxxx-72M-HF, SUNxxx-60M-HF, SUNxxx-72M-H6, SUNxxx-66M-H6, SUNxxx-60M-H6, SUNxxx-72M-H8, SUNxxx-66M-H8, SUNxxx-60M-H8, SUNxxx-54M-H8, SUNxxx-66M-H12, SUNxxx-60M-H12, SUNxxx-54M-H12.

(c) P 型单晶双玻组件 Monocrystalline PERC Double Glass Module:

SUNxxx-78MD-HFS, SUNxxx-72MD-HFS, SUNxxx-60MD-HFS, SUNxxx-60MD-H6S, SUNxxx-66MD-H6S, SUNxxx-72MD-H6S, SUNxxx-54MD-H8S, SUNxxx-60MD-H8S, SUNxxx-66MD-H8S, SUNxxx-72MD-H8S, SUNxxx-54MD-H12S, SUNxxx-60MD-H12S, SUNxxx-66MD-H12.

(d) N 型单玻组件 N-Type TOPCon Single Glass Module:

SUNxxx-60M-H8N, SUNxxx-66M-H8N, SUNxxx-72M-H8N.

(e) N 型双玻组件 N-Type TOPCon Double Glass Module:

SUNxxx-60MD-H8NS, SUNxxx-66MD-H8NS, SUNxxx-72MD-H8NS, SUNxxx-78MD-H8NS, SUNxxx-66MD-H12RS, SUNxxx-60MD-H12RS, SUNxxx-54MD-H12RS, SUNxxx-48MD-H12RS, SUNxxx-72MD-H9RS, SUNxxx-66MD-H9RS, SUNxxx-60MD-H9RS, SUNxxx-54MD-H9RS, SUNxxx-66MD-H12NS, SUNxxx-60MD-H12NS, SUNxxx-54MD-H12NS.

自产品交付日起的十二年内，组件不会出现因设计、材料、工艺或制造缺陷出现故障或不能运行。

The PV modules will not fail or fail to operate caused by design, materials, process or manufacturing defects for 12 years from the date of delivery.

1.2 十五年有限产品质保:

1.2 15 years limited warranty on panels:

(a) N 型单玻组件 N-Type TOPCon Single Glass Module: SUNxxx-54M-H8N;

(b) N 型双玻组件 N-Type TOPCon Double Glass Module: SUNxxx-54MD-H8NS;

自产品交付日起的十五年内，组件不会出现因设计、材料、工艺或制造缺陷出现故障或不能运行。

The PV modules will not fail or fail to operate caused by design, materials, process or manufacturing defects for 15 years from the date of delivery.

1.3 中南向买方交付组件后发生的组件外观缺陷（包括但不限于划伤、污损、机械磨损、生锈、发霉等）或其他变化不属于本有限质保规定的缺陷，除非上述外观缺陷或变化违反了第 2 条“有限电能输出质保”的规定。

1.2 The appearance defects (including but not limited to scratches, stains, mechanical wear, rust, mildew, etc.) or other changes that occur after Chinaland/Sunergy delivers the PV modules to the buyer do not fall within the limitations of this limited warranty, unless such appearance defects or changes violate the provisions of article 2 "limited warranty on performance power output".

2. 有限电能输出质保

2. Limited warranty on performance power output

我公司保证从产品交付日起, 根据不同型号产品提供 25 年或 30 年内有限电能输出损失, 即依据组件铭牌上规定的组件标称功率公差最小值和实际组件在标准测试条件下 (STC) 测定的最大峰值输出功率进行对比:

Our company guarantees limited power output loss by 25 or 30 years according to different models of products from the date of delivery, it means, the PV modules' power output loss, namely pursuant to the rated power PV modules tolerances of the PV modules name plate minimum value and the maximum power of actual PV modules under STC:

2.1 P 型多晶单玻组件

2.1 Polycrystalline PERC Single Glass Module

SUNxxx-72P, SUNxxx-60P:

自质保开始日起在 12 年功率保证期内最后一年的功率输出不低于 90.0%, 在 25 年功率保证期内最后一年的功率输出不低于 80.7%。

Within the first 12 years from the delivery date of sale to the customer, the PV modules exhibit a power output of not less than 90.0% of maximum power under STC specified at the time of sale, and within 25 years from the date of sale to the customer, the PV modules exhibit a power output of not less than 80.7% of maximum power under STC specified at the time of sale.

2.2 P 型单晶单玻组件

2.2 Monocrystalline PERC Single Glass Module

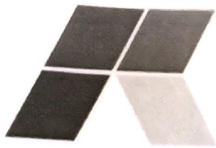
(a) SUNxxx-78M-HFD, SUNxxx-72M-HF, SUNxxx-60M-HF:

自质保开始日起在 12 年功率保证期内最后一年的功率输出不低于 90.0%, 在 25 年功率保证期内最后一年的功率输出不低于 80.0%。

Within the first 12 years from the delivery date of sale to the customer, the PV modules exhibit a power output of not less than 90.0% of maximum power under STC specified at the time of sale, and within 25 years from the date of sale to the customer, the PV modules exhibit a power output of not less than 80.0% of maximum power under STC specified at the time of sale.

(b) SUNxxx-72M-H6, SUNxxx-66M-H6, SUNxxx-60M-H6, SUNxxx-72M-H8, SUNxxx-66M-H8, SUNxxx-60M-H8, SUNxxx-54M-H8, SUNxxx-66M-H12, SUNxxx-60M-H12, SUNxxx-54M-H12:

自质保开始日起在 12 年功率保证期内最后一年的功率输出不低于 92.0%, 在 25 年功率



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保证期内最后一年的功率输出不低于 84.8%。

Within the first 12 years from the delivery date of sale to the customer, the PV modules exhibit a power output of not less than 92.0% of maximum power under STC specified at the time of sale, and within 25 years from the date of sale to the customer, the PV modules exhibit a power output of not less than 84.8% of maximum power under STC specified at the time of sale.

2.3 P 型单晶双玻组件

2.3 Monocrystalline PERC Double Glass Module

(a) SUNxxx-78MD-HFS, SUNxxx-72MD-HFS, SUNxxx-60MD-HFS:

自质保开始日起在 12 年功率保证期内最后一年的功率输出不低于 92.0%，在 30 年功率保证期内最后一年的功率输出不低于 83.0%。

Within the first 12 years from the delivery date of sale to the customer, the PV modules exhibit a power output of not less than 92.0% of maximum power under STC specified at the time of sale, and within 30 years from the date of sale to the customer, the PV modules exhibit a power output of not less than 83.0% of maximum power under STC specified at the time of sale.

(b) SUNxxx-60MD-H6S, SUNxxx-66MD-H6S, SUNxxx-72MD-H6S, SUNxxx-54MD-H8S, SUNxxx-60MD-H8S, SUNxxx-66MD-H8S, SUNxxx-72MD-H8S, SUNxxx-54MD-H12S, SUNxxx-60MD-H12S, SUNxxx-66MD-H12S:

自质保开始日起在 12 年功率保证期内最后一年的功率输出不低于 93.0%，在 30 年功率保证期内最后一年的功率输出不低于 84.95%。

Within the first 12 years from the delivery date of sale to the customer, the PV modules exhibit a power output of not less than 93.0% of maximum power under STC specified at the time of sale, and within 30 years from the date of sale to the customer, the PV modules exhibit a power output of not less than 84.95% of maximum power under STC specified at the time of sale.

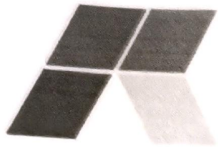
2.4 N 型单玻组件

2.4 N-Type TOPCon Single Glass Module

SUNxxx-54M-H8N, SUNxxx-60M-H8N, SUNxxx-66M-H8N, SUNxxx-72M-H8N:

自质保开始日起在 12 年功率保证期内最后一年的功率输出不低于 94.6%，在 30 年功率保证期内最后一年的功率输出不低于 87.4%。

Within the first 12 years from the delivery date of sale to the customer, the PV modules exhibit a power



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output of not less than 94.6% of maximum power under STC specified at the time of sale, and within 30 years from the date of sale to the customer, the PV modules exhibit a power output of not less than 87.4% of maximum power under STC specified at the time of sale.

2.5 N 型双玻组件

2.5 N-Type TOPCon Double Glass Module

SUNxxx-54MD-H8NS, SUNxxx-60MD-H8NS, SUNxxx-66MD-H8NS, SUNxxx-72MD-H8NS, SUNxxx-78MD-H8NS, SUNxxx-66MD-H12RS, SUNxxx-60MD-H12RS, SUNxxx-54MD-H12RS, SUNxxx-48MD-H12RS, SUNxxx-72MD-H9RS, SUNxxx-66MD-H9RS, SUNxxx-60MD-H9RS, SUNxxx-54MD-H9RS, SUNxxx-66MD-H12NS, SUNxxx-60MD-H12NS, SUNxxx-54MD-H12NS:

自质保开始日起在 12 年功率保证期内最后一年的功率输出不低于 94.6%，在 30 年功率保证期内最后一年的功率输出不低于 87.4%。

Within the first 12 years from the delivery date of sale to the customer, the PV modules exhibit a power output of not less than 94.6% of maximum power under STC specified at the time of sale, and within 30 years from the date of sale to the customer, the PV modules exhibit a power output of not less than 87.4% of maximum power under STC specified at the time of sale.

峰值功率是组件在标准测试条件下测定的最大功率。标准测试条件是指：光谱 AM1.5，光强 $1000\text{W}/\text{m}^2$ ，温度 $25 \pm 2^\circ\text{C}$ 。测量依据 IEC61215 标准，测试在接线盒终端测得，中南光电组件的校准及测试标准在组件的制造当日有效，校准标准与国际机构认可的通过的标准相一致。

The peak power is the maximum power measured under standard measurement conditions. The standard measurement conditions refer to: light spectrum of AM 1.5, irradiation of $1,000\text{w per m}^2$ and a cell temperature of 25 degrees centigrade. Such measurements are carried out in accordance with IEC 61215 as tested at the junction box terminals per the calibration and testing standard of Chinaland/Sunergy which are valid at the date of manufacture of the PV modules. Chinaland/Sunergy's calibration standard shall be compliant with the standard applied by international instructions accredited for this purpose.

3. 责任免除和限制——上述有限质保不适用于存在以下任何情形的产品：

3.Warranty Exclusions and Limitations- - Above limited warranty shall not cover those products under below conditions:

3.1 因物流原因造成的组件破碎或包装破损未能在卸货时且司机在现场的情况下提供有效的图片或视频的证据。

3.1 PV modules breakage or package damage due to logistics reasons fails to provide valid pictures or evidences of video when unloading and the driver is on site.

3.2 中南光电质量等级除 A 级以外的组件不享受有限质保。

3.2 PV modules of Chinaland/Sunergy's quality grade other than A Grade do not enjoy the limited warranty.

3.3 未遵守中南光电安装手册的所有要求。

3.3 Failed to comply with all requirements of Chinaland/Sunergy's installation manual.

3.4 组件的型号、铭牌或条形码被更改、擦除或无法辨认（因中南光电的任何作为或疏忽导致的除外）。

3.4 Model number, nameplate or bar code of the PV modules have been changed, erased or can not be identified (except for any act or omission by Chinaland/Sunergy).

3.5 组件安装位置或工作条件未在中南光电安装手册规定的范围内，并且未经中南光电书面同意。如组件安装在车辆、轮船等移动平台，或安装在海洋、沙漠等环境。

3.5 The installation location or working conditions of the PV modules are not within the scope specified in Chinaland/Sunergy's installation manual and have not been approved by Chinaland/Sunergy in writing. Such as PV modules installed in vehicles, ships and other mobile platforms, or installed in the ocean, desert and other environments.

3.6 放置组件的建筑物部件存在缺陷或其他非因中南产品本身原因导致的瑕疵、损坏、故障等问题。

3.6 Defects of the building parts or other defects, damage or failure which are not caused by Chinaland/Sunergy's product itself.

3.7 组件遭受以下任一情形：故意破坏、未经授权修改或连接、未经授权开启、用未经授权的备件进行维修、意外事故、化学产品影响等超过中南光电合理控制的其他行为。

3.7 The PV modules shall be subjected to any of the following circumstances: intentional damage, unauthorized modification or connection, unauthorized opening, maintenance with unauthorized spare parts, accidents, chemical products and other behaviors beyond the reasonable control of Chinaland/Sunergy.

3.8 加压超过最大系统电压或电涌时。

3.8 Pressure exceeding the maximum system voltage or surge.

3.9 以侵犯中南光电或任何第三方知识产权（例如发明专利权、商标）的方式使用组件、平行进口。



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3.9 Use PV modules in a manner that infringes Chinaland/Sunergy or any third party intellectual property (such as patents for inventions, trademarks), parallel imports.

3.10 根据安装地相关法律法规被认为是不合格的服务技术人员对组件提供服务。

3.10 The PV modules are serviced by a service technician who is considered unqualified according to the applicable laws and regulations of the installation site.

3.11 对于因火灾、洪水、暴风雪、飓风、雷电、公共政策变化、恐怖主义、战争、暴乱、罢工、缺乏适当或充分的劳动力、材料或生产能力、技术或物理事件以及中南无法控制的任何不可预见的事件等不可抗力，导致中南无法履行或延迟履行本有限质保规定的义务，中南不以任何方式对买方或任何第三方承担责任。

3.11 Due to fire, flood, storm, hurricane, lightning, public policy changes, terrorism, war, riots, strikes, lack of appropriate or sufficient labor, material or production capacity, technical or physical events and any unforeseen events of force majeure that Chinaland/Sunergy can not control, resulting in that Chinaland/Sunergy is unable to perform or delay to perform its obligations under this limited warranty, Chinaland/Sunergy does not in any way liable to the buyer or any third party.

3.12 其他非因中南产品本身质量原因导致的瑕疵、损坏、故障等问题。

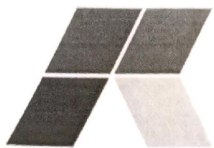
3.12 Other defects, damages, faults and other problems that are not caused by the quality of Chinaland/Sunergy's products.

3.13 中南对组件引起的或与组件相关的任何原因（包括但不限于组件或组件使用或安装中的任何缺陷）导致的任何人身伤害、财产损失或任何其他损失或伤害均不承担责任。无论何时，中南对偶然或随带产生的以及其他特殊的损害都不负责任，不管这些损害时如何发生的。在任何情况下，中南对不合格组件承担的责任均不得超过客户所涉及组件的单个组件的购买（发票）价值的 100%。

3.13 Chinaland/Sunergy shall not be liable for any personal injury, property damage or any other loss or injury caused by or related to the PV modules (including but not limited to any defects in the use or installation of the PV modules). At all times, Chinaland/Sunergy is not responsible for incidental or incidental damage and other special damages, no matter how they occur. Under no circumstances shall Chinaland/Sunergy be liable for unqualified PV modules more than 100% of the purchase (invoice) value of the individual components involved by the customer.

3.14 除非事先经中南书面授权，否则中南任何对组件的退回均不予接受。对中南认可的索赔要求，中南应当返还客户合理、按照惯例上应有的、具备证明文件的为有关组件退返和组件维修而发生的运输费用（仅限于陆运和海运费），该运输费用须经中南品质部门的批准。

3.14 Any return of PV modules by Chinaland/Sunergy will not be accepted unless prior written



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authorization is obtained from Chinaland/Sunergy. For claims accepted by Chinaland/Sunergy, Chinaland/Sunergy shall return to the customer reasonable, conventionally appropriate and documented transportation expenses incurred for the return and maintenance of the relevant PV modules (only for land and sea transport expenses), which shall be subject to the approval of Chinaland/Sunergy quality department.

3.15 质量保证总则: 若客户索赔的组件在控诉期间内没有生产, 中南保留权利发运其他类型的组件, 如尺寸不同, 外形不同, 颜色不同, 及数量不同的组件。更换下来的组件所有权归中南。

3.15 General Terms: Chinaland/Sunergy reserves the right to deliver another type of module with difference in size, form, color, and/or output, if the type of the reclaimed module is no longer produced at the time of complaint. The repair, replacement, or additional delivery of the module neither renews nor extends the period of the warranties. The replaced module is the property of Chinaland/Sunergy.

4. 适用范围和解释

4.Scope and explanation

4.1 本项有限质保适用于在 2024 年 12 月 25 日以后生产的产品。

4.1 This limited warranty applies to products after on December 25, 2024.

4.2 本有限质保书在合肥中南光电发布任何更新版之前保持有效。

4.2 This limited warranty in Chinaland/Sunergy Solar Energy released any updated version before remain valid.

4.3 合肥中南光电拥有对本质保书的最终解释权, 并有权对任何第三方检测机构的判定结果进行专业解释。

4.3 Sunergy/Chinaland Solar Energy has the final explanation right of this warranty, and shall have the right to determine the results of any third party testing institutions professional explanation.

合肥中南光电有限公司

Chinaland Solar Energy Co.,Ltd.

签发生效日期: 2024 年 12 月 25 日

Issuing date: on December 25, 2024