

太阳能光伏组件有限质保书

对于符合以下所述的条件、排除和限制，中电电气（南京）光伏有限公司（以下简称“中电光伏”）对于终端用户（简称“客户”）购买安装（自用）的光伏组件，承诺提供以下有限质量保证（简称“有限质保”），组件的品牌及型号如下：

1. 质保产品型号

CSUNXXX-72M/P/MH/PH (XXX=310, 315, 320, 325, 330, 335, 340, 345, 350, 355, 360, 365, 370, 375, 380, 385, 390)
CSUNXXX-60M/P/MH/PH-DG (XXX=250, 255, 260, 265, 270, 275, 280, 285, 290, 295, 300, 305, 310, 315, 320, 325)
CSUNXXX-54M/P/MH/PH-DG (XXX=210, 215, 220, 225, 230, 235, 240, 245, 250, 255, 260, 265, 270, 275, 280, 285)
CSUNXXX-48M/P/MH/PH -DG (XXX=180, 185, 190, 195, 200, 205, 210, 215, 220, 225, 230, 235, 240, 245, 250, 255)
CSUNXXX-36M/P/MH/PH -DG (XXX=135, 140, 145, 150, 155, 160, 165, 185, 190)
CSUNXXX-72M (XXX=190, 195, 200, 205, 210, 220, 225, 230, 235)
CSUNXXX-144M (XXX=325, 330, 335, 340, 345, 350, 355, 360, 365, 370, 375, 380, 390, 395, 400, 405, 410)
CSUNXXX-120M (XXX=270, 275, 280, 285, 290, 295, 300, 305, 310, 315, 320, 325)
CSUNXXX-108M (XXX=245, 250, 255, 260, 265, 270, 275, 280, 285, 290)
CSUNXXX-96M (XXX=215, 220, 225, 230, 235, 240, 245, 250, 255, 260)
CSUNXXX-72M (XXX=165, 185, 190, 195)

M 指单晶电池片组件。

P 指多晶电池片组件。

MH 指最大系统电压 1500V 的单晶电池片组件

PH 指最大系统电压 1500V 的多晶电池片组件。

DG 指双玻组件，常规组件-DG 省略。产品型号将包括但不限于上述型号，以客户所购买的具体型号为准。

2. **十二年工艺和材质有限质量保证** 中电光伏保证其产品按照中电光伏安装手册正常的使用、安装条件下，从质保生效日（见以下定义）起 12 年内，不会出现因设计、材料、工艺或制造导致的不符合 IEC61215、IEC61730、UL1703 标准中定义的严重外观缺陷及功率异常的外观缺陷。只有在客户提供证明表明在按照中电光伏安装手册正常的使用、安装前提下，产品失效是完全由于材料或工艺导致，此质保声明才能生效。输出功率的规定见下文第三条（“功率有限质量保证”）。备注：十二年工艺和材质有限质量保证中，只针对中电光伏提供的供应商所对应型号的材料，不包含客户指定材料（客供材料）。

3. 输出功率有限质量保证

- A. 在按照中电光伏安装手册正常的使用、安装前提下，中电光伏保证在质保生效日起 25 年内，
- ✓ 对于多晶组件：第一年组件的输出功率不低于中电光伏产品数据表中该规格产品最低输出功率 97.50%，此后每年衰减速率小于 0.62%，第 25 年不低于组件初始功率的 82.62%。
 - ✓ 对于单晶组件：第一年组件的输出功率不低于中电光伏产品数据表中该规格产品最低输出功率 97.00%，此后每年衰减速率小于 0.60%，第 25 年不低于组件初始功率的 82.60%。
 - ✓ 对于多晶双玻组件：第一年组件的输出功率不低于中电光伏产品数据表中该规格产品最低输出功率 97.50%，此后每年衰减速率小于 0.50%，第 30 年不低于组件初始功率的 83.00%。

- ✓ 对于单晶双玻组件：第一年组件的输出功率不低于中电光伏产品数据表中该规格产品最低输出功率 97.00%，此后每年衰减速率小于 0.48%，第 30 年不低于组件初始功率的 83.08%。
- B. 产品输出功率测试结果应为中电光伏认可的第三方机构（中电光伏的测试指标出自哪家机构即应在该机构测试）在 STC 条件下测得：(a) 光谱 AM1.5, (b) 光强 $1000\text{W}/\text{m}^2$, (c) 温度 $25 \pm 2^\circ\text{C}$ 。测试是依据 IEC61215 和 IEC60904, 中电光伏组件测试是在有效的中电光伏校准和测试标准下, 光伏组件生产之日接线盒终端测得, 测试不确定度 2σ (Pmpp) $\leq \pm 3\%$ 。
- C. 第 7 条“功率有限质量保证”中提到的补偿均为唯一补偿办法, 不可与其他补偿同时享受。客户应在发现质保承诺范围规定故障或缺陷的 30 天内, 以书面形式通知到中电光伏或其授权经销商。
- D. 如果组件使用条件处于高温高湿的环境中, 请参阅《CSUN 晶体硅光伏组件产品安装手册(IEC)》第 7.2 条。

4. 质保生效日

质保生效日定义为安装之日或中电光伏发货的 90（九十）天后, 取日期早者认定。

- 5. **不独立担保** 客户有权根据上述规定的每一项担保条款提出索赔, 但是如果一个事件提出多项索赔, 那么中电光伏根据上述规定提供了赔偿, 即视为已解决了此事件所产生的所有适用的索赔。

6. 排除和限制

- A. 质保索赔必须在有效的质保期限内以书面形式向中电光伏或其授权的分销商提出, 无一例外。
- B. 有限质保不适用于以下情况所述的产品:
 - (1) 事先未经中电光伏书面同意进行的改造、维修或改变。
 - (2) 事先未经中电光伏书面同意搬移并安装至新的地点。
 - (3) 未按照中电光伏安装手册进行搬运、安装、使用和维护, 特别是安装和维护过程中组件受到作业者踩踏及猛烈碰撞, 组件受到碰撞、擦划或挤压。
 - (4) 储存, 运输, 装卸, 安装, 应用, 使用或服务中的误用、滥用、疏漏或事故。
 - (5) 电气浪涌, 雷击, 洪水, 火灾, 故意破坏, 改造, 意外破损, 发霉变色, 或其他中电光伏难以控制的事件, 包括但不限于客户在购买产品时期发生的无法得知或理解的任何技术或物理事件。
 - (6) 安装在移动平台或在海洋环境; 直接接触腐蚀剂或盐水; 虫害; 或安装和用户手册中没有明确允许的有故障的光伏系统单元和其他工作条件。
 - (7) 改造, 拆除或涂改产品的原始标签。
- C. 如组件的型号和序列号已经被更改、擦除或难以辨认, 质保要求将不被受理。
- D. 此“光伏组件有限质量保证书”仅适用于合格的组件产品。
- E. 中电光伏提供任何修理、更换或额外补偿的产品, 享受与首批购买产品相同的质保, 质保期或质保条款没有延长。中电光伏应做出合理的商业努力, 使用相同或相似尺寸、美学的、新的或翻新的产品替换有缺陷的产品, 但保留以下权利: 中电光伏在该型号产品已经停产的情况下可提供其他型号的产品并保证此型号产品与客户的光伏系统兼容。更换后的产品和零件属于中电光伏财产。

7. 退货、修复或替换

- A. 十二年工艺和材质有限质量保证范围内, 产品出现应由中电光伏承担的质量问题, 中电光伏有权单方面决定采取以下任一补救措施, 并且该措施作为“有限质保”项下提供的唯一的、排他性的补救措施。
 - (1) 负责退货赔付故障组件。中电光伏有权选择以故障组件的净值或者按照当前的市场组件价格退款给客户, 所谓故障组件的净值是指在当时所购买产品价格的基础上首年扣除 16%的折旧费, 后续每年

扣除 3.5%折旧费，折旧费用从质保开始日算起直至 25 年结束。

(2) 负责免费维修或替换故障组件。

B. 输出功率有限质量保证范围内，产品出现应由中电光伏承担的质量问题，中电光伏有权单方决定采取以下任一补救措施，并且该措施作为“有限质保”项下提供的唯一的、排他性的补救措施。

(1) 负责免费维修或替换故障组件。

(2) 负责通过提供额外组件以补偿功率损失，使组件不低于质保期内最低输出功率。

(3) 负责按故障组件的净值赔付损失的功率。

当采用以上 A (2) 或 B (1) 或 B (2) 措施时，在产品退换货过程中所发生的保险、运输（空运除外）、清关等相关费用由中电光伏承担，但在产品的安装、拆卸和重新安装过程所发生的任何费用由客户承担。

8. 质量保证范围限制 此“光伏组件有限质量保证书”明确代替并排除了其他一切明确或默示的担保，包括但不限于商务担保，特殊用途、使用或应用，同时代替并排除了其余所有中电光伏的责任和义务，除非中电光伏以书面形式明确同意并签字批准这些责任和义务。中电光伏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、财产损害或任何其他损失或伤害均不承担责任。无论如何，中电光伏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产生的。对于在美国市场销售的产品，由于美国一些州的法律不允许对默示担保设置限制和排除损害责任，所以上述的限制和排除条款可能不会被接受。

9. 质量的转让 此质保适用于原始的终端用户，并且当产品保持在原安装地点未动，其所有者持有合规的继承或转让证明时，质保传递给后续的所有者。

10. 获取质保

A. 为获得有限质保，客户应及时通知中电光伏的区域客户服务中心。发出通知的同时，客户应附上索赔证据，如缺陷的描述，组件完整的序列号，条形码的图片，商业发票的副本和产品交货日期。产品是否应返回中电光伏进行检测、维修或替换，中电光伏将提供给客户退货授权（RMA）。中电光伏将不接受任何没有 RMA 的退回组件。

B. 如果中电光伏确定产品没有缺陷或性能不足不属该质保范围，中电光伏将会将产品退回客户并由客户承担费用，并且没有进一步的修理，更换或退款的义务。

中电光伏 客户服务中心：

地址：中国南京市江宁经济技术开发区水阁路6号 邮政编码：211100

E-mail: customer_service@chinasunenergy.com 网站: www.csunsolartech.com

11. 不可抗力 对于因火灾，洪水，暴风雪，飓风，雷电，天灾，公共政策变化，恐怖主义，战争，骚乱，罢工，无法获得适当和足够的劳力或材料或其他中电光伏无法控制的事件，导致销售条款和条件未履行或延迟履行，包括此有限质保，中电光伏对客户或第三方不符任何责任。

12. 有效对象

此“光伏组件有限质量保证书”对于 2020 年 1 月 1 日至 2020 年 12 月 31 日期间发货的组件产品有效。

中电电气江苏光伏有限公司

Limited Warranty for PV Modules

Subject to the conditions, exclusions and limitations set forth below, China Sunergy (Nanjing) Co. ("CSUN") hereby grants the following Limited Warranty for PV Modules (collectively, the "Limited Warranty") to the original end user purchaser installing (for its own use) (the "Customer") any of the specified (and no other) brand models of solar photovoltaic modules listed below (the "Product(s)"):

1. Warranted Products

CSUNXXX-72M/P/MH/PH (XXX=310, 315, 320, 325, 330, 335, 340, 345, 350, 355, 360, 365, 370, 375, 380, 385, 390)
CSUNXXX-60M/P/MH/PH-DG (XXX=250, 255, 260, 265, 270, 275, 280, 285, 290, 295, 300, 305, 310, 315, 320, 325)
CSUNXXX-54M/P/MH/PH-DG (XXX=210, 215, 220, 225, 230, 235, 240, 245, 250, 255, 260, 265, 270, 275, 280, 285)
CSUNXXX-48M/P/MH/PH -DG (XXX=180, 185, 190, 195, 200, 205, 210, 215, 220, 225, 230, 235, 240, 245, 250, 255)
CSUNXXX-36M/P/MH/PH -DG (XXX=135, 140, 145, 150, 155, 160, 165, 185, 190)
CSUNXXX-72M (XXX=190, 195, 200, 205, 210, 220, 225, 230, 235)
CSUNXXX-144M (XXX=325, 330, 335, 340, 345, 350, 355, 360, 365, 370, 375, 380, 390, 395, 400, 405, 410)
CSUNXXX-120M (XXX=270, 275, 280, 285, 290, 295, 300, 305, 310, 315, 320, 325)
CSUNXXX-108M (XXX=245, 250, 255, 260, 265, 270, 275, 280, 285, 290)
CSUNXXX-96M (XXX=215, 220, 225, 230, 235, 240, 245, 250, 255, 260)
CSUNXXX-72M (XXX=165, 185, 190, 195)

M -Monocrystalline module.

P -Polycrystalline module.

MH-Monocrystalline module(used in PV plants at a maximum system voltage(Voc at STC) of up to1500VDC).

PH-Polycrystalline module(used in PV plants at a maximum system voltage(Voc at STC) of up to 1500VDC).

DG-Double glass, For the normal module the -DG leaveout.

Types of Products will include but not limited to the above.

2. 12Year Limited Product Warranty

CSUN warrants the Product(s) to be free from serious visual defects in materials and workmanship which defined in IEC61215、IEC61730、UL1703 or cause abnormal power output under normal application and use, installation and service conditions as specified in CSUN's installation manual for a period of twelve (12) years from Warranty Start Date(as defined below). Claims under this warranty will be honored only if the Customer can provide the proof that said serious visual defects results exclusively from defects in materials or workmanship or cause abnormal power output occurred during the ten-year period of this warranty under normal application, use, installation and service conditions specified in CSUN's installation manual.

This Limited Warranty does not warrant a specific power output, which shall be exclusively covered under clause 3 hereinafter ("Limited Power Warranty").

Note: Twelve years limited warranty for materials or workmanship just includes types of material provided by CSUN and does not include types of material provided by customers.

3. Limited Power Output Warranty

A. Under normal application, use, installation and service condition as specified in CSUN's installation manual, CSUN warrants that within a period of twenty-five (25) years after the Warranty Start Date,

- ← For Polycrystalline Products: within the first year, the output power shall not be less than 97.5 % of the minimum output power in CSUN's product datasheet, thereafter the loss of output power shall not exceed 0.62% per year, ending with 82.62% in the 25th year.
 - ← For Monocrystalline Products: within the first year, the output power shall not be less than 97.0 % of the minimum output power in CSUN's product datasheet, thereafter the loss of output power shall not exceed 0.60% per year, ending with 82.60% in the 25th year.
 - ← For Polycrystalline Double glass Products: within the first year, the output power shall not be less than 97.5 % of the minimum output power in CSUN's product datasheet, thereafter the loss of output power shall not exceed 0.5% per year, ending with 83% in the 30th year.
 - ← For Monocrystalline Double glass Products: within the first year, the output power shall not be less than 96.5 % of the minimum output power in CSUN's product datasheet, thereafter the loss of output power shall not exceed 0.48% per year, ending with 83.08% in the 30th year.
- B. The DC power of a Product shall be tested at Standard Test Conditions (STC) by the third party accredited by CSUN (should be the same party with CSUN applied) which are: [a] light spectrum of AM 1.5, [b] irradiation of 1,000 Watts per square meter and [c] temperature of 25±2 degrees Centigrade. The measurements are carried out at the junction box terminals per the calibration and testing standards of CSUN valid at the date of manufacture of the PV Modules in accordance with IEC61215 and IEC60904. The extended measurement uncertainty 2σ (Pmpp) is $\pm 3\%$.
- C. The remedies set forth in Clause 7 are the sole and exclusive remedies provided under the limited Warranty. Customers shall notify CSUN or its authorized resellers in writing within 30 business days after the date when the malfunction or defects provided under this warranty have been found.
- D. If the modules are used in high-temperature and high-humidity environment, please see the item 7.2 in CSUN Crystalline Silicon PV Module Products Installation Manual (IEC Version).

4. Warranty Start Date

The Warranty Start Date shall be defined as the date of installation or 90 (ninety) days after the delivery by CSUN, whichever date is earlier.

5. Not Independent Warranties

The Customer has the right to pursue claims under each of the warranties set forth above; provided, however, that if claims arise under multiple limited warranties from a single incident, then if CSUN remedies such incidents as set forth above, CSUN shall be deemed to have resolved all applicable warranty claims arising from such incident.

6. Exclusions and Limitations

- A. Warranty claims shall be filed in writing to CSUN or its authorized distributors within the applicable warranting period, without exception.
- B. The Limited Warranty does not apply to any Products which have been subjected to:
- (1) Alteration, repair or modification without the expressed, prior written consent of CSUN Solar.
 - (2) Removal of Product(s) and reinstallation at a new site.
 - (3) Non-observance of CSUN's Installation and User Manual. Particularly in the installation and maintenance, the products are subject to violent collision and trampled by the operator, and products are collided, scratched or squeezed.
 - (4) Misuse, abuse, neglect, or accident in storage, transportation, handling, installation, application, use or service.

- (5) Electrical surges, lightning, flood, fire, vandalism, tampering, accidental breakage, mold discoloration, or other events beyond CSUN's control, including without limitation any technological or physical event or condition that is not reasonably known or understood at the time the Customer purchased the Products.
- (6) Installation on mobile platforms or in a marine environment; direct contact with corrosive agents or salt water; pest damage; or malfunctioning PV system components and other operating conditions, which are not expressly allowed in the Installation and User Manual.
- (7) Alteration, removal or obliteration of the original Product label.
- C. Warranty claim will not be honored if the type or serial number of the module(s) have been altered, removed or made illegible.
- D. This "Limited Warranty for PV Modules" only applies for the conforming products.
- E. Any additional Products provided, and any Product repaired or replaced, by CSUN under a warranty claim shall be covered by the same Limited Warranties and terms as the first Products purchased that were the subject of the claim; no warranty periods or terms shall be extended because of a warranty claim or remedy. CSUN shall make commercially reasonable efforts to replace defective Products with new or refurbished Products of the same or similar size and aesthetics but reserves the right to deliver another Product type in the event that CSUN has discontinued production of the Product type that is the subject of the warranty claim provided, that such other Product type is compatible to the Customer's PV System. Replaced Products and parts shall become the property of CSUN.

7. Repair, Replacement or Refund Remedy

- A. If a Product, under normal application, use and service conditions, fails to conform to this 12 Year Limited Product Warranty during this twelve-year period, as Customer's sole and exclusive remedy under this Limited Warranty, CSUN will, in its sole discretion, either, with regard to the applicable Products:
 - i. Refund the Actual Cash Value of the defective Product(s) or the current market price of the relevant new Product(s), For this purpose the Actual Cash Value is defined as the price at the time of purchase of the Product(s) reduced by an amount equal to 3.5% of that price per each 365 day period (and 16% of that price for the first year) following Warranty Start Date until the conclusion of the twenty-fifth period;
 - ii. 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.
- B. If a Product fails to conform to the Limited Power Output Warranty during the warranty period and if such decrease in power is due to defects in materials or workmanship under normal application, use and service conditions, as Customer's sole and exclusive remedy under this Limited Warranty, CSUN will, in its sole discretion, either, with regard to the applicable Products:
 - i. 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;
 - ii. Providing Customer with additional Products to make up for such decrease in power, provided, it is possible for the Customer to mount such additional Products; or
 - iii. Refunding the decrease in power, based on the Actual Cash Value.

In the event that CSUN opts for options A (ii) or B(i) or B(ii), CSUN shall bear all insurance and transportation charges (except air freight), customs clearance and any other costs for returning the defective Product(s) to CSUN and shipping the repaired or replaced Product(s) to Customer. The costs and expenses for their removal, installation or reinstallation shall remain with Customer.

8. Limitation of Warranty Scope

This Limited Warranties as set forth herein are expressly in lieu of and exclude all other express or implied warranties, including but not limited to warranties of merchantability and of fitness for particular purpose, use, or application, and all other obligations or liabilities on the part of CSUN, unless such other obligations or liabilities are expressly agreed to in writing signed and approved by CSUN. CSUN 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 module(s), or from use or installation. Under no circumstances shall CSUN be liable for incidental, consequential or special damages, howsoever caused. Loss of use, loss of profits, loss of production, and loss of revenues are therefore specifically but without limitation excluded. CSUN's liability, if any, in damages or otherwise, shall not exceed the Actual Cash Value of the product(s) which is the subject of claim or dispute. FOR SALES TO U.S. ONLY: SOME STATES IN THE U.S. DO NOT ALLOW LIMITATIONS ON IMPLIED WARRANTIES OR THE EXCLUSION OF DAMAGES BY STATE LAW. SO THE ABOVE LIMITATIONS OR EXCLUSIONS MAY NOT APPLY FOR YOU.

9. Transferability

This warranty is extended to the original end-user purchaser, and is transferable to any subsequent owner of the location or subsequent holder of the product when Product(s) remain at their original installed location upon satisfactory proof of succession or assignment.

10. Obtaining Warranty Performance

- A. In order to obtain warranty service under the Limited Warranty, the Customer should promptly notify CSUN regional customer service center. Together with the notification, the Customer should enclose the evidence of the claim, such as the description of the defect, the complete serial number printed on the module label, the picture of the bar code, a copy of commercial invoice and the delivery date of its Products. Should the Products be returned for inspection, repair or replacement by CSUN, CSUN will provide the customer a Return Merchandise Authorization (RMA). CSUN will not accept the return of any modules without a RMA.
- B. If CSUN determines that the Product is not defective or that a performance deficit is not covered under this warranty, CSUN will return the Product to Customer at Customer's expense and will have no further obligation for the repair, replacement, or refund.

Obtain CSUN customer service:

Add: No. 6, Shuige Road, Jiangning E & T Development Zone, Nanjing, P. R. China

PC: 211100

E-mail: customer_service@chinasunenergy.com Web: www.csunsolartech.com

11. Force Majeure

CSUN shall not be in any way responsible or liable to the Customer or any third-party for matters arising from any non-performance or delay in performance of any terms and conditions of sale, including this Limited Warranty, due to fire, flood, blizzard, hurricane, thunder, acts of God, changes of public policies, terrorism, war, riots, strikes, unavailability of suitable and sufficient labor or materials and other events which are out of control of CSUN.

12. Validity

This "Limited Power Warranty for PV Modules" is valid for module(s) dispatched from CSUN between Jan. 1st 2020 and Dec. 31st 2020.