

SUNTECH

LIMITED MANUFACTURER'S WARRANTY FOR PV MODULES

Valid as of January 01, 2019

Congratulations, you have decided on the purchase of SUNTECH products with a long operating life.

Suntech standard glass-foil photovoltaic modules are covered by our 12 years workmanship and 25 years performance warranty as described in detail below. Suntech double-glass photovoltaic modules are covered by our 12 years workmanship and 30 years performance warranty as described in detail below.

I. General Terms

This warranty is provided by Wuxi Suntech Power Co., Ltd., 9 Xinhua Road, Wuxi Xinwu District, China 214028 (hereinafter referred to as "SUNTECH") and applies to the following Standard PV Modules (MODULES) with the following classifications (MODULE TYPE):

STPXXX(S)-YY/Ze (b, e, m, r, w, y)(+) (-TG, -MX) (XXX=170-350 / YY=20, 24, / Z=V, W)

STPXXX(S)-20/Wf (w, m, b, h, s, y,hb,hm) (-TG, -MX, -AP) (XXX=250-350)

STPXXX(S)-24/Vf (w, m, b, h, s, y) (-TG, -MX) (XXX=250-450)

STPXXX(S)-A20/Wf (w,m,b,h,hm,hb) (XXX=250-400)

STPXXX(S)-A24/Vf (w,m,b,h) (XXX=250-450)

STPXXX(S)-A21/Wfh, STPXXX(S)-A60/Wfh,

STPXXX(S)-A66/Wfh (XXX=250-450)

STPXXX(S)-A72/Vfh, STPXXX(S)-A78/Vfh (XXX=250-500)

STPXXX(S)-A70/Sfw, STPXXX(S)-A84/Sfw (XXX=250-500)

STPXXX(S)-21/Wfh, STPXXX(S)-78/Vf,

STPXXX(S)-72/Vfh, STPXXX(S)-66/Wfh (XXX=250-450)

STXXX(S)-60/Wnh, STXXX(S)-66/Wnh, STXXX(S)-72/Vnh,

STXXX(S)-78/Vnh (XXX=250-500)

STPXXX(S)-24H/V (em,fw,fm,fb,fw,fb)(-MX) (XXX=250-450)

STPXXX(S)-20H/W (em,fw,fm,fb,fw,ew,fb)(-MX) (XXX=250-400)

STPXXX(S)-16H/T (em,fm,ee)(+) (XXX=250-300)

STPXXX(S)-20/We (i, j, k, g, d) (XXX=230-350)

STPXXX(S)-24/Ve (i, j, k, g, d) (+) (XXX=310-350)

STPXXX(S)-20/Wf (i, j, k, g, d) (XXX=260-340)

STPXXX(S)-24/Vf (i, j, k, g, d) (+) (XXX=315-410)

STPXXX (S)-60/Pf (d,h,)(+) (XXX=250-350)

STPXXX(S)-72/Pf (d,h,)(+) (XXX=250-450)

STPXXX(S)-60/Nfd (+), STPXXX(S)-60/Nmh+ (XXX=250-350)

STPXXX(S)-72/Nfd(+), STPXXX(S)-72/Nmh+ (XXX=250-450)

XXX stands for the performance classification of MODULES. S/Z/e/b/m/r/w/y/+/W/f/h/s/V defines the individual module variants, as described in the corresponding product datasheet. SUNTECH warrants its Photovoltaic Solar Modules (MODULES) starting from the date of sale with the certifiable invoice (SALES DATE) to the first customer installing (for their own use) the MODULES (CUSTOMER); or starting at the latest 12 months after MODULES dispatch from the SUNTECH factory, whichever occurs earlier ("WARRANTY START DATE").

These warranty terms exclusively apply to END-CUSTOMER. END-CUSTOMER in terms of this warranty is the purchaser of the respective MODULES, who has purchased the respective MODULES for end-use and has installed the same for the first time (first installation).

This warranty is transferrable by an END-CUSTOMER to the purchaser of already installed MODULES insofar as the MODULES remain at their original place of installation. Claims under this warranty **cannot** be transferred to third parties.

Therefore, these warranty terms do **not** apply to intermediaries, installation companies, or second-hand purchasers, who install the MODULES again at a different place of installation (second installation). The present "Manufacturer's warranty for PV Modules" does **not** apply

to MODULES marked as "Grade A-1" or substandard modules on the nameplate. SUNTECH herewith explicitly refers to its "Limited Warranty for PV Modules marked Grade A-1".

a) Territory of Warranty Validity

This warranty applies only inside the European Economic Area and Switzerland, as far as the respective MODULES have been put into circulation there for the first time by SUNTECH respectively with the consent of SUNTECH. The corresponding warranty terms for other regions will apply for if European distributors/ EPC companies reship the PV modules to non-European country projects for installation.

b) Applicability of National Law

For this warranty and legal disputes concerning this warranty the laws of such country in the European Economic Area and Switzerland in which the respective MODULES have been purchased by the END-CUSTOMER apply, excluding the UN Convention on the International Sales of Goods as well as conflict of law's provisions.

c) Validity

The present warranty applies to all MODULES which have been produced by SUNTECH between the 1st and the 53rd calendar week of the year 2019.

The END-CUSTOMER receives this warranty transmitted on demand in text form, e.g. by E-Mail from SUNTECH. This warranty can furthermore be obtained from SUNTECH distribution partners or found on SUNTECH's official website.

Additional Note:

This manufacturer's warranty for PV MODULES valid as of Jan 2019 is also applicable for SUNTECH MODULES manufactured in 2018, which, however, are being sold to the END-CUSTOMER or being installed for the END-CUSTOMER in 2019 with the limitations named under the general terms.

II. Notification of END CUSTOMER'S Statutory Rights

This voluntary, independent and limited manufacturer's warranty exists independently of statutory and potential contractual rights of the END-CUSTOMER against the SELLER and/or INSTALLER of the respective MODULES, which remain unaffected by this manufacturer's warranty.

III. Limited Manufacturer's Warranty

SUNTECH grants the END-CUSTOMER product warranty regarding materials and workmanship defects of the respective MODULES, as well as performance warranty regarding power reduction of the respective MODULES inside the timeframes indicated as follows.

1. Product Warranty

i. Scope, Start and Duration of Product Warranty Protection

SUNTECH warrants MODULES for a period of 12 years as of the respective WARRANTY START DATE that the respective MODULES are free of materials and workmanship defects.

ii. Warranty

In a warranty case, SUNTECH will either repair the defective MODULES free of charge or replace the same by functional MODULE(s) of the same type, free of charge. In case that the respective PV-module type is no longer manufactured by SUNTECH at the time of the warranty case, SUNTECH retains the right to supply a functionally equivalent PV-module of the same or higher power of a different type or refunds the owner with an actual market price commonly agreed with the owner. The remaining period of the original warranty period applies to newly supplied or repaired PV-modules.

2. Performance Warranty

Scope, Start and Duration of Performance Warranty Protection

Suntech warrants that for a period of twenty-five years each PV-module will maintain a level of performance as set forth below:

- For glass -foil Poly or Poly Perc/Superpoly modules, the actual power output of the module will be no less than 97.5% of the labelled power output in the first year; thereafter, 0.7% maximum decrease per year, ending with 80.7% in the 25th year after the WARRANTY START DATE.
- For glass -foil Mono Module, the actual power output of the module will be no less than 97% of the labelled power output in the first year; thereafter, 0.7% maximum decrease per year, ending with 80.2% in the 25th year after the WARRANTY START DATE.
- For glass -foil Hypro-mono /mono Perc modules, the actual power output of the module will be no less than 97.5% of the labelled power output in the first year; thereafter, 0.7% maximum decrease per year, ending with 80.7% in the 25th year after the WARRANTY START DATE.

Suntech warrants that for a period of thirty years the module will maintain a level of performance as set forth below:

- For Standard Poly double-glass modules, the actual power output of the module will be no less than 97.5% of the labelled power output in the first year; thereafter, 0.5% maximum decrease per year, ending with the 83% in the 30th year after the WARRANTY START DATE.
- For Standard Mono double-glass modules, the actual power output of the module will be no less than 97% of the labelled power output in the first year; thereafter, 0.5% maximum decrease per year, ending with the 82.5% in the 30th year after the WARRANTY START DATE.
- For P-type mono bifacial double-glass module, the actual power output of the module will be no less than 97.5% of the labelled power output in the first year; thereafter, 0.5% maximum decrease per year, ending with the 83% in the 30th year after the WARRANTY START DATE.
- For N-type mono bifacial double-glass module, the actual power output of the module will be no less than 99% of the labelled power output in the first year; thereafter, 0.4% maximum decrease per year, ending with the 87% in the 30th year after the WARRANTY START DATE.

The nominal power listed on the nameplate is the power in Watt (W) which a PV-module generates under the following Standard-Test-Conditions (STC) according to the norm IEC 61215 in its Maximum Power Point (MPP):

- a) A light spectrum of Air-Mass (AM) 1.5
- b) An irradiation of 1000 W/m² at right angle irradiation
- c) A module temperature of 25°C

The deviation of the nominal power is to be determined under STC.

ii. Warranty Performance of SUNTECH

In a warranty case SUNTECH will either repair the defective PV-module free of charge or replace the defective PV-module by a functional PV-module of the same type free of charge. In case that the respective PV-module type is no longer manufactured by SUNTECH at the time of the warranty case, SUNTECH retains the right to supply a functionally equivalent PV-module of the same or higher power of a different type or refunds the owner with an actual market price commonly agreed with the owner. The remaining period of the original warranty period applies to newly supplied or repaired PV-modules. The following conditions apply to both warranties.

3. Warranty Case and Claiming Warranty Performance

i. Report of Warranty Case

The report shall include the following information:

- Name and address of the END-CUSTOMER, INSTALLER resp. SELLER.
- A copy of the invoice with reference to the claimed module serial numbers/module type or purchase agreement or installation agreement.
- A copy of the installation test report following minimum requirements of IEC 62446 / IEC 60364-6
- A copy of the periodical maintenance reports as recommended or required by regional regulations or legal requirements and acceptance protocol of handover after the installation was finished and the system connected to the grid with all relevant measured system data.
- MODULE TYPE and Serial number(s), Quantity of the respective PV-module(s).
- Address of the place of installation of the respective PV-module, as far as this address differs from the address of END-CUSTOMER.
- A short but clear description of the problem at hand and what is claimed, as well as a short description of the tests which may have already been performed and with which tools, as well as their results.
 - a. In particular, regarding a material defect: high quality pictures of the defective PV-module which show the defect including pictures of the system and surrounding environment.
 - b. In the case of a low power output: information regarding the PV-generator, the inverter, the circuitry / layout (please see the installation documentation for this which you should have received from your INSTALLER) as well as the pictures of shadowing situation at the location.
- The requested warranty performance and reason of claim, etc.

The report of a warranty case is to be addressed to one of the Service/Contact Addresses of SUNTECH, listed in the end of this warranty terms.

ii. Deadline

A warranty case is to be reported within 10 weeks after becoming aware of the circumstances which constitute a warranty case. The timely receipt of the report by SUNTECH shall be decisive. The deadline is met, if the report is received by SUNTECH via fax or email in advance.

iii. Return of PV-module

The END-CUSTOMER is only authorized to return the respective PV-module after prior written consent of SUNTECH. Recycling must be done via regional qualified recycling organization following the local laws or regulations and managed by the owner.

iv. Costs

In a warranty case, SUNTECH will bear the relevant costs for testing, transport, repair, dismounting and mounting for END-CUSTOMER, not exceeding average regional market costs for all modules which are finally accepted as valid. Loss of use, loss of profits, loss of production, and loss of revenues are specifically and without limitation **excluded**. Suntech will not cover costs for claims and modules which finally turn out being invalid.

4. Limitation of Liability

This MANUFACTURER'S WARRANTY applies only in case of proper use of the above listed PV-module types in keeping with the respective conditions of operation and qualified installation according to the applicable datasheets and the applicable installation guides of SUNTECH. These can be obtained from SUNTECH directly or from one of SUNTECH distribution partners or from Suntech's website. The respectively applicable datasheet and installation guides are defined by year of the PRODUCTION DATE, as indicated by the serial number, starting from the left side, the last four digits (WKYY). Therefore, the datasheets and installation guides of 2019 or its latest version shall be binding for this warranty.

If you install the modules closer to the sea side (<500 m from the coast line), pls. read the "Near-coast installation manual" and follow the instruction. You can download this document this from Suntech Website or request from service@suntech-power.com, as it shall be binding for this warranty.

This MANUFACTURER'S WARRANTY will not apply, if the material defect or the reduced power was caused by circumstances or acts which are beyond the control of SUNTECH, in particular:

- Mechanical, electric or thermal overload, faulty mounting resp. putting into operation not in keeping with the conditions of the respectively applicable datasheet as well as the respectively applicable installation guide.
- Use of unsuitable connector or service parts, inappropriate modifications of the PV-module or inappropriately executed repairs or module handling.
- Incidences caused by acts of god, e.g. damages caused by falling trees or branch breaks, floods, landslides, damages caused by violent storms, fire, animals.
- Theft, willful damage or vandalism.
- Impairments caused by external effects, such as e.g., dirt stains, smoke, damages caused by salt, by chemicals not explicitly authorized for use, e.g. for cleaning.
- Power outage, surge voltage, lightning, accidental breaking of the PV-module.

Claims under the MANUFACTURER'S WARRANTY can only be recognized if the serial number of the respective PV-module is unchanged, has not been removed or obscured.

5. Further Terms

The further use of any replaced PV-module will be determined individually by Suntech.

6. Partial Nullity

Should one of the clauses of the present "Manufacturer's Warranty for PV Modules" or their applicability to a certain person or a certain circumstance be deemed invalid, void or unenforceable, all other clauses and the further applicability of the present "Manufacturer's warranty for PV-modules" remain unaffected.

7. Dispute Regarding Material Defect or Reduced Power

In case of a dispute regarding the existence of material defect or reduced power in a warranty case, SUNTECH will accept the judgment of an accredited testing institute such as e.g. the Fraunhofer ISE in Freiburg i. Br., the TÜV Rheinland in Cologne, the Verband der Elektrotechnik (VDE) in Frankfurt as binding.

If you have questions regarding the products of SUNTECH or their quality and performance, please contact SUNTECH's service team through the following email address:

Service/Contact Addresses:

Europe(Suntech Deutschland GmbH)

Address : Mergenthalerallee 10-12, 65760 Eschborn, Germany
Tel: +49/6196 58655 580
Fax: +49/6196 58655 500
Email: service.europe@suntech-power.com
Website: www.suntech-power.com

China

Address: 9 Xinhua Road, Xinwu District, Wuxi, China 214028
Telephone: +86 400 8888 009 (Customer Service Hot Line)
Telephone: +86 510 8531 8000 (Sales Hot Line)
E-Mail: service.china@suntech-power.com
Website: www.suntech-power.com

Global

E-Mail: services@suntech-power.com

All warranty performances will always be provided by the warrantor of this manufacturer's warranty, the company Wuxi Suntech Power Co. Ltd..