



## Warranty Letter

### LIMITED WARRANTY STATEMENT PHOTOVOLTAIC MODULE PRODUCTS

#### 1. Preface

TCL Photovoltaic Technology Co., Ltd. (hereinafter referred to as "TCL") guarantees that its solar modules (hereinafter referred to as "modules") are designed and manufactured for a long life span and provides the limited warranty.

#### 2. Definition

Peak power is the max power of module tested at standard test condition.  
standard test condition is:

- a) Spectrum amplitude modulation AM1.5
- b) Illumination intensity is  $1 \pm 0.005 \text{ kW/m}^2$
- c) Illuminate at right angle, humidity is below of 60%RH, module temperature is  $25 \pm 2^\circ\text{C}$

#### 3. The limited warranty of my product

TCL guarantees that the produced modules will not appear to be defective in quality due to design, material and/or production processes in accordance with the normal application, installation, use and maintenance requirements set out in the customer's standard product documentation. If the modules occur quality problems caused by materials or production process in the process of normal use, installation and maintenance within 15 years from the date of the warranty, after verification by independent testing organization recognized by TCL and the customer, TCL will choose to deal these parts with repairing, replacing or refunding in accordance with timely price, the specific way to be determined by TCL.

Under the warranty of this limited product, after the modules are delivered to the buyer, the color change, deterioration (including scratches, stains, mechanical wear, rust or mildew) or other changes in appearance, all of these changes are not regarded as quality defects, except in case where the change seriously impairs the function of the module.

The above remediation measures are the only remedy provided in accordance with this 'product limited warranty'. This 'product limited warranty' does not involve modules' power output guarantee (power output guarantee will be specially described in the second part 'peak power limited warranty').

#### 4. Peak power limited warranty

4.1 Within 30 years of the half-cut P-type double glass product insurance, if the modules

are tested under the standard test conditions(AM1.5 spectrum, irradiance 1000 w/m<sup>2</sup>, temperature 25°C), the loss of the modules' nominal power in the relevant product data will be not more than:

Monocrystalline double glass module, for double glass PV modules with perc monocrystalline cells of 182mm and above, the power attenuation is 2% in the first year from the start date of warranty, and the average annual power attenuation is not more than 0.45% from the second year to the 30th year. By the end of the 30th year, the actual power output is not less than 84.95% of the nominal power.

4.2 Within 30 years of the half-cut N-type double-glass product insurance, if the modules are tested under the standard test conditions(AM1.5 spectrum, irradiance 1000 w/m<sup>2</sup>, temperature 25°C), the loss of the modules' nominal power in the relevant product data will be not more than:

Monocrystalline double glass module, for double glass PV modules with topcon monocrystalline cells of 182mm and above, the power attenuation is 1% in the first year from the start date of warranty, and the average annual power attenuation is not more than 0.4% from the second year to the 30th year. By the end of the 30th year, the actual power output is not less than 87.4% of the nominal power.

4.3 Within 30 years of the shingled N-type double-glass product insurance, if the modules are tested under the standard test conditions(AM1.5 spectrum, irradiance 1000 w/m<sup>2</sup>, temperature 25°C), the loss of the modules' nominal power in the relevant product data will be not more than:

Monocrystalline double glass module, for double glass PV modules with topcon monocrystalline cells of 182mm and above, the power attenuation is 1% in the first year from the start date of warranty, and the average annual power attenuation is not more than 0.4% from the second year to the 30th year. By the end of the 30th year, the actual power output is not less than 87.4% of the nominal power.

The confirmation of the actual output power of the module must follow the IEC60904's standard test conditions. And it is tested by the third party's own tester of calibration standard module for testing, or verification by testing organization mutually recognized by TCL and the customer to determine that the power loss is due to the materials or production process reasons, which can be attributed to TCL's defect.

It is determined that if the actual output power of the module is lower than the guaranteed value in this limited power guarantee, and it was confirmed by TCL that it was caused by module material or production process, TCL will compensate for the loss of power by providing additional modules to the buyer, or by repairing, replacing or compensating them economically. The specific way will be decided by TCL

## **5.Warranty exclusions and limitations**

5.1 Claim for compensation should submit in written form to TCL within warranty, and must not exceed the last day of warranty period.

5.2 The limited product warranty and Peak power's limited warranty are not applicable to the following conditions:

- (1) Do not store and transport according to the advice or instructions of TCL, or change



the packaging method, and use improper transportation tools;

(2) Fail to follow the installation manual of TCL;

(3) Abuse, misuse and improperly operate;

(4) The existence of defects or damage is caused by improper installation or debugging, excessive external force or improper operation done by the buyer or the third party, especially by the end customer or the system installer;

(5) The maintenance, modification or any service performed by the personnel unauthorized and unapproved by TCL;

(6) The power loss or other defects are due to pollution or sand, soil, moss or rust, chemical reactions;

(7) The defects or damage are caused by the installation on the moving objects such as cars, ships, and so on but except for the PV tracking system;

(8) There are defects in the building where the modules are installed;

(9) The serial number of the module is tampered, removed or difficult to recognize;

(10) The use of module infringes on the intellectual property of TCL or the third parties (such as patent, trademark).

#### 5.3 Under the limited product warranty and Peak power's limited warranty

Any charge of installing、removing and reinstalling also exclusive of charge for customs liquidation and return of module should be settled through both parties' friendly negotiation.

### **6.The carry-out of guarantee**

Customer shall immediately notify to TCL by mail to address of TCL in written form or send emails or fax if customer have any reasonable claim that conforms to the guarantee. Customer shall supply evidence of claim for compensation, related serial number and date of purchase together with this notification.

TCL does not accept the module returned without the previous written notice.

The buyer shall lodge a claim within three months after learning the situation.

### **7.Transferability**

Terms in this quality guarantee cover to final product user, and can transfer the possession to any follow-up owner at the condition of having no change of mounting position, suffice to prove of inheriting or making over.

### **8.Independent validity of the terms**

If any part of this quality guarantee is identified to be invalid, failure, or can not carry out, or part of the terms is invalid, failure, or can not carry out by someone or at some condition, these conditions have no influence of validity of other part in this quality guarantee or the whole quality guarantee. Under the circumstances, In this case, the applicability of the other parts or other terms of the guarantee or the whole guarantee is deemed to be independent and valid.

## **9. Dispute resolution**

If there is a dispute over the warranty claims about the technology and so on, the final judgment shall be made by the inspection agency jointly recognized by both parties. The resulting expenses shall be borne by the losing party.

If there is any disagreement over the product limited warranty or controversy associated with this product limited warranty, the customer should put forward the agreement within three months after its appearance for the convenience of screening of the problem.

## **10. Change**

Service, change, supply extra module will not make recalculate of guarantee period, and does not make extend application of this guarantee. Module after changed are owned by TCL. If we have stop production of problematical module when claiming happen, TCL can choose other type of PV module (different sizes, color, shape or power), whether it is a new brand or the original brand.

TCL holds the ownership of the replaced module.

## **11. The starting date of the warranty**

The date on which the module is delivered to the buyer is the starting date of the product limited warranty.

## **12. Force majeure**

Caused by fire, flood, snowstorm, typhoon, thunder, natural disaster, change of public policy, terrorism, war, riot, strike, and other unforeseeable circumstances out of the range of the influence of TCL, terms of sale, fail to perform or delay in performance, TCL have no responsibility to terminal clients and third party in any way.

## **13. Disclaimer**

The limited warranty described above is exclusive and supersedes all other warranties expressed or implied, including but not limited to warranties of merchantability or fitness for a particular purpose, and all other obligations of TCL, but TCL party's written agreement promises the above additional guarantee or liability. Some jurisdictions have limited or no warranty disclaimers, so the above may not apply.

**Limitation of Liability :** In the maximum extent permitted by applicable laws, TCL does not take any responsibility towards casualties and property losses or any other losses and damages caused by its products and their use due to its product quality problems. Subject to the maximum extent permitted by applicable law, TCL shall not be liable for any loss of profits, loss of use, equipment outages, or any incidental and special losses and others damages caused by or in connection with the product, other than those caused by the customer due to its product quality or by the third party in the name



of the customer, even if TCL has been informed of the possibility of such losses.

To the maximum extent permitted by applicable law, TCL's cumulative compensation for damage or other defects, if any, shall not exceed the price paid by the customer when purchasing the product. The client's agreement that the above limitation of liability is a necessary part of the agreement between the parties, if the limited liability scope is not defined, the price of the product will be very different. Some jurisdictions restrict or disclaim disclaimer, so the above rules may not apply to certain clients.

#### **14.Note**

This limited warranty is according to the law of P.R.C.

All explanation rights belong to TCL Photovoltaic Technology Co.,Ltd.