



# IEC TS 62804-1:2015

Photovoltaic (PV) Modules - Test Methods for the detection of potential-induced degradation

Part 1: Crystalline silicon  
Confirmation of test results

VDE Renewables File Ref.: 10011/ ET-20221016-187

**Applicant:** Wuxi Suntech Power Co., Ltd.  
16 Xin Hua Road, Xinwu District, 214028 Wuxi City, China

**Product:** Crystalline silicon Photovoltaic (PV)-Modules

**Type:** A) STPXXXS-C72/Nsh  
A) STPXXXS-C72/Nsh  
B) STPXXXS-C54/Nshb  
B) STPXXXS-C54/Nshy

A) STPXXXS-C72/Nshb  
B) STPXXXS-C54/Nsh  
B) STPXXXS-C54/Nshm

XXX in the type replace the power in Watt and can be any number between:

545 – 580 for A); 405 – 435 for B)

**Manufacturer:** Wuxi Suntech Power Co., Ltd.

**Standard:** IEC TS 62804-1:2015

## Test conditions

Testing time: 192 h

Chamber temperature: 85°C

Relative Humidity: 85 %

Potential to ground:  $\pm 1500$  V

## Pass criteria

Power degradation: < 5%

Dry Insulation: > 40 M $\Omega$ m<sup>2</sup>

Wet insulation: > 40 M $\Omega$ m<sup>2</sup>



### Summary of test results:

|                                   |          |             |
|-----------------------------------|----------|-------------|
| <b>Maximum power degradation:</b> | allowed  | max. 5 %    |
|                                   | measured | max. 1.21 % |

The measured degradation is below the allowed degradation.

|                                   |          |                      |
|-----------------------------------|----------|----------------------|
| <b>Dry insulation resistance:</b> | required | min. 15.5 M $\Omega$ |
|                                   | measured | >500 M $\Omega$      |

The measured dry insulation resistance is above the minimum required dry insulation resistance.

|                                   |          |                      |
|-----------------------------------|----------|----------------------|
| <b>Wet insulation resistance:</b> | required | min. 15.5 M $\Omega$ |
|                                   | measured | >500 M $\Omega$      |

The measured wet insulation resistance is above the minimum required wet insulation resistance.

|                           |             |
|---------------------------|-------------|
| <b>Visual inspection:</b> | No findings |
|---------------------------|-------------|

The complete test results and the relevant bill of materials are given in Test Report No.: TRPVM- ET-20221016-187-4.

### VDE Renewables GmbH

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Shanghai, 2023-02-02

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