



# TS IEC 62804-1:2015

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

Part 1: Crystalline silicone  
Confirmation of test results

**VDE Renewables File Ref.:** 10011/2017-40260

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

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

Type: A) STPXXX-24/Vfw, STPXXX-24/Vfb STPXXX-24/Vfm  
STPXXX-24/Vfs, STPXXX-24/Vfy  
B) STPXXX-20/Wfw, STPXXX-20/Wfb, STPXXX-20/Wfm,  
STPXXX-20/Wfs, STPXXX-20/Wfy

XXX in the type replaces the power in watt and can be any number between:  
290 – 350 for A), 255 - 285 for B)

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

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

## Test conditions

Testing time: 192 h  
Chamber temperature: 85°C  
Relative Humidity: 85 %  
Potential to ground: - 1000 V

## Pass criteria

Power degradation: < 5%  
Dry Insulation: > 40 MΩm<sup>2</sup>  
Wet insulation: > 40 MΩm<sup>2</sup>



## TS IEC 62804-1:2015

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

Part 1: Crystalline silicone  
Confirmation of test results

### Summary of test results:

<b>Maximum power degradation:</b>	allowed	max. 5 %
	measured	max. 2.02 %

The measured degradation is below the allowed degradation.

<b>Dry insulation resistance:</b>	required	min. 20.7 M $\Omega$
	measured	>1000 M $\Omega$

The measured dry insulation resistance is above the limit.

<b>Wet insulation resistance:</b>	required	min. 20.7 M $\Omega$
	measured	>1000 M $\Omega$

The measured wet insulation resistance is above the limit.

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

The complete test results and the relevant bill of materials are given in Test Report No.: TRPVM-2017-40260-2.

### VDE Renewables GmbH

**Dean Wen**

**Arnd Roth**

63755 Alzenau, 2017-09-08

