



# IEC 61701:2011

## Salt mist corrosion testing of photovoltaic (PV) modules

### 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  
                  C) STPXXXS-24/Vfw      STPXXXS-24/Vfb      STPXXXS-24/Vfm  
                  STPXXXS-24/Vfs      STPXXXS-24/Vfy  
                  D) STPXXXS-20/Wfw      STPXXXS-20/Wfb      STPXXXS-20/Wfm  
                  STPXXXS-20/Wfs      STPXXXS-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), 305 - 370 for C, 265 - 320 for D)

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

**Standard:** IEC 61701:2011, Salt mist corrosion test

#### Test conditions

Severity level:                      3  
Testing time:                        168 h  
Chamber temperature:            40°C  
Relative Humidity:                93 %  
Mist pH level:                      7

#### Pass criteria

Power degradation:              < 5%  
Dry Insulation:                    > 40 MΩm<sup>2</sup>  
Wet insulation:                    > 40 MΩm<sup>2</sup>  
Ground continuity:               < 0.1Ω  
Bypass diode functionality: Shall be functional after test



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#### Summary of test results:

**Maximum power degradation:** allowed max. 5 %  
measured max. 0.25 %

The measured degradation is below the allowed degradation.

**Dry insulation resistance:** required min. 20.7 M $\Omega$   
measured >1000 M $\Omega$

The measured dry insulation resistance is above the limit.

**Wet insulation resistance:** required min. 20.7 M $\Omega$   
measured >500 M $\Omega$


The measured wet insulation resistance is above the limit.

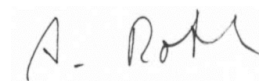
**Ground continuity test:** required max. 0.1 $\Omega$   
measured max. 0.005 $\Omega$

**Bypass diode functionality test:** Still functional after test

The complete test results and the relevant bill of materials are given in Test Report No.: TRPVM-2017-40260-1.

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63755 Alzenau, 2017-09-08

