



# IEC 61701:2011

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

Confirmation of test results

**Ref.:** 10118/2017-40287

**Applicant:** SolarWorld Industries GmbH  
Martin-Luther-King-Str. 24, 53175 Bonn, Germany

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

**Type:** A) Sunmodule Plus SW XXX mono Y  
A) Sunmodule Plus SW XXX poly Y  
B) Sunmodule SW XXX XL mono Y  
B) Sunmodule SW XXX XL poly Y  
C) Sunmodule Protect SW XXX mono Y  
C) Sunmodule Protect SW XXX poly Y  
D) Sunmodule Bisun protect XXX Y  
E) Sunmodule Bisun XXX XL Y

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

200 – 320 for A), C), D); 260 – 360 for B), E).

Y in the type replaces a potential suffix and can be black or clear.

**Manufacturer:** SolarWorld Industries GmbH

**Standard:** IEC 61701:2011

**Test conditions:** As given in IEC 61701:2011

Severity:	6
Testing time:	56 days
Mist ph level:	6,9
Angle of inclination from horizontal:	60°

### Pass criteria

Visual inspection:	No findings which may affect safety
Power degradation:	< 5 %
Dry Insulation:	> 40 MΩm <sup>2</sup>
Wet insulation:	> 40 MΩm <sup>2</sup>
Bonding path resistance:	< 0,1 Ω
Bypass diode functionality test:	Bypass diodes shall remain functional



## Summary of test results:

**Visual inspection:** No findings which affect safety

**Maximum power degradation:** allowed < 5 %  
measured min. + 0,95%

There was no degradation measurable.

**Dry insulation resistance:** required  $\geq 23,81 \text{ M}\Omega$   
measured min. 500  $\text{M}\Omega$

The measured dry insulation resistance is above the limit.

**Wet insulation resistance:** required  $\geq 23,81 \text{ M}\Omega$   
measured min. 268  $\text{M}\Omega$

The measured wet insulation resistance is above the limit.

**Bonding path resistance:** required < 0,1  $\Omega$   
measured max. 0,04  $\Omega$

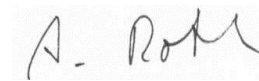
The measured bonding path resistance is below the limit.

**Bypass diode functionality test:** Bypass diodes remain functional

The complete test results are given in the Test Reports No.:  
TRPVM-2017-40287-2 and TRPVM-2017-40287-3.

**VDE Renewables GmbH**

  
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63755 Alzenau, 2017-08-30