



IEC 60068-2-68 Blowing Sand Test Lc 2

Ref.: 5005440-3972-0001/198067

Applicant: SolarWorld AG
Martin-Luther-King-Str. 24, 53175 Bonn

Product: Crystalline Photovoltaic (PV)-Modules

Type: A) Sunmodule Plus SW XXX mono Y
A) Sunmodule Plus SW XXX poly Y
B) Sunmodule Plus SW XXX XL mono Y
B) Sunmodule Plus SW XXX XL poly Y
C) Sunmodule Protect SW XXX mono Y
C) Sunmodule Protect SW XXX poly Y
D) Sunmodule Plus SW XXX mono Y
D) Sunmodule Plus SW XXX poly Y
E) Sunmodule SW XX mono RHA
F) Sunmodule SW XXX poly RGP
G) Sunmodule SW XXX mono R6A
G) Sunmodule SW XXX poly R6A
H) Sunmodule Bisun SW XXX duo
I) Sunmodule Bisun SW XXX XL duo

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

200 – 300 for A), C), D), H); 260 – 360 for B), I); 100 for F); 140 – 160 for G); 75 - 85 for E).

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

Manufacturer: SolarWorld AG

Standard: IEC 60068-2-68, Test method Lc 2 plus
TechnoLab Sand Test PA03/01 and AECTP 300,
method 313

**Test sequence and
pass/fail criteria:** Based on IEC 61701ed.2

Average particle size: 380µm

Concentration: (2,5 ± 0,5) g/m³

Sand composition: ASIA Desert Rub'al Khali, Saudi Arabia, 97% SiO₂

Wind speed: 9 m/s

Testing time: 6 h (4 positions, 90 minutes testing time each)





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Summary of test results:

Maximum power degradation: required max. 8 %
measured 1,51 %

The measured degradation is within the measurement error.

Dry insulation resistance: required 23,81 M Ω
measured >500 M Ω

The measured dry insulation resistance is far above the limit.

Wet insulation resistance: required 23,81 M Ω
measured >500 M Ω

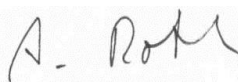
The measured wet insulation resistance is far above the limit.

Visual inspection: No findings

The complete test results are given in Test Report No.: Report_ET2_198067.

VDE Prüf- und Zertifizierungsinstitut GmbH
VDE Testing and Certification Institute
Fachgebiet ET2 / Section ET2


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Arnd Roth

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