



IEC 62716:2013
Photovoltaic (PV) modules
- Ammonia corrosion testing -
Confirmation of test results

VDE Renewables File Ref.: 10011/2020-40066

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

Product: Crystalline silicon Photovoltaic (PV)-Modules

Type:

A) STPXXXS-B72/Pnh+	B) STPXXXS-B60/Pnh+
C) STPXXXS-B72/Pnhm+	D) STPXXXS-B60/Pnhm+
E) STPXXXS-A24/Vfk+	F) STPXXXS-A72/Pfh+
G) STPXXXS-60/Nfh+	H) STPXXXS-72/Nfh+
I) STPXXXS-60/Pfh+	J) STPXXXS-60/Nfd+
K) STPXXXS-72/Nfd+	L) STPXXXS-72/Pfh+
M) STPXXXS-60/Pfd+	N) STPXXXS-72/Pfd+

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

425 – 450 for A), C)	350 – 375 for B), D)	355 – 380 for E)
370 – 410 for F)	285 – 310 for G)	345 – 375 for H)
305 – 355 for I)	280 – 305 for J)	340 – 370 for K)
370 – 405 for L)	295 – 325 for M)	370 – 395 for N)

Manufacturer: Wuxi Suntech Power Co., Ltd.

Standard: IEC 62716:2013, Ammonia corrosion testing

Test conditions

Hours including heating up:	8 h
NH ₃ -concentration (ppm):	6667
Chamber temperature:	60°C
Relative Humidity:	100 %
Hours including cooling:	16 h
NH ₃ -concentration (ppm):	0
Chamber temperature:	23°C
Relative Humidity:	75 %



Pass criteria

Power degradation: < 5%

Dry Insulation: > 40 MΩm²

Wet insulation: > 40 MΩm²

Ground continuity: < 0.1Ω

Bypass diode functionality: Shall be functional after test

Summary of test results:

Maximum power degradation:	allowed	max. 5 %
	measured	max. 1.07 %

The measured degradation is below the allowed degradation.

Dry insulation resistance:	required	min. 17.9 MΩ
	measured	>1000 MΩ

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

Wet insulation resistance:	required	min. 17.9 MΩ
	measured	>1000 MΩ

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

Ground continuity test:	allowed	max. 0.1Ω
	measured	max. 0.0064Ω

The measured resistance is below the max. allowed resistance.

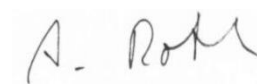
Visual inspection: No findings

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-2020-40066-3.

VDE Renewables GmbH


Dean Wen


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63755 Alzenau, 2020-07-08