



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

VDE Renewables File Ref.: ET-20220518-088

Applicant: Jiangsu Runergy New Energy Technology Co., Ltd.
Unit 101, Building 1, 58 Xiangjiang Road, Yancheng Economic and Technological Development Zones, Yancheng, Jiangsu, China.

Product: Crystalline silicon Photovoltaic (PV)-Modules

Type:

A) HY-DH144P8-XXX	A) HY-DH144P8-XXXb/B/T
B) HY-DH132P8-XXX	B) HY-DH132P8-XXXb/B/T
C) HY-DH120P8-XXX	C) HY-DH120P8-XXXb/B/T
D) HY-DH108P8-XXX	D) HY-DH108P8-XXXb/B/T
E) HY-DH144N8-XXX	E) HY-DH144N8-XXXb/B/T
F) HY-DH132N8-XXX	F) HY-DH132N8-XXXb/B/T
G) HY-DH120N8-XXX	G) HY-DH120N8-XXXb/B/T
H) HY-DH108N8-XXX	H) HY-DH108N8-XXXb/B/T

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

520 – 550 for A)	470 – 505 for B)	430 – 465 for C)
390 – 420 for D)	540 – 585 for E)	490 – 545 for F)
450 – 495 for G)	405 – 445 for F)	

Manufacturer: Runergy PV Technology (Thailand) 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. 0.41 %

The measured degradation is below the allowed degradation.

Dry insulation resistance: required min. 15.5 MΩ
measured >1000 MΩ

The measured dry insulation resistance is above the limit.

Wet insulation resistance: required min. 15.5 MΩ
measured >1000 MΩ

The measured wet insulation resistance is above the limit.

Ground continuity test: required max. 0.1Ω
measured max. 0.0153Ω

The measured ground continuity test is below the limit.

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- ET-20220518-088-1.

VDE Renewables GmbH

Zhiyao Wang

Shanghai, 2022-10-24

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