

CERTIFICATE

TÜV NORD CERT GmbH
herewith declares that

Anhui Daheng Energy Technology Co., Ltd.
No.01, Yaoyuan Road, Luyang District,
Hefei City, Anhui Province,
P.R. China

is authorized to provide the product mentioned below with the mark as illustrated:

Description of product (details see Annex 2):

Crystalline Silicon Terrestrial Photovoltaic (PV) Modules



Valid from: 2022-07-19

Valid until: 2024-06-13

Certification program:	P12-VA-01 Rev. 17 09.20
Certification fundamental(s):	IEC / EN 61215-1:2016; IEC / EN 61215-1-1:2016; IEC 61215-2:2016 / EN 61215-2:2017 + AC:2017 + AC:2018; IEC 61730-1:2016 / EN IEC 61730-1:2018 + AC:2018; IEC 61730-2:2016 / EN IEC 61730-2:2018 + AC:2018.
Registered No.:	44 780 19 406749 - 367R6A1M7
Manufacturer:	see Annex 1
Test Report No.:	492011236.011
File No.:	PVP07021/22P-01



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Essen, 2022-07-19

Please also pay attention to the information stated overleaf.

Anlage 1 zum Zertifikat Nr.: / Annex 1 to Certificate No.: **44 780 19 406749 - 367R6A1M7**

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Aktenzeichen: / File reference: **PVP07021/22P-01**

2022-07-19

Manufacturer:

Manufacturer: **Anhui Daheng Energy Technology Co., Ltd.**
No.01, Yaoyuan Road, Luyang District,
Hefei City, Anhui Province, P.R. China

Factory inspection report no.: **862010588.001**

Remark:

Factory inspection is mandatory to be performed annually. Please refer to factory inspection report for detailed information.

A handwritten signature in blue ink, appearing to read "Daheng", is positioned above the company name.

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Description of product(s):

Module types:

PV Modules with Mono-crystalline Silicon Solar Cells (156.75mm to 166mm):

- 72 cells: DHM72-xxxW (xxx = 325 - 370, in increment of 5)
- 72 cells: DHM72/FS-xxxW (xxx = 325 - 370, in increment of 5)
- 60 cells: DHM60-xxxW (xxx = 275 - 310, in increment of 5)
- 60 cells: DHM60/FS-xxxW (xxx = 275 - 310, in increment of 5)
- 72 cells: DHM72X-xxxW (xxx = 370 - 390, in increment of 5)
- 72 cells: DHM72X/FS-xxxW (xxx = 370 - 390, in increment of 5)
- 60 cells: DHM60X-xxxW (xxx = 310 - 325, in increment of 5)
- 60 cells: DHM60X/FS-xxxW (xxx = 310 - 325, in increment of 5)

Maximum system voltage: 1500V

Fuse rating: 16A

Electrical protection class: Class II

Pollution degree: 1

Material group: I

Design load (positive / negative): 3600Pa / 1600Pa

Safety factors: 1.5

Fire safety class: Class C according to ANSI/UL 1703-2018 (as per ANSI/UL 790-2018)

Module types:

PV Modules with Mono-crystalline Silicon Half-cut Solar Cells (156.75mm to 166mm):

- 144 cells: HCM72-xxxW (xxx = 350 - 390, in increment of 5)
- 144 cells: HCM72/FS-xxxW (xxx = 350 - 390, in increment of 5)
- 120 cells: HCM60-xxxW (xxx = 290 - 325, in increment of 5)
- 120 cells: HCM60/FS-xxxW (xxx = 290 - 325, in increment of 5)
- 156 cells: HCM78X9-xxxW (xxx = 415 - 455, in increment of 5)
- 156 cells: HCM78X9/FS-xxxW (xxx = 415 - 455, in increment of 5)
- 144 cells: HCM72X9-xxxW (xxx = 385 - 420, in increment of 5)
- 144 cells: HCM72X9/FS-xxxW (xxx = 385 - 420, in increment of 5)
- 120 cells: HCM60X9-xxxW (xxx = 320 - 350, in increment of 5)
- 120 cells: HCM60X9/FS-xxxW (xxx = 320 - 350, in increment of 5)
- 144 cells: DHM-72L9-xxxW (xxx = 430 - 465, in increment of 5)
- 144 cells: DHM-72L9(BW)-xxxW (xxx = 430 - 465, in increment of 5)
- 144 cells: DHM-72L9(BB)-xxxW (xxx = 430 - 465, in increment of 5)
- 144 cells: DHM-72L9/FS-xxxW (xxx = 430 - 465, in increment of 5)
- 144 cells: DHM-72L9/FS(BW)-xxxW (xxx = 430 - 465, in increment of 5)



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144 cells: DHM-72L9/FS(BB)-xxxW (xxx = 430 - 465, in increment of 5)
 144 cells: DHM-72L9/BF-xxxW (xxx = 430 - 465, in increment of 5)
 144 cells: DHM-72L9/BF(BW)-xxxW (xxx = 430 - 465, in increment of 5)
 144 cells: DHM-72L9/BF(BB)-xxxW (xxx = 430 - 465, in increment of 5)
 144 cells: DHM-72L9/BF/FS -xxxW (xxx = 430 - 465, in increment of 5)
 144 cells: DHM-72L9/BF/FS(BW)-xxxW (xxx = 430 - 465, in increment of 5)
 144 cells: DHM-72L9/BF/FS(BB)-xxxW (xxx = 430 - 465, in increment of 5)
 120 cells: DHM-60L9-xxxW (xxx = 360 - 385, in increment of 5)
 120 cells: DHM-60L9(BW)-xxxW (xxx = 360 - 385, in increment of 5)
 120 cells: DHM-60L9(BB)-xxxW (xxx = 360 - 385, in increment of 5)
 120 cells: DHM-60L9/FS-xxxW (xxx = 360 - 385, in increment of 5)
 120 cells: DHM-60L9/FS(BW)-xxxW (xxx = 360 - 385, in increment of 5)
 120 cells: DHM-60L9/FS(BB)-xxxW (xxx = 360 - 385, in increment of 5)
 120 cells: DHM-60L9/BF-xxxW (xxx = 360 - 385, in increment of 5)
 120 cells: DHM-60L9/BF(BW)-xxxW (xxx = 360 - 385, in increment of 5)
 120 cells: DHM-60L9/BF(BB)-xxxW (xxx = 360 - 385, in increment of 5)
 120 cells: DHM-60L9/BF/FS -xxxW (xxx = 360 - 385, in increment of 5)
 120 cells: DHM-60L9/BF/FS(BW)-xxxW (xxx = 360 - 385, in increment of 5)
 120 cells: DHM-60L9/BF/FS(BB)-xxxW (xxx = 360 - 385, in increment of 5)

Maximum system voltage: 1500V
 Fuse rating: 20A
 Electrical protection class: Class II
 Pollution degree: 1
 Material group: I
 Design load (positive / negative): 3600Pa / 1600Pa
 Safety factors: 1.5
 Fire safety class: Class C according to ANSI/UL 1703-2018 (as per ANSI/UL 790-2018)

Module types: **PV Modules with 182mm Mono-crystalline Silicon Half-cut Solar Cells:**
 156 cells: DHM-78X10-xxxW (xxx = 570 - 590, in increment of 5)
 156 cells: DHM-78X10(BW)-xxxW (xxx = 570 - 590, in increment of 5)
 156 cells: DHM-78X10(BB)-xxxW (xxx = 570 - 590, in increment of 5)



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156 cells: DHM-78X10/FS-xxxW (xxx = 570 - 590, in increment of 5)
156 cells: DHM-78X10/FS(BW)-xxxW (xxx = 570 - 590, in increment of 5)
156 cells: DHM-78X10/FS(BB)-xxxW (xxx = 570 - 590, in increment of 5)
156 cells: DHM-78X10/BF-xxxW (xxx = 570 - 590, in increment of 5)
156 cells: DHM-78X10/BF(BW)-xxxW (xxx = 570 - 590, in increment of 5)
156 cells: DHM-78X10/BF(BB)-xxxW (xxx = 570 - 590, in increment of 5)
156 cells: DHM-78X10/BF/FS-xxxW (xxx = 570 - 590, in increment of 5)
156 cells: DHM-78X10/BF/FS(BW)-xxxW (xxx = 570 - 590, in increment of 5)
156 cells: DHM-78X10/BF/FS(BB)-xxxW (xxx = 570 - 590, in increment of 5)
144 cells: DHM-72X10-xxxW (xxx = 525 - 555, in increment of 5)
144 cells: DHM-72X10(BW)-xxxW (xxx = 525 - 555, in increment of 5)
144 cells: DHM-72X10(BB)-xxxW (xxx = 525 - 555, in increment of 5)
144 cells: DHM-72X10/FS-xxxW (xxx = 525 - 555, in increment of 5)
144 cells: DHM-72X10/FS(BW)-xxxW (xxx = 525 - 555, in increment of 5)
144 cells: DHM-72X10/FS(BB)-xxxW (xxx = 525 - 555, in increment of 5)
144 cells: DHM-72X10/BF-xxxW (xxx = 525 - 555, in increment of 5)
144 cells: DHM-72X10/BF(BW)-xxxW (xxx = 525 - 555, in increment of 5)
144 cells: DHM-72X10/BF(BB)-xxxW (xxx = 525 - 555, in increment of 5)
144 cells: DHM-72X10/BF/FS-xxxW (xxx = 525 - 555, in increment of 5)
144 cells: DHM-72X10/BF/FS(BW)-xxxW (xxx = 525 - 555, in increment of 5)
144 cells: DHM-72X10/BF/FS(BB)-xxxW (xxx = 525 - 555, in increment of 5)
132 cells: DHM-66X10-xxxW (xxx = 485 - 505, in increment of 5)
132 cells: DHM-66X10(BW)-xxxW (xxx = 485 - 505, in increment of 5)
132 cells: DHM-66X10(BB)-xxxW (xxx = 485 - 505, in increment of 5)
132 cells: DHM-66X10/FS-xxxW (xxx = 485 - 505, in increment of 5)
132 cells: DHM-66X10/FS(BW)-xxxW (xxx = 485 - 505, in increment of 5)
132 cells: DHM-66X10/FS(BB)-xxxW (xxx = 485 - 505, in increment of 5)
132 cells: DHM-66X10/BF-xxxW (xxx = 485 - 505, in increment of 5)
132 cells: DHM-66X10/BF(BW)-xxxW (xxx = 485 - 505, in increment of 5)
132 cells: DHM-66X10/BF(BB)-xxxW (xxx = 485 - 505, in increment of 5)
132 cells: DHM-66X10/BF/FS-xxxW (xxx = 485 - 505, in increment of 5)
132 cells: DHM-66X10/BF/FS(BW)-xxxW (xxx = 485 - 505, in increment of 5)
132 cells: DHM-66X10/BF/FS(BB)-xxxW (xxx = 485 - 505, in increment of 5)
120 cells: DHM-60X10-xxxW (xxx = 440 - 460, in increment of 5)
120 cells: DHM-60X10(BW)-xxxW (xxx = 440 - 460, in increment of 5)



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120 cells: DHM-60X10(BB)-xxxW (xxx = 440 - 460, in increment of 5)
 120 cells: DHM-60X10/FS-xxxW (xxx = 440 - 460, in increment of 5)
 120 cells: DHM-60X10/FS(BW)-xxxW (xxx = 440 - 460, in increment of 5)
 120 cells: DHM-60X10/FS(BB)-xxxW (xxx = 440 - 460, in increment of 5)
 120 cells: DHM-60X10/BF-xxxW (xxx = 440 - 460, in increment of 5)
 120 cells: DHM-60X10/BF(BW)-xxxW (xxx = 440 - 460, in increment of 5)
 120 cells: DHM-60X10/BF(BB)-xxxW (xxx = 440 - 460, in increment of 5)
 120 cells: DHM-60X10/BF/FS -xxxW (xxx = 440 - 460, in increment of 5)
 120 cells: DHM-60X10/BF/FS(BW)-xxxW (xxx = 440 - 460, in increment of 5)
 120 cells: DHM-60X10/BF/FS(BB)-xxxW (xxx = 440 - 460, in increment of 5)
 108 cells: DHM-54X10-xxxW (xxx = 395 - 415, in increment of 5)
 108 cells: DHM-54X10(BW)-xxxW (xxx = 395 - 415, in increment of 5)
 108 cells: DHM-54X10(BB)-xxxW (xxx = 395 - 415, in increment of 5)
 108 cells: DHM-54X10/FS-xxxW (xxx = 395 - 415, in increment of 5)
 108 cells: DHM-54X10/FS(BW)-xxxW (xxx = 395 - 415, in increment of 5)
 108 cells: DHM-54X10/FS(BB)-xxxW (xxx = 395 - 415, in increment of 5)
 108 cells: DHM-54X10/BF-xxxW (xxx = 395 - 415, in increment of 5)
 108 cells: DHM-54X10/BF(BW)-xxxW (xxx = 395 - 415, in increment of 5)
 108 cells: DHM-54X10/BF(BB)-xxxW (xxx = 395 - 415, in increment of 5)
 108 cells: DHM-54X10/BF/FS -xxxW (xxx = 395 - 415, in increment of 5)
 108 cells: DHM-54X10/BF/FS(BW)-xxxW (xxx = 395 - 415, in increment of 5)
 108 cells: DHM-54X10/BF/FS(BB)-xxxW (xxx = 395 - 415, in increment of 5)

Maximum system voltage:	1500V
Fuse rating:	25A
Electrical protection class:	Class II
Pollution degree:	1
Material group:	I
Design load (positive / negative):	3600Pa / 1600Pa
Safety factors:	1.5
Fire safety class:	Class C according to ANSI/UL 1703-2018 (as per ANSI/UL 790-2018)

Module types:

PV Modules with 182mm Mono-crystalline Silicon 1/3-cut Solar Cells:

216 cells: DHT-M72X10-xxxW (xxx = 525 - 555, in increment of 5)
 216 cells: DHM-T72X10-xxxW (xxx = 525 - 555, in increment of 5)



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216 cells: DHM-T72X10(BW)-xxxW (xxx = 525 - 555, in increment of 5)
216 cells: DHM-T72X10(BB)-xxxW (xxx = 525 - 555, in increment of 5)
216 cells: DHM-T72X10/FS-xxxW (xxx = 525 - 555, in increment of 5)
216 cells: DHM-T72X10/FS(BW)-xxxW (xxx = 525 - 555, in increment of 5)
216 cells: DHM-T72X10/FS(BB)-xxxW (xxx = 525 - 555, in increment of 5)
216 cells: DHM-T72X10/BF-xxxW (xxx = 525 - 555, in increment of 5)
216 cells: DHM-T72X10/BF(BW)-xxxW (xxx = 525 - 555, in increment of 5)
216 cells: DHM-T72X10/BF(BB)-xxxW (xxx = 525 - 555, in increment of 5)
216 cells: DHM-T72X10/BF/FS -xxxW (xxx = 525 - 555, in increment of 5)
216 cells: DHM-T72X10/BF/FS(BW)-xxxW (xxx = 525 - 555, in increment of 5)
216 cells: DHM-T72X10/BF/FS(BB)-xxxW (xxx = 525 - 555, in increment of 5)
180 cells: DHT-M60X10-xxxW (xxx = 440 - 460, in increment of 5)
180 cells: DHM-T60X10-xxxW (xxx = 440 - 460, in increment of 5)
180 cells: DHM-T60X10(BW)-xxxW (xxx = 440 - 460, in increment of 5)
180 cells: DHM-T60X10(BB)-xxxW (xxx = 440 - 460, in increment of 5)
180 cells: DHM-T60X10/FS-xxxW (xxx = 440 - 460, in increment of 5)
180 cells: DHM-T60X10/FS(BW)-xxxW (xxx = 440 - 460, in increment of 5)
180 cells: DHM-T60X10/FS(BB)-xxxW (xxx = 440 - 460, in increment of 5)
180 cells: DHM-T60X10/BF-xxxW (xxx = 440 - 460, in increment of 5)
180 cells: DHM-T60X10/BF(BW)-xxxW (xxx = 440 - 460, in increment of 5)
180 cells: DHM-T60X10/BF(BB)-xxxW (xxx = 440 - 460, in increment of 5)
180 cells: DHM-T60X10/BF/FS -xxxW (xxx = 440 - 460, in increment of 5)
180 cells: DHM-T60X10/BF/FS(BW)-xxxW (xxx = 440 - 460, in increment of 5)
180 cells: DHM-T60X10/BF/FS(BB)-xxxW (xxx = 440 - 460, in increment of 5)

Maximum system voltage:

1500V

Fuse rating:

25A



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Electrical protection class:	Class II
Pollution degree:	1
Material group:	I
Design load (positive / negative):	3600Pa / 1600Pa
Safety factors:	1.5
Fire safety class:	Class C according to ANSI/UL 1703-2018 (as per ANSI/UL 790-2018)

Remark:

For detailed product information, please refer to CDF (Constructional Data Form) in Annex 1 of test report.



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