

CERTIFICATE

TÜV NORD CERT GmbH
herewith declares that

Tongwei Co., Ltd.

No. 588, Middle Section Tianfu Avenue,
High-Tech Zone, Chengdu,
China (Sichuan) Pilot Free Trade Zone

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: 2024-08-13

Valid until: 2029-08-12

Certification program:

P12-VA-01 Rev. 17 09.20

Certification fundamental(s):

P12.4-AA-02 Rev. 00(IEC TS 62804-1:2015 modified);

IEC 61215-1:2021 / EN IEC 61215-1:2021;

IEC 61215-1-1:2021 / EN IEC 61215-1-1:2021;

IEC 61215-2:2021 / EN IEC 61215-2:2021;

IEC 61730-1:2023;

IEC 61730-2:2023.

Remark:

Test temperature: 85°C; Relative humidity: 85%;

Test duration: 192 hours.

Registered No.:

44 780 24 406749 - 332

Manufacturer and factory(-ies):

See Annex 1

Test Report No.:

492013349.001

File No.:

PVP08052/24P-04



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Essen, 2024-08-13

Please also pay attention to the information stated overleaf.

Manufacturer and factory(-ies):

Manufacturer :	Tongwei Co., Ltd. No. 588, Middle Section Tianfu Avenue, High-Tech Zone, Chengdu, China (Sichuan) Pilot Free Trade Zone
Factory 1:	Tongwei Solar (Hefei) Co., Ltd. No.888, Changning Road, High-tech District, Hefei City, Anhui Province, 230088, P.R. China
Factory inspection report no.:	862010358.007
Factory 2:	Tongwei Solar (Yancheng) Co., Ltd. No. 88, Jiuhuashan Road, Economic Development Zone, Yancheng City, Jiangsu Province, China
Factory inspection report no.:	862010763.001
Factory 3:	Tongwei Solar (Sichuan) Co., Ltd. No.888, Jilin East Road, Huai Kou Street, Jintang County, Chengdu City, Sichuan Province
Factory inspection report no.:	862010782.001
Factory 4:	Tongwei Solar (Nantong) Co., LTD No. 8, Bonded 10 Road, Economic Development Zone, Nantong City, Jiangsu Province, P. R. China
Factory inspection report no.:	862010863.001
Factory 5:	Tongwei Solar (Chengdu) Co., LTD No. 888, Linjiaci Road, Huangjia Subdistrict, Shuangliu District, Chengdu City, Sichuan Province, China
Factory inspection report no.:	862010864.001

Remark:

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

Description of product(s):

Module types:

Double Glass PV Modules with Half-cut 7" PERC Mono-crystalline Silicon Solar Cells:

156 cells: TWMPD-78HDxxx (xxx = 570-615, in increment of 5)

144 cells: TWMPD-72HDxxx (xxx = 525-565, in increment of 5)

132 cells: TWMPD-66HDxxx (xxx = 480-520, in increment of 5)

120 cells: TWMPD-60HDxxx (xxx = 440-470, in increment of 5)

108 cells: TWMPD-54HDxxx (xxx = 395-425, in increment of 5)

144 cells: TWMPG-72HDxxx (xxx = 560-590, in increment of 5)

108 cells: TWMPG-54HDxxx (xxx = 420-440, in increment of 5)

108 cells: TWMPG-54HCxxx (xxx = 420-440, in increment of 5)

132 cells: TWMPH-66HDxxx (xxx = 575-590, in increment of 5)

120 cells: TWMPH-60HDxxx (xxx = 525-535, in increment of 5)

96 cells: TWMPH-48HDxxx (xxx = 420-430, in increment of 5)

96 cells: TWMPH-48HCxxx (xxx = 420-430, in increment of 5)

Remark: xxx indicates rated output power generated from front side under STC

Maximum system voltage:

1500V

Maximum overcurrent protection rating:

30A

Electrical protection class:

Class II

Module types:

Double Glass PV Modules with Half-cut 7" TOPCon Mono-crystalline Silicon Solar Cells:

156 cells: TWMND-78HDxxx (xxx = 580-650, in increment of 5)

144 cells: TWMND-72HDxxx (xxx = 535-605, in increment of 5)

132 cells: TWMND-66HDxxx (xxx = 490-555, in increment of 5)

120 cells: TWMND-60HDxxx (xxx = 445-505, in increment of 5)

108 cells: TWMND-54HDxxx (xxx = 400-450, in increment of 5)

144 cells: TWMNG-72HDxxx (xxx = 580-620, in increment of 5)

120 cells: TWMNG-60HDxxx (xxx = 485-515, in increment of 5)

120 cells: TWMNG-60HCxxx (xxx = 485-515, in increment of 5)

108 cells: TWMNG-54HDxxx (xxx = 435-465, in increment of 5)

108 cells: TWMNG-54HCxxx (xxx = 435-465, in increment of 5)

132 cells: TWMNH-66HDxxx (xxx = 580-630, in increment of 5)

120 cells: TWMNH-60HDxxx (xxx = 530-570, in increment of 5)

108 cells: TWMNH-54HDxxx (xxx = 475-515, in increment of 5)

108 cells: TWMNH-54HCxxx (xxx = 475-515, in increment of 5)

96 cells: TWMNH-48HDxxx (xxx = 420-455, in increment of 5)

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96 cells: TWMNH-48HCxxx (xxx = 420-455, in increment of 5)
Remark: xxx indicates rated output power generated from front side under STC

Maximum system voltage: 1500V

Maximum overcurrent protection rating: 30A

Electrical protection class: Class II

Module types:

Double Glass PV Modules with Half-cut 8" PERC Mono-crystalline Silicon Solar Cells:

132 cells: TWMPF-66HDxxx (xxx = 635-685, in increment of 5)

120 cells: TWMPF-60HDxxx (xxx = 580-620, in increment of 5)

108 cells: TWMPF-54HDxxx (xxx = 520-560, in increment of 5)

110 cells: TWMPF-55HDxxx (xxx = 530-570, in increment of 5)

100 cells: TWMPF-50HDxxx (xxx = 480-515, in increment of 5)

Remark: xxx indicates rated output power generated from front side under STC

Maximum system voltage: 1500V

Maximum overcurrent protection rating: 35A

Electrical protection class: Class II

Module types:

Double Glass PV Modules with Half-cut 8" TOPCon Mono-crystalline Silicon Solar Cells:

132 cells: TWMNF-66HDxxx (xxx = 665-725, in increment of 5)

120 cells: TWMNF-60HDxxx (xxx = 605-660, in increment of 5)

108 cells: TWMNF-54HDxxx (xxx = 545-590, in increment of 5)

110 cells: TWMNF-55HDxxx (xxx = 530-570, in increment of 5)

100 cells: TWMNF-50HDxxx (xxx = 480-515, in increment of 5)

Remark: xxx indicates rated output power generated from front side under STC

Maximum system voltage: 1500V

Maximum overcurrent protection rating: 35A

Electrical protection class: Class II

Module types:

Double Glass PV Modules with Half-cut 8" HJT Mono-crystalline Silicon Solar Cells:

132 cells: TWMHF-66HDxxx (xxx = 660-735 in increment of 5)



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120 cells: TWMHF-60HDxxx (xxx = 600-665, in increment of 5)

Remark: xxx indicates rated output power generated from front side under STC

Maximum system voltage: 1500V

Maximum overcurrent protection rating: 35A

Electrical protection class: Class II

Remark:

For detailed product information, please refer to CDF (Constructional Data Form).



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