

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: 2024-08-01

Valid until: 2029-02-25

Certification program:

P12-VA-01 Rev. 17 09.20

Certification fundamental(s):

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.

Registered No.:

44 780 24 406749 - 028R2M2

Manufacturer and factory(-ies):

See Annex 1

Test Report No.:

492013017.003

File No.:

PVP01125/24P-06



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Essen, 2024-08-01

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.:	862010763.002
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.:	862010782.002
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.



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Description of product(s):

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 = 535-600, in increment of 5)

132 cells: TWMND-66HDxxx (xxx = 490-550, in increment of 5)

120 cells: TWMND-60HDxxx (xxx = 445-500, in increment of 5)

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

144 cells: TWMNG-72HDxxx (xxx = 580-615, in increment of 5)

120 cells: TWMNG-60HDxxx (xxx = 485-510, in increment of 5)

120 cells: TWMNG-60HCxxx (xxx = 485-510, in increment of 5)

108 cells: TWMNG-54HDxxx (xxx = 435-460, in increment of 5)

108 cells: TWMNG-54HCxxx (xxx = 435-460, 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)

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

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

Pollution degree:

1

Design load (positive / negative):

3600Pa / 1600Pa, refer to CDF for details

Safety factors:

1.5

Fire safety class:

Class A or Class C according to ANSI/UL 1703-2018 (as per ANSI/UL 790-2018), refer to CDF for details

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 = 530-565, in increment of 5)

100 cells: TWMNF-50HDxxx (xxx = 480-510, in increment of 5)

xxx indicates rated output power generated from front side under STC



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Maximum system voltage:	1500V
Maximum overcurrent protection rating:	35A
Electrical protection class:	Class II
Pollution degree:	1
Design load (positive / negative):	3600Pa / 1600Pa, refer to CDF for details
Safety factors:	1.5
Fire safety class:	Class A or Class C according to ANSI/UL 1703-2018 (as per ANSI/UL 790-2018), refer to CDF for details

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 = 575-585, in increment of 5)
 120 cells: TWMPH-60HDxxx (xxx = 525-530, in increment of 5)
 96 cells: TWMPH-48HDxxx (xxx = 420-425, in increment of 5)
 96 cells: TWMPH-48HCxxx (xxx = 420-425, in increment of 5)
 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
Pollution degree:	1
Design load (positive / negative):	3600Pa / 1600Pa, refer to CDF for details
Safety factors:	1.5
Fire safety class:	Class A or Class C according to ANSI/UL 1703-2018 (as per ANSI/UL 790-2018), refer to CDF for details

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



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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 = 530-565, in increment of 5)
 100 cells: TWMPF-50HDxxx (xxx = 480-510, in increment of 5)
 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
 Pollution degree: 1
 Design load (positive / negative): 3600Pa / 1600Pa, refer to CDF for details
 Safety factors: 1.5
 Fire safety class: Class A or Class C according to ANSI/UL 1703-2018 (as per ANSI/UL 790-2018), refer to CDF for details

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)
 120 cells: TWMHF-60HDxxx (xxx = 600-665, in increment of 5)
 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
 Pollution degree: 1
 Design load (positive / negative): 3600Pa / 1600Pa, refer to CDF for details
 Safety factors: 1.5
 Fire safety class: Class A or Class C according to ANSI/UL 1703-2018 (as per ANSI/UL 790-2018), refer to CDF for details

Remark:

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



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