

CERTIFICATE

TÜV NORD CERT GmbH
herewith declares that

Ningbo Isola New Energy Co., Ltd.
4F, Building 037, No.336 Tongning Road,
Jiangbei District, Ningbo City,
Zhejiang Province, 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: 2024-07-22

Valid until: 2029-07-21

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 - 285
Manufacturer and factory(-ies):	See Annex 1
Test Report No.:	492013185.001
File No.:	PVP08151/23P-01



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Essen, 2024-07-22

Please also pay attention to the information stated overleaf.

Manufacturer and factory(-ies):

Manufacturer: **Ningbo Isola New Energy Co., Ltd.**
4F, Building 037, No.336 Tongning Road, Jiangbei District,
Ningbo City, Zhejiang Province, China

Factory: **Taizhou Isola New Energy Co., Ltd.**
Jiantiao industrial area, Jiantiao town,
Sanmen county, Taizhou city, Zhejiang province, China

Factory inspection report no.: 862010986.001

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:	PV Modules with Half-cut 210mm PERC Mono-crystalline Silicon Solar Cells: 132 cells: YHxxxW-33M (xxx = 630-670, in increment of 5) 108 cells: YHxxxW-27M (xxx = 530-545, in increment of 5)
Maximum system voltage:	1500V
Maximum overcurrent protection rating:	30A
Electrical protection class:	Class II
Pollution degree:	1
98th percentile module operating temperature (T ₉₈)	70°C
Design load (positive / negative):	2400Pa / 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 Half-cut 210mm PERC Mono-crystalline Silicon Solar Cells: 72 cells: YHxxxW-36M (xxx = 350-365, in increment of 5) 68 cells: YHxxxW-34M (xxx = 335-345, in increment of 5) 60 cells: YHxxxW-30M (xxx = 295-305, in increment of 5) 56 cells: YHxxxW-28M (xxx = 275-285, in increment of 5) 52 cells: YHxxxW-26M (xxx = 255-260, in increment of 5) 42 cells: YHxxxW-21M (xxx = 200-210, in increment of 5) 39 cells: YHxxxW-19.5M (xxx = 190-195, in increment of 5) 36 cells: YHxxxW-18M (xxx = 175-180, in increment of 5) 33 cells: YHxxxW-16.5M (xxx = 160-165, in increment of 5)
Maximum system voltage:	1500V
Maximum overcurrent protection rating:	15A
Electrical protection class:	Class II
Pollution degree:	1
98th percentile module operating temperature (T ₉₈)	70°C
Design load (positive / negative):	2400Pa / 1600Pa or 1600Pa / 1600Pa, refer to CDF for details
Safety factors:	1.5



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

Module tyoes: **PV Modules with 210*90mm PERC Mono-crystalline Silicon Solar Cells:**

36 cells: YHxxxW-18M (xxx = 150-155, in increment of 5)

33 cells: YHxxxW-16.5M (xxx = 140)

Maximum system voltage: 1500V

Maximum overcurrent protection rating: 10A

Electrical protection class: Class II

Pollution degree: 1

98th percentile module operating temperature (Tgs) 70°C

Design load (positive / negative): 1600Pa/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 210*78.75mm PERC Mono-crystalline Silicon Solar Cells:**

36 cells: YHxxxW-18M (xxx = 130-135, in increment of 5)

Maximum system voltage: 1500V

Maximum overcurrent protection rating: 10A

Electrical protection class: Class II

Pollution degree: 1

98th percentile module operating temperature (Tga) 70°C

Design load (positive / negative): 1600Pa/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 210*70mm PERC Mono-crystalline Silicon Solar Cells:**

72 cells: YHxxxW-36M (xxx = 225-235, in increment of 5)

68 cells: YHxxxW-34M (xxx = 215-220, in increment of 5)

36 cells: YHxxxW-18M (xxx = 115)

33 cells: YHxxxW-16.5M (xxx = 105)



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	30 cells: YHxxxW-15M (xxx = 95)
Maximum system voltage:	1500V
Maximum overcurrent protection rating:	10A
Electrical protection class:	Class II
Pollution degree:	1
98th percentile module operating temperature (T ₉₈)	70°C
Design load (positive / negative):	1600Pa / 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 210*52.5mm PERC Mono-crystalline Silicon Solar Cells: 36 cells: YHxxxW-18M (xxx = 85) 33 cells: YHxxxW-16.5M (xxx = 80) 30 cells: YHxxxW-15M (xxx = 70)
Maximum system voltage:	1500V
Maximum overcurrent protection rating:	10A
Electrical protection class:	Class II
Pollution degree:	1
98th percentile module operating temperature (T ₉₈)	70°C
Design load (positive / negative):	1600Pa / 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 210*42mm PERC Mono-crystalline Silicon Solar Cells: 36 cells: YHxxxW-18M (xxx = 70)
Maximum system voltage:	1500V
Maximum overcurrent protection rating:	10A
Electrical protection class:	Class II
Pollution degree:	1



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98th percentile module operating temperature (T_{98}) 70°C
Design load (positive / negative): 1600Pa / 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 210*35mm PERC Mono-crystalline Silicon Solar Cells:**
36 cells: YHxxxW-18M (xxx = 55)

Maximum system voltage: 1500V
Maximum overcurrent protection rating: 10A
Electrical protection class: Class II
Pollution degree: 1
98th percentile module operating temperature (T_{98}) 70°C
Design load (positive / negative): 1600Pa / 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 210*30mm PERC Mono-crystalline Silicon Solar Cells:**
36 cells: YHxxxW-18M (xxx = 50)

Maximum system voltage: 1500V
Maximum overcurrent protection rating: 10A
Electrical protection class: Class II
Pollution degree: 1
98th percentile module operating temperature (T_{98}) 70°C
Design load (positive / negative): 1600Pa / 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 105*52.5mm PERC Mono-crystalline Silicon Solar Cells:**



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	36 cells: YHxxxW-18M (xxx = 40)
Maximum system voltage:	1500V
Maximum overcurrent protection rating:	10A
Electrical protection class:	Class II
Pollution degree:	1
98th percentile module operating temperature (T ₉₈)	70°C
Design load (positive / negative):	1600Pa / 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 105*42mm PERC Mono-crystalline Silicon Solar Cells: 36 cells: YHxxxW-18M (xxx = 35)
Maximum system voltage:	1500V
Maximum overcurrent protection rating:	10A
Electrical protection class:	Class II
Pollution degree:	1
98th percentile module operating temperature (T ₉₈)	70°C
Design load (positive / negative):	1600Pa / 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 105*35mm PERC Mono-crystalline Silicon Solar Cells: 36 cells: YHxxxW-18M (xxx = 30)
Maximum system voltage:	1500V
Maximum overcurrent protection rating:	10A
Electrical protection class:	Class II
Pollution degree:	1
98th percentile module operating temperature (T ₉₈)	70°C



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Design load (positive / negative): 1600Pa / 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 105*30mm PERC Mono-crystalline Silicon Solar Cells:**

36 cells: YHxxxW-18M (xxx = 25)

Maximum system voltage: 1500V

Maximum overcurrent protection rating: 10A

Electrical protection class: Class II

Pollution degree: 1

98th percentile module operating temperature (T₉₈): 70°C

Design load (positive / negative): 1600Pa / 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 105*23.3mm PERC Mono-crystalline Silicon Solar Cells:**

36 cells: YHxxxW-18M (xxx = 20)

Maximum system voltage: 1500V

Maximum overcurrent protection rating: 10A

Electrical protection class: Class II

Pollution degree: 1

98th percentile module operating temperature (T₉₈): 70°C

Design load (positive / negative): 1600Pa / 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 52.5*35mm PERC Mono-crystalline Silicon Solar Cells:**

36 cells: YHxxxW-18M (xxx = 15)

Maximum system voltage: 1500V



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Maximum overcurrent protection rating:	10A
Electrical protection class:	Class II
Pollution degree:	1
98th percentile module operating temperature (T ₉₈)	70°C
Design load (positive / negative):	1600Pa / 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 52.5*23.3mm PERC Mono-crystalline Silicon Solar Cells:**

36 cells: YHxxxW-18M (xxx = 10)

Maximum system voltage:	1500V
Maximum overcurrent protection rating:	10A
Electrical protection class:	Class II
Pollution degree:	1
98th percentile module operating temperature (T ₉₈)	70°C
Design load (positive / negative):	1600Pa / 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 52.5*21mm PERC Mono-crystalline Silicon Solar Cells:**

24 cells: YHxxxW-12M (xxx = 5)

Maximum system voltage:	1500V
Maximum overcurrent protection rating:	10A
Electrical protection class:	Class II
Pollution degree:	1
98th percentile module operating temperature (T ₉₈)	70°C
Design load (positive / negative):	1600Pa / 1600Pa
Safety factors:	1.5



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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) attached to test report with same file no.



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