

CERTIFICATE

TÜV NORD CERT GmbH
herewith declares that

Shandong Ronma Solar Co., Ltd.
Room 217, No.39 Weihe Road, Dongying Development Zone
Dongying City, Shandong 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: 2022-11-16

Valid until: 2025-07-19

Tested according to: 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 20 406749 - 129R1A1M4

Manufacturer: see Annex 1

Test Report No.: 492011441.006

File No.: PVP05048/22P-01



TÜV NORD CERT GmbH
Certification Body
Consumer Products



Essen, 2022-11-16

Please also pay attention to the information stated overleaf.

Manufacturer:

Manufacturer: **Shandong Ronma Solar Co., Ltd.**
Room 217, No.39 Weihe Road, Dongying Development Zone
Dongying City, Shandong Province, China

Factory inspection report no.: 862010489.002

Remark:

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



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Consumer Products

Description of product(s):

Module types:	PV Modules with 6" Half-cut Poly-crystalline Silicon Solar Cells: 144 cells: RM-xxxW-144P (xxx = 330-355, in increment of 5) 120 cells: RM-xxxW-120P (xxx = 275-295, in increment of 5)
Maximum system voltage:	1500V
Fuse rating:	15A
Electrical protection class:	Class II
Pollution degree:	1
Material group:	I
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)

Remark:

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



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Valid from: 2022-11-16
Valid until: 2025-07-19

Tested according to: 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 20 406749 - 128R3A1M6
Manufacturer: see Annex 1
Test Report No.: 492011441.006
File No.: PVP05048/22P-01



TÜV NORD CERT GmbH
Certification Body
Consumer Products



Essen, 2022-11-16

Please also pay attention to the information stated overleaf.

Anlage 1 zum Zertifikat Nr.: / Annex 1 to Certificate No.: 44 780 20 406749 - 128R3A1M6

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Aktenzeichen: / File reference: PVP05048/22P-01

2022-11-16

Manufacturer:

Manufacturer: **Shandong Ronma Solar Co., Ltd.**
Room 217, No.39 Weihe Road, Dongying Development Zone
Dongying City, Shandong Province, China

Factory inspection report no.: 862010489.002

Remark:

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



TÜV NORD CERT GmbH
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Consumer Products

Description of product(s):

Module types: **PV Modules with 6" Mono-crystalline Silicon Solar Cells:**
72 cells: RM-xxxW-72M (xxx = 365-380, in increment of 5)
60 cells: RM-xxxW-60M (xxx = 305-315, in increment of 5)

Maximum system voltage: 1500V
Fuse rating: 15A
Electrical protection class: Class II
Pollution degree: 1
Material group: I
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 6" Half-cut Mono-crystalline Silicon Solar Cells:**
144 cells: RM-xxxW-166M/144 (xxx = 430-455, in increment of 5)
132 cells: RM-xxxW-166M/132 (xxx = 395-415, in increment of 5)
120 cells: RM-xxxW-166M/120 (xxx = 360-380, in increment of 5)
108 cells: RM-xxxW-166M/108 (xxx = 325-340, 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)



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Module types:	PV Modules with 7" Half-cut Mono-crystalline Silicon Solar Cells: 144 cells: RM-xxxW-182M/144 (xxx = 515-550, in increment of 5) 132 cells: RM-xxxW-182M/132 (xxx = 475-505, in increment of 5) 120 cells: RM-xxxW-182M/120 (xxx = 430-455, in increment of 5) 108 cells: RM-xxxW-182M/108 (xxx = 385-410, in increment of 5) 96 cells: RM-xxxW-182M/96 (xxx = 345-360, in increment of 5)
Maximum system voltage:	1500V
Fuse rating:	20A or 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 8" Half-cut Mono-crystalline Silicon Solar Cells: 132 cells: RM-xxxW-210M/132 (xxx = 635-660, in increment of 5) 120 cells: RM-xxxW-210M/120 (xxx = 580-600, in increment of 5) 108 cells: RM-xxxW-210M/108 (xxx = 520-540, in increment of 5) 96 cells: RM-xxxW-210M/96 (xxx = 460-480, in increment of 5) 84 cells: RM-xxxW-210M/84 (xxx = 405-420, in increment of 5)
Maximum system voltage:	1500V
Fuse rating:	30A
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.



TÜV NORD CERT GmbH
Certification Body
Consumer Products

Certificate of conformity with the following European Directives

Registered No.:
44 799 22 406749 - 160

Low-Voltage Directive 2014/35/EU

Date of application	File reference	Test report No.	Date of issue	Place of issue
2022-05-24	PVP05048/22P-01	492011441.006	2022-11-16	Essen

This is to certify that the following products comply to the essential requirements of the above mentioned European Directive and the following standards, taking into account the German national deviations:

Product: Crystalline Silicon Terrestrial Photovoltaic (PV) Modules

Type designation: See Annex 1

Applicant: **Shandong Ronma Solar Co., Ltd.**
Room 217, No.39 Weihe Road, Dongying Development Zone
Dongying City, Shandong Province, China

Standard(s): EN IEC 61730-1:2018; EN IEC 61730-1:2018/AC:2018-06
EN IEC 61730-2:2018; EN IEC 61730-2:2018/AC:2018-06

This Certificate of conformity is based on the evaluation of samples of the product. It does not imply an assessment of the production and it does not permit the use of a mark of conformity or of a safety mark of the TÜV NORD CERT GmbH. The holder of this certificate may use this Certificate together with his EC-Declaration of Conformity.




Certification Body
Specialist Manager Consumer Products

TÜV NORD CERT GmbH
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Fax: +49 (0)201 825-3209
Email: prodcert@tuev-nord.de

Description of product(s):

- Module types: **PV Modules with 6" Mono-crystalline Silicon Solar Cells:**
72 cells: RM-xxxW-72M (xxx = 365-380, in increment of 5)
60 cells: RM-xxxW-60M (xxx = 305-315, in increment of 5)
- Module types: **PV Modules with 6" Half-cut Mono-crystalline Silicon Solar Cells:**
144 cells: RM-xxxW-166M/144 (xxx = 430-455, in increment of 5)
132 cells: RM-xxxW-166M/132 (xxx = 395-415, in increment of 5)
120 cells: RM-xxxW-166M/120 (xxx = 360-380, in increment of 5)
108 cells: RM-xxxW-166M/108 (xxx = 325-340, in increment of 5)
- Module types: **PV Modules with 7" Half-cut Mono-crystalline Silicon Solar Cells:**
144 cells: RM-xxxW-182M/144 (xxx = 515-550, in increment of 5)
132 cells: RM-xxxW-182M/132 (xxx = 475-505, in increment of 5)
120 cells: RM-xxxW-182M/120 (xxx = 430-455, in increment of 5)
108 cells: RM-xxxW-182M/108 (xxx = 385-410, in increment of 5)
96 cells: RM-xxxW-182M/96 (xxx = 345-360, in increment of 5)
- Module types: **PV Modules with 8" Half-cut Mono-crystalline Silicon Solar Cells:**
132 cells: RM-xxxW-210M/132 (xxx = 635-660, in increment of 5)
120 cells: RM-xxxW-210M/120 (xxx = 580-600, in increment of 5)
108 cells: RM-xxxW-210M/108 (xxx = 520-540, in increment of 5)
96 cells: RM-xxxW-210M/96 (xxx = 460-480, in increment of 5)
84 cells: RM-xxxW-210M/84 (xxx = 405-420, in increment of 5)
- Module types: **PV Modules with 6" Half-cut Poly-crystalline Silicon Solar Cells:**
144 cells: RM-xxxW-144P (xxx = 330-355, in increment of 5)
120 cells: RM-xxxW-120P (xxx = 275-295, in increment of 5)



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