

CERTIFICATE

TÜV NORD CERT GmbH
herewith declares that

Sunrise energy Co., Ltd.
No.20 Tongzi River West Road, Zhonglou Development Zone
Changzhou Jiangsu, 213023
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: 2022-01-20

Valid until: 2025-11-19

Certification program: P12-VA-01 Rev. 17 09.20
Certification fundamental(s): P12.4-AA-04 Rev. 00
(IEC 60068-2-68:1994 modified)
Remark: Test Method Lc2;
Dust concentration: $5\pm 0.5\text{g/m}^3$;
Wind velocity: $20\pm 2\text{m/s}$;
Test duration: 4 hours each side.
Registered No.: 44 780 20 406749 - 227R1M1
Manufacturer: see Annex 1
Test Report No.: 492011561.002
File No.: PVP12111/21P-03



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Certification Body
Consumer Products



Essen, 2022-01-20

Please also pay attention to the information stated overleaf.

Anlage 1 zum Zertifikat Nr.: / Annex 1 to Certificate No.: 44 780 20 406749 - 227R1M1

Seite / Page 1 von / of 1

Aktenzeichen: / File reference: PVP12111/21P-03

2022-01-20

Manufacturer:

Manufacturer: **Sunrise energy Co., Ltd.**
No.20 Tongzi River West Road, Zhonglou Development Zone,
Changzhou Jiangsu, 213023 P.R. China

Factory inspection report no.: 862010400.003

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 6" Half-cut Mono-crystalline Silicon Solar Cells:**
144 cells: SR-M672xxxHLP (xxx = 415 - 450, in increment of 5)
132 cells: SR-M666xxxHLP (xxx = 380 - 410, in increment of 5)
120 cells: SR-M660xxxHLP (xxx = 345 - 375, in increment of 5)

Maximum system voltage: 1500V
Fuse rating: 20A
Application class: Class A
Electrical protection class: Class II

Module types: **PV Modules with 7" Half-cut Mono-crystalline Silicon Solar Cells:**
144 cells: SR-72MxxxHLPro (xxx = 530 - 555, in increment of 5)
132 cells: SR-66MxxxHLPro (xxx = 485 - 505, in increment of 5)
120 cells: SR-60MxxxHLPro (xxx = 440 - 460, in increment of 5)
108 cells: SR-54MxxxHLPro (xxx = 400 - 415, in increment of 5)
96 cells: SR-48MxxxHLPro (xxx = 355 - 370, in increment of 5)
84 cells: SR-42MxxxHLPro (xxx = 310 - 320, in increment of 5)
72 cells: SR-36MxxxHLPro (xxx = 265 - 275, in increment of 5)

Maximum system voltage: 1500V
Fuse rating: 20A
Application class: Class A
Electrical protection class: Class II



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Module types:

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

132 cells: SR-66MAXxxxH (xxx = 640 - 665, in increment of 5)

120 cells: SR-60MAXxxxH (xxx = 580 - 605, in increment of 5)

108 cells: SR-54MAXxxxH (xxx = 525 - 545, in increment of 5)

96 cells: SR-48MAXxxxH (xxx = 465 - 480, in increment of 5)

84 cells: SR-42MAXxxxH (xxx = 410 - 420, in increment of 5)

110 cells: SR-55MAXxxxH (xxx = 535 - 555, in increment of 5)

100 cells: SR-50MAXxxxH (xxx = 485 - 500, in increment of 5)

90 cells: SR-45MAXxxxH (xxx = 435 - 450, in increment of 5)

80 cells: SR-40MAXxxxH (xxx = 390 - 400, in increment of 5)

70 cells: SR-35MAXxxxH (xxx = 340 - 350, in increment of 5)

Maximum system voltage: 1500V

Fuse rating: 20A

Application class: Class A

Electrical protection class: Class II

Remark:

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



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