

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: 2022-09-07

Valid until: 2025-11-04

Certification program:	P12-VA-01 Rev. 17 09.20
Certification fundamental(s):	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 - 218R4M4
Manufacturer:	see Annex 1
Test Report No.:	492011544.006
File No.:	PVP03079/22P



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Consumer Products



Essen, 2022-09-07

Please also pay attention to the information stated overleaf.

Anlage 1 zum Zertifikat Nr.: / Annex 1 to Certificate No.: **44 780 20 406749 - 218R4M4**

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Aktenzeichen: / File reference: **PVP03079/22P**

2022-09-07

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.: **862010400.004**

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:	25A
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 7" Half-cut Mono-crystalline Silicon Solar Cells: 144 cells: SR-72MxxxHLPro (xxx = 530 - 560, in increment of 5) 132 cells: SR-66MxxxHLPro (xxx = 485 - 510, in increment of 5) 120 cells: SR-60MxxxHLPro (xxx = 440 - 465, in increment of 5) 108 cells: SR-54MxxxHLPro (xxx = 400 - 420, in increment of 5) 96 cells: SR-48MxxxHLPro (xxx = 355 - 370, in increment of 5) 84 cells: SR-42MxxxHLPro (xxx = 310 - 325, in increment of 5) 72 cells: SR-36MxxxHLPro (xxx = 265 - 280, in increment of 5)
Maximum system voltage:	1500V
Fuse rating:	25A
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)



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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: 30A

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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