

CERTIFICATE

TÜV NORD CERT GmbH

herewith declares that

JSHINE SOLAR TECHNOLOGY CO., LIMITED

ROOM A1, 11/F WINNER BUILDING, 36 MAN YUE STREET, HUNG HOM
KOWLOON, HONG KONG.

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: 2022-07-18

Valid until: 2026-09-28

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 22 406749 - 166
Manufacturer:	see Annex 1
Test Report No.:	492012112.001
File No.:	PVP07015/22P-02



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Consumer Products



Essen, 2022-07-18

Please also pay attention to the information stated overleaf.

Manufacturer:

Manufacturer 1: **Suzhou Akcome Optronics Science & Technology Co., Ltd.**

Jintang Rd, Zhangjiagang Economic Development Zone
Zhangjiagang City, Jiangsu Province, 215618, P.R. China

Factory inspection report no.: 862010243.008

Manufacturer 2: **Zhejiang Akcome Optronics Science & Technology Co., Ltd.**

Zheneng Science and Technology Industrial Park, Meishan Town
Changxing, Huzhou City, Zhejiang, P.R. China

Factory inspection report no.: 862010481.003

Manufacturer 3: **Ganzhou Akcome Optronics Science & Technology Co., Ltd.**

Jingba Industrial Zone, Jingba Town, Nankang District
Ganzhou City, Jiangxi Province, 341408, P.R. China

Factory inspection report no.: 862010369.004

Manufacturer 4: **Zhejiang Runhai New Energy Co., Ltd.**

High-tech Industrial Park, Dinghai District, Zhoushan City, Zhejiang,
P.R.China

Factory inspection report no.: 862010654.001

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 6" Bifacial Mono Solar Cells: 144 cells: JSxxx-144BMG DG (xxx = 400-425, in increment of 5) 120 cells: JSxxx-120BMG DG (xxx = 340-350, in increment of 5) 144 cells: JSxxx-144BM6 DG (xxx = 425-475, in increment of 5) 120 cells: JSxxx-120BM6 DG (xxx = 355-395, 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 A according to ANSI/UL 1703-2018 (as per ANSI/UL 790-2018)

Module types:	Double glass PV Modules with half-cut 7" Bifacial Mono Solar Cells: 144 cells: JSxxx-144BM10 DG (xxx = 520-560, in increment of 5) 120 cells: JSxxx-120BM10 DG (xxx = 435-465, in increment of 5) 108 cells: JSxxx-108BM10 DG (xxx = 390-420, 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):	3600Pa / 1600Pa
Safety factors:	1.5
Fire safety class:	Class A according to ANSI/UL 1703-2018 (as per ANSI/UL 790-2018)



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Module types:	Double glass PV Modules with half-cut 8" Bifacial Mono Solar Cells: 132 cells: JSxxx-132BM12 DG (xxx = 635-675, in increment of 5) 120 cells: JSxxx-120BM12 DG (xxx = 580-610, in increment of 5) 110 cells: JSxxx-110BM12 DG (xxx = 525-560, 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 A according to ANSI/UL 1703-2018 (as per ANSI/UL 790-2018)

Module types:	Double glass PV Modules with half-cut 6" n-type heterojunction Bifacial Mono Solar Cells: 144 cells: JSxxx-144HJT MG DG (xxx = 415-440, in increment of 5) 132 cells: JSxxx-132HJT MG DG (xxx = 380-400, in increment of 5) 120 cells: JSxxx-120HJT MG DG (xxx = 350-365, in increment of 5) 144 cells: JSxxx-144HJT M6 DG (xxx = 450-490, in increment of 5) 132 cells: JSxxx-132HJT M6 DG (xxx = 410-450, in increment of 5) 120 cells: JSxxx-120HJT M6 DG (xxx = 375-405, 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 A according to ANSI/UL 1703-2018 (as per ANSI/UL 790-2018)



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Module types:	Double glass PV Modules with half-cut 8" n-type heterojunction Bifacial Mono Solar Cells: 132 cells: JSxxx-132HJT M12 DG (xxx = 645-700, in increment of 5) 120 cells: JSxxx-120HJT M12 DG (xxx = 585-635, in increment of 5) 110 cells: JSxxx-110HJT M12 DG (xxx = 540-580, in increment of 5) 100 cells: JSxxx-100HJT M12 DG (xxx = 490-530, in increment of 5) 80 cells: JSxxx-80HJT M12 DG (xxx = 390-425, 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 A 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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