

CERTIFICATE

TÜV NORD CERT GmbH
herewith declares that

Shanghai JA Solar Technology Co., Ltd.
No. 118, Lane 3111, West Huancheng Road,
Fengxian District, Shanghai, 201401,
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: 2023-03-15
Valid until: 2026-09-29

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 Lc;
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 19 406749 - 305R12A7M14
Manufacturer: see Annex 1
Test Report No.: 492010720.024
File No.: PVP11052/22P-03



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Essen, 2023-03-15

Please also pay attention to the information stated overleaf.

Manufacturer:

Manufacturer 1: **Shanghai JA Solar Technology Co., Ltd.**
No. 118, Lane 3111, West Huancheng Road, Fengxian District
Shanghai 201401, P.R. China
Factory inspection report no.: 862010153.010

Manufacturer 2: **Hefei JA Solar Technology Co., Ltd.**
No. 999, Chang Ning Road, Hi-tech Zone, Hefei
230088, P.R. China
Factory inspection report no.: 862010241.009

Manufacturer 3: **JA Solar (Xingtai) Co., Ltd.**
No. 1688, Chang An Road, Xingtai Economic Development Area
Xingtai City, Hebei Province, 054001, P.R. China
Factory inspection report no.: 862010290.007

Manufacturer 4: **Vina Solar Technology Co., Ltd.**
E12 factory, lot CN-03, Van Trung Industrial park
21000 Bac Giang Province, Vietnam
Factory inspection report no.: 862010302.006

Manufacturer 5: **JA Solar New Energy Yangzhou Co., Ltd.**
No.1, Jianhua Road, Economic Development Zone
Yangzhou, Jiangsu Province, 225000, P.R. China
Factory inspection report no.: 862010496.003

Manufacturer 6: **Yiwu JA Solar Technology Co., Ltd.**
No. 165, Tongze Road, Yiting Town, Yiwu City,
Zhejiang Province, 322000, P.R. China.
Factory inspection report no.: 862010513.003

Manufacturer 7: **JA Solar Viet Nam Company Limited**
Lot G, Quang Chau Industrial Zone, Quang Chau Commune
Viet Yen Dist, 236110 Bac Giang Province, VIETNAM.
Factory inspection report no.: 862010560.002



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Manufacturer 8: **JA Solar New Energy Yangzhou Co., Ltd. (Jingshan Park)**
No.123, Jinshan Road, Economic Development Zone,
Yangzhou, Jiangsu Province, 225127, P.R. China

Factory inspection report no.: 862010584.002

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 Mono-crystalline Silicon Solar Cells (156mm to 158.75mm):

72 cells: JAM6(K)(DG)-72-xxx/PR/1500V (xxx=330-365, in steps of 5)
72 cells: JAM6(K)(DG)-72-xxx/4BB/1500V (xxx=320-340, in steps of 5)
72 cells: JAM72D00-xxx/PR (xxx=340-385, in steps of 5)
72 cells: JAM72D00-xxx/PR/1500V (xxx=340-385, in steps of 5)
72 cells: JAM72D00-xxx/SC (xxx=320-340, in steps of 5)
72 cells: JAM72D00-xxx/BP (xxx=330-385, in steps of 5)
72 cells: JAM72D00-xxx/BP/1500V (xxx=330-385, in steps of 5)
72 cells: JAM72D00-xxx/MB (xxx=370-380, in steps of 5)
72 cells: JAM72D00-xxx/MB/1500V (xxx=370-380, in steps of 5)
72 cells: JAM72D09-xxx/BP (xxx=360-400, in steps of 5)
72 cells: JAM72D09-xxx/BP/1500V (xxx=360-400, in steps of 5)
60 cells: JAM6(DG)-60-xxx/1500V (xxx=250-270, in steps of 5)
60 cells: JAM6(K)(DG)-60-xxx/4BB/1500V (xxx=260-285, in steps of 5)
60 cells: JAM6(K)(DG)-60-xxx/PR/1500V (xxx=270-305, in steps of 5)
60 cells: JAM6(DG)-60-xxx/4BB/1500V (xxx=260-280, in steps of 5)
60 cells: JAM60D00-xxx/PR (xxx=285-320, in steps of 5)
60 cells: JAM60D00-xxx/PR/1500V (xxx=285-320, in steps of 5)
60 cells: JAM60D00-xxx/SC (xxx=260-285, in steps of 5)
60 cells: JAM60D00-xxx/BP (xxx=275-320, in steps of 5)
60 cells: JAM60D00-xxx/BP/1500V (xxx=275-320, in steps of 5)
60 cells: JAM60D00-xxx/MB (xxx=310-315, in steps of 5)
60 cells: JAM60D00-xxx/MB/1500V (xxx=310-315, in steps of 5)
60 cells: JAM60D09-xxx/BP (xxx=300-340, in steps of 5)
60 cells: JAM60D09-xxx/BP/1500V (xxx=300-340, in steps of 5)

Maximum system voltage:

1500V

Fuse rating:

20A

Application class:

Class A

Electrical protection class:

Class II

Module types:

PV Modules with Mono-crystalline Silicon half-cut Solar Cells (156mm to 158.75mm):

72 cells: JAM72D10-xxx/MB (xxx=385-430, in steps of 5)
72 cells: JAM72D10-xxx/MB/1500V (xxx=385-430, in steps of 5)
60 cells: JAM60D10-xxx/MB (xxx=320-355, in steps of 5)
60 cells: JAM60D10-xxx/MB/1500V (xxx=320-355, in steps of 5)
72 cells: JAM72D10-xxx/BP (xxx=385-415, in steps of 5)

72 cells: JAM72D10-xxx/BP/1500V (xxx=385-415, in steps of 5)
60 cells: JAM60D10-xxx/BP (xxx=320-345, in steps of 5)
60 cells: JAM60D10-xxx/BP/1500V (xxx=320-345, in steps of 5)
78 cells: JAM78D10-xxx/MB (xxx=435-455, in steps of 5)
78 cells: JAM78D10-xxx/MB/1500V (xxx=435-455, in steps of 5)
66 cells: JAM66D10-xxx/MB (xxx=360-380, in steps of 5)
66 cells: JAM66D10-xxx/MB/1500V (xxx=360-380, in steps of 5)
72 cells: JAM72D20-xxx/MB (xxx=430-465, in steps of 5)
72 cells: JAM72D20-xxx/MB/1500V (xxx=430-465, in steps of 5)
60 cells: JAM60D20-xxx/MB (xxx=355-385, in steps of 5)
60 cells: JAM60D20-xxx/MB/1500V (xxx=355-385, in steps of 5)
72 cells: JAM72D10-xxx/TB (xxx=400-420, in steps of 5)
72 cells: JAM72D10-xxx/TB/1500V (xxx=400-420, in steps of 5)
60 cells: JAM60D10-xxx/TB (xxx=335-350, in steps of 5)
60 cells: JAM60D10-xxx/TB/1500V (xxx=335-350, in steps of 5)

Maximum system voltage: 1500V
Fuse rating: 20A or 25A
Application class: Class A
Electrical protection class: Class II

Module types:

PV Modules with 182mm Mono-crystalline Silicon half-cut Solar Cells:

78 cells: JAM78D30-xxx/MB (xxx=580-605, in steps of 5)
78 cells: JAM78D30-xxx/MB/1500V (xxx=580-605, in steps of 5)
72 cells: JAM72D30-xxx/MB (xxx=505-555, in steps of 5)
72 cells: JAM72D30-xxx/MB/1500V (xxx=505-555, in steps of 5)
72 cells: JAM72D30-xxx/MB/F (xxx=505-555, in steps of 5)
72 cells: JAM72D30-xxx/MB/F/1500V (xxx=505-555, in steps of 5)
66 cells: JAM66D30-xxx/MB (xxx=465-505, in steps of 5)
66 cells: JAM66D30-xxx/MB/1500V (xxx=465-505, in steps of 5)
66 cells: JAM66D30-xxx/MB/F (xxx=465-505, in steps of 5)
66 cells: JAM66D30-xxx/MB/F/1500V (xxx=465-505, in steps of 5)
60 cells: JAM60D30-xxx/MB (xxx=435-460, in steps of 5)
60 cells: JAM60D30-xxx/MB/1500V (xxx=435-460, in steps of 5)
54 cells: JAM54D30-xxx/MB (xxx=390-415, in steps of 5)
54 cells: JAM54D30-xxx/MB/1500V (xxx=390-415, in steps of 5)
54 cells: JAM54D31-xxx/MB (xxx=395-400, in steps of 5)
54 cells: JAM54D31-xxx/MB/1500V (xxx=395-400, in steps of 5)
78 cells: JAM78D30-xxx/GB (xxx=585-610, in steps of 5)



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78 cells: JAM78D30-xxx/GB/1500V (xxx=585-610, in steps of 5)
72 cells: JAM72D30-xxx/GB (xxx=540-560, in steps of 5)
72 cells: JAM72D30-xxx/GB/1500V (xxx=540-560, in steps of 5)
66 cells: JAM66D30-xxx/GB (xxx=495-510, in steps of 5)
66 cells: JAM66D30-xxx/GB/1500V (xxx=495-510, in steps of 5)
60 cells: JAM60D30-xxx/GB (xxx=450-470, in steps of 5)
60 cells: JAM60D30-xxx/GB/1500V (xxx=450-470, in steps of 5)
54 cells: JAM54D30-xxx/GB (xxx=405-420, in steps of 5)
54 cells: JAM54D30-xxx/GB/1500V (xxx=405-420, in steps of 5)
54 cells: JAM54D31-xxx/GB (xxx=410-420, in steps of 5)
54 cells: JAM54D31-xxx/GB/1500V (xxx=410-420, in steps of 5)
72 cells: JAM72D30-xxx/HB (xxx=530-560, in steps of 5)
72 cells: JAM72D30-xxx/HB/1500V (xxx=530-560, in steps of 5)
72 cells: JAM72D30-xxx/TB (xxx=540-580, in steps of 5)
72 cells: JAM72D30-xxx/TB/1500V (xxx=540-580, in steps of 5)
78 cells: JAM78D40-xxx/MB (xxx=580-630, in steps of 5)
78 cells: JAM78D40-xxx/MB/1500V (xxx=580-630, in steps of 5)
72 cells: JAM72D40-xxx/MB (xxx=540-580, in steps of 5)
72 cells: JAM72D40-xxx/MB/1500V (xxx=540-580, in steps of 5)
66 cells: JAM66D40-xxx/MB (xxx=500-530, in steps of 5)
66 cells: JAM66D40-xxx/MB/1500V (xxx=500-530, in steps of 5)
60 cells: JAM60D40-xxx/MB (xxx=455-480, in steps of 5)
60 cells: JAM60D40-xxx/MB/1500V (xxx=455-480, in steps of 5)
54 cells: JAM54D40-xxx/MB (xxx=405-435, in steps of 5)
54 cells: JAM54D40-xxx/MB/1500V (xxx=405-435, in steps of 5)
78 cells: JAM78D40-xxx/GB (xxx=580-635, in steps of 5)
78 cells: JAM78D40-xxx/GB/1500V (xxx=580-635, in steps of 5)
72 cells: JAM72D40-xxx/GB (xxx=540-585, in steps of 5)
72 cells: JAM72D40-xxx/GB/1500V (xxx=540-585, in steps of 5)
66 cells: JAM66D40-xxx/GB (xxx=500-535, in steps of 5)
66 cells: JAM66D40-xxx/GB/1500V (xxx=500-535, in steps of 5)
60 cells: JAM60D40-xxx/GB (xxx=455-485, in steps of 5)
60 cells: JAM60D40-xxx/GB/1500V (xxx=455-485, in steps of 5)
54 cells: JAM54D40-xxx/GB (xxx=405-440, in steps of 5)
54 cells: JAM54D40-xxx/GB/1500V (xxx=405-440, in steps of 5)
54 cells: JAM54D41-xxx/GB (xxx=415-435, in steps of 5)
54 cells: JAM54D41-xxx/GB/1500V (xxx=415-435, in steps of 5)

Maximum system voltage: 1500V

Fuse rating: 30A



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Application class: Class A

Electrical protection class: Class II

Module types: **PV Modules with 210mm Mono-crystalline Silicon 1/3-cut Solar Cells:**

50 cells: JAM50D40-xxx/MB (xxx=485-500, in steps of 5)

50 cells: JAM50D40-xxx/MB/1500V (xxx=485-500, in steps of 5)

Maximum system voltage: 1500V

Fuse rating: 30A

Application class: Class A

Electrical protection class: Class II

Module types: **PV Modules with 210mm Mono-crystalline Silicon 1/2-cut Solar Cells:**

66 cells: JAM66D35-xxx/MB (xxx=650-665, in steps of 5)

66 cells: JAM66D35-xxx/MB/1500V (xxx=650-665, in steps of 5)

60 cells: JAM60D35-xxx/MB (xxx=590-605, in steps of 5)

60 cells: JAM60D35-xxx/MB/1500V (xxx=590-605, in steps of 5)

Maximum system voltage: 1500V

Fuse rating: 30A

Application class: Class A

Electrical protection class: Class II

Module types: **PV Modules with Poly-crystalline Silicon Solar Cells (156mm to 158.75mm):**

72 cells: JAP6(DG)-72-xxx/4BB/1500V (xxx=305-325, in steps of 5)

72 cells: JAP6(DG)-72-xxx/3BB/1500V (xxx=305-315, in steps of 5)

72 cells: JAP6(DG)-72-xxx/4BB/RE/1500V (xxx=310-335, in steps of 5)

72 cells: JAP6(K)(DG)-72-xxx/4BB/1500V (xxx=310-335, in steps of 5)

72 cells: JAP72D00-xxx/SC (xxx=305-345, in steps of 5)

72 cells: JAP72D00-xxx/SC/1500V (xxx=310-340, in steps of 5)

72 cells: JAP72D00-xxx/PR (xxx=330-350, in steps of 5)

72 cells: JAP72D00-xxx/PR/1500V (xxx=330-345, in steps of 5)

72 cells: JAP72D09-xxx/SC (xxx=325-345, in steps of 5)

72 cells: JAP72D09-xxx/SC/1500V (xxx=330-345, in steps of 5)

60 cells: JAP6(DG)-60-xxx/4BB/1500V (xxx=250-275, in steps of 5)

60 cells: JAP6(DG)-60-xxx/3BB/1500V (xxx=245-265, in steps of 5)

60 cells: JAP6(DG)-60-xxx/4BB/RE/1500V (xxx=255-280, in steps of 5)



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60 cells: JAP6(K)(DG)-60-xxx/4BB/1500V (xxx=255-280, in steps of 5)

60 cells: JAP60D00-xxx/SC (xxx=255-290, in steps of 5)

60 cells: JAP60D00-xxx/SC/1500V (xxx=260-285, in steps of 5)

60 cells: JAP60D00-xxx/PR (xxx=275-290, in steps of 5)

60 cells: JAP60D00-xxx/PR/1500V (xxx=275-290, in steps of 5)

60 cells: JAP60D09-xxx/SC (xxx=270-290, in steps of 5)

60 cells: JAP60D09-xxx/SC/1500V (xxx=275-290, in steps 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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