

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: 2023-05-19
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 - 305R13A7M15
Manufacturer:	see Annex 1
Test Report No.:	492010720.025
File No.:	PVP04070/23P-03



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Essen, 2023-05-19

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)



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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)
72 cells: JAM72D40-xxx/LB (xxx=575-600, in steps of 5)
72 cells: JAM72D40-xxx/LB/1500V (xxx=575-600, in steps of 5)
54 cells: JAM54D40-xxx/LB (xxx=420-450, in steps of 5)



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54 cells: JAM54D40-xxx/LB/1500V (xxx=420-450, in steps of 5)
54 cells: JAM54D41-xxx/LB (xxx=420-440, in steps of 5)
54 cells: JAM54D41-xxx/LB/1500V (xxx=420-440, in steps of 5)
72 cells: JAM72D42-xxx/LB (xxx=605-630, in steps of 5)
72 cells: JAM72D42-xxx/LB/1500V (xxx=605-630, in steps of 5)
72 cells: JAM72D30-xxx/LB (xxx=555-575, in steps of 5)
72 cells: JAM72D30-xxx/LB/1500V (xxx=555-575, in steps of 5)
54 cells: JAM54D30-xxx/LB (xxx=420-430, in steps of 5)
54 cells: JAM54D30-xxx/LB/1500V (xxx=420-430, 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 1/3-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)



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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)
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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