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# Certificate

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This certifies that the company:

**Shanghai JA Solar Technology Co., Ltd.**
No. 118, Lane 3111, West Huancheng Road,
Fengxian District, 201401 Shanghai,
P.R. China

is authorized to provide the product(s) mentioned below with the mark as illustrated.

| | |
|---|---|
| Manufacturer and factory(-ies): | See Annex 1 |
| Description of product(s) (details see Annex 2): | **Crystalline Silicon Terrestrial Photovoltaic (PV) Modules** |
| Trademark: | See Annex 1 |
| Certification scheme: | P12.4-VA-01 Rev. 01 / 01.26 Certification scheme type: Type 5 acc. to ISO/IEC 17067:2013 |
| Certification fundamental(s): | IEC 61701:2020 / EN IEC 61701:2020 |

It is certified by TÜV NORD CERT GmbH that the product(s) described above has(have) been assessed according to the certification program mentioned above and found in compliance with the requirements of above specified certification fundamental(s). This certification is based on evaluation results as documented in test report(s) referenced below and production site(s) audit results as documented in factory inspection report(s) referenced in Annex 1. This certificate is valid in conjunction with these quoted report(s).

| | |
|---|---|
| Registration no.: | 44 780 23 406749 - 191R18A10M19 |
| Report no.: | 492012551.021 |
| File no.: | PVP05038/25P-01 |
| Remark: | Test Method 6<br>Test duration: 1344 hours |

Valid from: 2026-06-17
Valid until: 2031-03-29

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Please also pay attention to the information stated overleaf.

Scan the QR code or visit cis.tuv-nord.com.cn to verify the validity of the certificate

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# Annex 1

to certificate registration no. 44 780 23 406749 - 191R18A10M19

| | |
|---|---|
| **Manufacturer:** | **Shanghai JA Solar Technology Co., Ltd.**<br>No. 118, Lane 3111, West Huancheng Road, Fengxian District<br>201401 Shanghai, P.R. China |
| **Trademark:** | JA SOLAR<br>晶 澳 太 阳 能 |
| **Factory 1:** | **Shanghai JA Solar Technology Co., Ltd.**<br>No. 118, Lane 3111, West Huancheng Road, Fengxian District<br>201401 Shanghai, P.R. China |
| Factory inspection report no.: | 862010153.014 |
| **Factory 2:** | **Hefei JA Solar Technology Co., Ltd.**<br>No. 999, Changning Road, Hi-tech Zone, 230088 Hefei City, Anhui Province, P.R. China. |
| Factory inspection report no.: | 862010241.012 |
| **Factory 3:** | **JA Solar (Xingtai) Co., Ltd.**<br>No. 1688, Chang An Road, Xingtai Economic Development Area<br>054000 Xingtai City, Hebei Province, 054001, P.R. China |
| Factory inspection report no.: | 862010290.010 |
| **Factory 4:** | **JA Solar New Energy Yangzhou Co., Ltd.**<br>No.1, Jinhui Road, Economic Development Zone<br>225131 Yangzhou city, Jiangsu Province, 225131, P.R. China. |
| Factory inspection report no.: | 862010496.006 |
| **Factory 5:** | **Yiwu JA Solar Technology Co., Ltd.**<br>No. 165, Tongze Road, Yiting Town, 322000 Yiwu City,<br>Zhejiang Province, P.R. China. |
| Factory inspection report no.: | 862010513.006 |
| **Factory 6:** | **JA Solar Viet Nam Company Limited**<br>Lot G, Quang Chau Industrial park, Nenh Ward, Bac Ninh Province<br>Vietnam |
| Factory inspection report no.: | 862010560.005 |

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| | |
|---|---|
| **Factory 7:** | **JA Solar New Energy Yangzhou Co., Ltd. (Jingshan Park)**<br>No.123, Jinshan Road, Economic Development Zone,<br>Yangzhou, Jiangsu Province, 225131, P.R. China. |
| Factory inspection report no.: | 862010584.005 |
| **Factory 8:** | **Dongtai JA Solar Technology Co., Ltd.**<br>No.8 Zaofeng North Road, Dongtai High-tech Zone, Dongtai City, 224248 Yancheng City, Jiangsu Province, PEOPLE'S REPUBLIC OF CHINA |
| Factory inspection report no.: | 862010802.003 |
| **Factory 9:** | **QuJing JA Solar Technology Co., Ltd.**<br>North of Nanhai Avenue and East of Shaoxi Road, Qujing Economic and Technological Development Zone, 655000 Qujing City, Yunnan Province, PEOPLE'S REPUBLIC OF CHINA |
| Factory inspection report no.: | 862010866.003 |
| **Factory 10:** | **Ordos JA Solar Technology Co., Ltd.**<br>Room 2007, Office Builiding, High-tech Industrial Development Zone, Dongsheng District Equipment Manufacturing Base, 017000 Ordos City, Inner Mongolia, PEOPLE'S REPUBLICOF CHINA |
| Factory inspection report no.: | 862011003.002 |
| **Factory 11:** | **Inner Mongolia JA Naoer New Energy Co., Ltd.**<br>No.4 Xinhua East Street, Economic andTechnological Development Zone, Bayannur City 015000 Inner Mongolia Autonomous Region, PEOPLE'S REPUBLIC OF CHINA |
| Factory inspection report no.: | 862011027.002 |
| **Factory 12:** | **MEM PANEL SOLAR ENERJI SANAYI VETICARET A.S**<br>Organized Industrial Site 3. Street No: 4 Onikisubat, 46050 Kahramanmaras, TURKIYE |
| Factory inspection report no.: | 862011040.001 |
| **Factory 13:** | **American Panel Solutions LLC**<br>1975 South 99th Avenue, Phoenix, AZ85353, USA |
| Factory inspection report no.: | 862011080.001 |

Remark: Factory inspection is mandatory to be performed annually. Please refer to factory inspection report for detailed information.

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# Annex 2

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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(L)-72- xxx (xxx=295-335, in steps of 5)
72 cells: JAM6-72- xxx/SI (xxx=285-325, in steps of 5)
72 cells: JAM6(R)-72-xxx (xxx=295-340, in steps of 5)
72 cells: JAM6(R)-72-xxx/PR (xxx=330-350, in steps of 5)
72 cells: JAM6-72-xxx/PR (xxx=325-345, in steps of 5)
72 cells: JAM6(L)-72-xxx/PR (xxx=325-345, in steps of 5)
72 cells: JAM6(K)-72-xxx/4BB (xxx=320-345, in steps of 5)
72 cells: JAM6(K)-72-xxx/PR (xxx=325-370, in steps of 5)
72 cells: JAM72S02-xxx/PR (xxx=325-390, in steps of 5)
72 cells: JAM72S01-xxx/PR/1000V (xxx=345-390, in steps of 5)
72 cells: JAM72S01-xxx/SC/1000V (xxx=320-365, in steps of 5)
72 cells: JAM72S01-xxx/MR/1000V (xxx=365-385, in steps of 5)
72 cells: JAM72S09-xxx/PR/1000V (xxx=370-405, in steps of 5)
72 cells: JAM72S09-xxx/BP/1000V (xxx=375-385, in steps of 5)
72 cells: JAM72S02-xxx/PR/1000V (xxx=345-390, in steps of 5)
72 cells: JAM72S02-xxx/SC/1000V (xxx=320-365, in steps of 5)
72 cells: JAM72S02-xxx/MR/1000V (xxx=365-385, in steps of 5)
72 cells: JAM72S12-xxx/PR/1000V (xxx=365-385, in steps of 5)
60 cells: JAM6(L)-60-xxx (xxx=255-280, in steps of 5)
60 cells: JAM6-60-xxx/SI (xxx=235-280, in steps of 5)
60 cells: JAM6(FA)-60-xxx/SI (xxx=255-275, in steps of 5)
60 cells: JAM6(R)(FA)-60-xxx (xxx=260-280, in steps of 5)
60 cells: JAM6(R)-60-xxx (xxx=255-280, in steps of 5)
60 cells: JAM6(R)-60-xxx/PR (xxx=280-300, in steps of 5)
60 cells: JAM6-60-xxx/PR (xxx=275-295, in steps of 5)
60 cells: JAM6(L)-60-xxx/PR (xxx=270-295, in steps of 5)
60 cells: JAM6(K)-60-xxx/4BB (xxx=265-285, in steps of 5)
60 cells: JAM6(K)-60-xxx/PR (xxx=275-310, in steps of 5)
60 cells: JAM60S02-xxx/PR (xxx=280-325, in steps of 5)
60 cells: JAM60S01-xxx/PR/1000V (xxx=285-325, in steps of 5)
60 cells: JAM60S01-xxx/SC/1000V (xxx=265-305, in steps of 5)
60 cells: JAM60S01-xxx/MR/1000V (xxx=305-320, in steps of 5)
60 cells: JAM60S09-xxx/PR/1000V (xxx=310-335, in steps of 5)
60 cells: JAM60S09-xxx/BP/1000V (xxx=315-320, in steps of 5)
60 cells: JAM60S02-xxx/PR/1000V (xxx=285-325, in steps of 5)

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|---|---|
| | 60 cells: JAM60S02-xxx/SC/1000V (xxx=265-305, in steps of 5)<br>60 cells: JAM60S02-xxx/MR/1000V (xxx=305-320, in steps of 5)<br>60 cells: JAM60S12-xxx/PR/1000V (xxx=305-330, in steps of 5)<br>48 cells: JAM6(FA)-48-xxx/SI (xxx=205-220, in steps of 5)<br>48 cells: JAM6(R)(FA)-48-xxx (xxx=210-225, in steps of 5)<br>48 cells: JAM6(R)-48-xxx/PR (xxx=220-235, in steps of 5)<br>48 cells: JAM6-48-xxx/PR (xxx=215-235, in steps of 5)<br>48 cells: JAM6(L)-48-xxx/PR (xxx=215-235, in steps of 5)<br>48 cells: JAM6(K)-48xxx/4BB (xxx=210-225, in steps of 5)<br>48 cells: JAM6(K)-48-xxx/PR (xxx=220-235, in steps of 5) |
| Maximum system voltage: | 1000V |
| Maximum overcurrent protection rating: | 20A |
| Electrical protection class: | Class II |
| 98th percentile module operating temperature ($T_{98}$): | 70°C |
| Module types: | **PV Modules with 125mm Mono-crystalline Silicon Solar Cells:**<br>72 cells: JAM5-72-xxx/SI (xxx=180-210, in steps of 5)<br>72 cells: JAM5(L)-72-xxx/SI (xxx=180-220, in steps of 5)<br>72 cells: JAM5(R)-72-xxx (xxx=195-220, in steps of 5) |
| Maximum system voltage: | 1000V |
| Maximum overcurrent protection rating: | 10A |
| Electrical protection class: | Class II |
| 98th percentile module operating temperature ($T_{98}$): | 70°C |
| Module types: | **PV Modules with Mono-crystalline Silicon half-cut Solar Cells (156mm to 158.75mm):**<br>72 cells: JAM72S03-xxx/PR/1000V (xxx=360-395, in steps of 5)<br>72 cells: JAM72S10-xxx/PR/1000V (xxx=380-410, in steps of 5)<br>72 cells: JAM72S10-xxx/BP/1000V (xxx=385-400, in steps of 5)<br>72 cells: JAM72S10-xxx/MR/1000V (xxx=390-430, in steps of 5)<br>72 cells: JAM72S10-xxx/MB/1000V (xxx=395-415, in steps of 5)<br>72 cells: JAM72S08-xxx/PR/1000V (xxx=360-395, in steps of 5)<br>72 cells: JAM72S17-xxx/PR/1000V (xxx=380-390, in steps of 5) |

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|---|---|
| | 72 cells: JAM72S17-xxx/MR/1000V (xxx=390-430, in steps of 5)<br>72 cells: JAM72S17-xxx/GR/1000V (xxx=385-400, in steps of 5)<br>60 cells: JAM60S03-xxx/PR/1000V (xxx=300-330, in steps of 5)<br>60 cells: JAM60S10-xxx/PR/1000V (xxx=315-345, in steps of 5)<br>60 cells: JAM60S10-xxx/BP/1000V (xxx=320-330, in steps of 5)<br>60 cells: JAM60S10-xxx/MR/1000V (xxx=325-355, in steps of 5)<br>60 cells: JAM60S10-xxx/MB/1000V (xxx=330-345, in steps of 5)<br>60 cells: JAM60S08-xxx/PR/1000V (xxx=300-330, in steps of 5)<br>60 cells: JAM60S17-xxx/PR/1000V (xxx=315-325, in steps of 5)<br>60 cells: JAM60S17-xxx/MR/1000V (xxx=315-355, in steps of 5)<br>78 cells: JAM78S10-xxx/MR/1000V (xxx=435-465, in steps of 5)<br>66 cells: JAM66S10-xxx/MR/1000V (xxx=345-390, in steps of 5) |
| Maximum system voltage: | 1000V |
| Maximum overcurrent protection rating: | 20A |
| Electrical protection class: | Class II |
| 98th percentile module operating temperature ($T_{98}$): | 70°C |
| Module types: | **PV Modules with Mono-crystalline Silicon half-cut Solar Cells (166mm to 168mm):**<br>72 cells: JAM72S20-xxx/MR/1000V (xxx=430-470, in steps of 5)<br>72 cells: JAM72S20-xxx/MB/1000V (xxx=450-465, in steps of 5)<br>60 cells: JAM60S20-xxx/MR/1000V (xxx=355-390, in steps of 5)<br>60 cells: JAM60S21-xxx/MR/1000V (xxx=355-390, in steps of 5)<br>60 cells: JAM60S20-xxx/MB/1000V (xxx=375-390, in steps of 5) |
| Maximum system voltage: | 1000V |
| Maximum overcurrent protection rating: | 25A |
| Electrical protection class: | Class II |
| 98th percentile module operating temperature ($T_{98}$): | 70°C |
| Module types: | **PV Modules with 182mm Mono-crystalline Silicon half-cut Solar Cells:**<br>60 cells: JAM60S30-xxx/MR/1000V (xxx=435-460, in steps of 5)<br>66 cells: JAM66S30-xxx/MR/1000V (xxx=470-510, in steps of 5)<br>72 cells: JAM72S30-xxx/MR/1000V (xxx=510-560, in steps of 5) |

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78 cells: JAM78S30-xxx/MR/1000V (xxx=580-605, in steps of 5)
54 cells: JAM54S30-xxx/MR/1000V (xxx=390-425, in steps of 5)
78 cells: JAM78S30-xxx/GR/1000V (xxx=575-610, in steps of 5)
72 cells: JAM72S30-xxx/GR/1000V (xxx=510-560, in steps of 5)
66 cells: JAM66S30-xxx/GR/1000V (xxx=500-510, in steps of 5)
60 cells: JAM60S30-xxx/GR/1000V (xxx=445-470, in steps of 5)
54 cells: JAM54S30-xxx/GR/1000V (xxx=400-420, in steps of 5)
72 cells: JAM72S31-xxx/MR/1000V (xxx=510-545, in steps of 5)
66 cells: JAM66S31-xxx/MR/1000V (xxx=470-500, in steps of 5)
60 cells: JAM60S31-xxx/MR/1000V (xxx=425-450, in steps of 5)
54 cells: JAM54S31-xxx/MR/1000V (xxx=385-415, in steps of 5)
78 cells: JAM78S31-xxx/GR/1000V (xxx=570-590, in steps of 5)
72 cells: JAM72S31-xxx/GR/1000V (xxx=510-545, in steps of 5)
66 cells: JAM66S31-xxx/GR/1000V (xxx=480-500, in steps of 5)
60 cells: JAM60S31-xxx/GR/1000V (xxx=435-450, in steps of 5)
54 cells: JAM54S31-xxx/GR/1000V (xxx=395-415, in steps of 5)
72 cells: JAM72S40-xxx/GR/1000V (xxx=540-575, in steps of 5)
66 cells: JAM66S40-xxx/GR/1000V (xxx=495-525, in steps of 5)
60 cells: JAM60S40-xxx/GR/1000V (xxx=450-480, in steps of 5)
54 cells: JAM54S40-xxx/GR/1000V (xxx=405-430, in steps of 5)
72 cells: JAM72S41-xxx/GR/1000V (xxx=540-570, in steps of 5)
66 cells: JAM66S41-xxx/GR/1000V (xxx=495-525, in steps of 5)
60 cells: JAM60S41-xxx/GR/1000V (xxx=450-475, in steps of 5)
54 cells: JAM54S41-xxx/GR/1000V (xxx=405-430, in steps of 5)
72 cells: JAM72S30-xxx/LR/1000V (xxx=555-580, in steps of 5)
54 cells: JAM54S30-xxx/LR/1000V (xxx=415-435, in steps of 5)
54 cells: JAM54S31-xxx/LR/1000V (xxx=415-425, in steps of 5)
72 cells: JAM72S30-xxx/MB/1000V (xxx=535-550, in steps of 5)
72 cells: JAM72S31-xxx/MB/1000V (xxx=525-540, in steps of 5)
54 cells: JAM54S30-xxx/MB/1000V (xxx=385-410, in steps of 5)
54 cells: JAM54S31-xxx/MB/1000V (xxx=385-405, in steps of 5)
54 cells: JAM54S30-xxx/LB/1000V (xxx=410-425, in steps of 5)
54 cells: JAM54S31-xxx/LB/1000V (xxx=410-415, in steps of 5)
72 cells: JAM72S40-xxx/MR/1000V (xxx=560-590, in steps of 5)

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| Maximum system voltage: | 1000V |
| Maximum overcurrent protection rating: | 25A |

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|---|---|
| Electrical protection class: | Class II |
| 98th percentile module operating temperature ($T_{98}$): | 70°C |
| Module types: | **PV Modules with 210mm Mono-crystalline Silicon 1/3-cut Solar Cells:**<br>50 cells: JAM50S40-xxx/MR/1000V (xxx=490-500, in steps of 5)<br>66 cells: JAM66S35-xxx/MR/1000V (xxx=650-670, in steps of 5)<br>60 cells: JAM60S35-xxx/MR/1000V (xxx=590-610, in steps of 5) |
| Maximum system voltage: | 1000V |
| Maximum overcurrent protection rating: | 25A |
| Electrical protection class: | Class II |
| 98th percentile module operating temperature ($T_{98}$): | 70°C |
| Module types: | **PV Modules with 182mm Mono-crystalline Silicon 1/5-cut Solar Cells:**<br>76 cells: JAM76S11-xxx/PR(B)/1000V (xxx=395-415, in steps of 5) |
| Maximum system voltage: | 1000V |
| Maximum overcurrent protection rating: | 25A |
| Electrical protection class: | Class II |
| 98th percentile module operating temperature ($T_{98}$): | 70°C |
| Module types: | **PV Modules with Poly-crystalline Silicon Solar Cells (156mm to 158.75mm):**<br>72 cells: JAP6-72-xxx/3BB (xxx=250-330, in steps of 5)<br>72 cells: JAP6-72-xxx/4BB (xxx=305-330, in steps of 5)<br>72 cells: JAP6-72-xxx/RE (xxx=305-330, in steps of 5)<br>72 cells: JAP6-72-xxx/4BB/RE (xxx=305-330, in steps of 5)<br>72 cells: JAP6(K)-72-xxx/4BB (xxx=310-330, in steps of 5)<br>72 cells: JAP72S01-xxx/SC/1000V (xxx=310-345, in steps of 5)<br>72 cells: JAP72S01-xxx/PR/1000V (xxx=330-345, in steps of 5)<br>72 cells: JAP72S09-xxx/SC/1000V (xxx=320-345, in steps of 5)<br>72 cells: JAP72S01-xxx/MS/1000V (xxx=325-340, in steps of 5)<br>72 cells: JAP72S02-xxx/SC/1000V (xxx=310-345, in steps of 5)<br>72 cells: JAP72S02-xxx/PR/1000V (xxx=330-345, in steps of 5) |

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| | |
|---|---|
| | 60 cells: JAP6-60-xxx/3BB (xxx=240-275, in steps of 5)<br>60 cells: JAP6(FA)-60-xxx/3BB (xxx=250-270, in steps of 5)<br>60 cells: JAP6-60-xxx/4BB (xxx=250-275, in steps of 5)<br>60 cells: JAP6-60-xxx/RE (xxx=255-280, in steps of 5)<br>60 cells: JAP6-60-xxx/4BB/RE (xxx=255-280, in steps of 5)<br>60 cells: JAP6(K)-60-xxx/4BB (xxx=255-275, in steps of 5)<br>60 cells: JAP60S01-xxx/SC/1000V (xxx=255-290, in steps of 5)<br>60 cells: JAP60S01-xxx/PR/1000V (xxx=275-285, in steps of 5)<br>60 cells: JAP60S09-xxx/SC/1000V (xxx=265-290, in steps of 5)<br>60 cells: JAP60S01-xxx/MS/1000V (xxx=270-280, in steps of 5)<br>60 cells: JAP60S02-xxx/SC/1000V (xxx=255-290, in steps of 5)<br>60 cells: JAP60S02-xxx/PR/1000V (xxx=275-285, in steps of 5)<br>54 cells: JAP54S01-xxx/SC (xxx=245-255, in steps of 5)<br>48 cells: JAP6(FA)-48-xxx/3BB (xxx=200-220, in steps of 5)<br>48 cells: JAP6-48-xxx/3BB (xxx=200-220, in steps of 5) |
| Maximum system voltage: | 1000V |
| Maximum overcurrent protection rating: | 20A |
| Electrical protection class: | Class II |
| 98th percentile module operating temperature ($T_{98}$): | 70°C |
| Module types: | **PV Modules with Poly-crystalline Silicon half-cut Solar Cells (156mm to 158.75mm):**<br>72 cells: JAP72S03-xxx/SC/1000V (xxx=320-345, in steps of 5)<br>72 cells: JAP72S03-xxx/PR/1000V (xxx=335-355, in steps of 5)<br>72 cells: JAP72S10-xxx/SC/1000V (xxx=335-350, in steps of 5)<br>72 cells: JAP72S03-xxx/MS/1000V (xxx=320-345, in steps of 5)<br>72 cells: JAP72S08-xxx/SC/1000V (xxx=320-345, in steps of 5)<br>72 cells: JAP72S08-xxx/PR/1000V (xxx=335-355, in steps of 5)<br>60 cells: JAP60S03-xxx/SC/1000V (xxx=270-290, in steps of 5)<br>60 cells: JAP60S03-xxx/PR/1000V (xxx=280-295, in steps of 5)<br>60 cells: JAP60S10-xxx/SC/1000V (xxx=275-290, in steps of 5)<br>60 cells: JAP60S03-xxx/MS/1000V (xxx=270-285, in steps of 5)<br>60 cells: JAP60S08-xxx/SC/1000V (xxx=270-290, in steps of 5)<br>60 cells: JAP60S08-xxx/PR/1000V (xxx=280-295, in steps of 5) |
| Maximum system voltage: | 1000V |

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| | |
|---|---|
| Maximum overcurrent protection rating: | 20A |
| Electrical protection class: | Class II |
| 98th percentile module operating temperature ($T_{98}$): | 70°C |

Module types:

**PV Modules with Mono-crystalline Silicon Solar Cells (156mm to 158.75mm):**
72 cells: JAM6(K)-72-xxx/PR/1500V (xxx=345-370, in steps of 5)
72 cells: JAM6(K)-72-xxx/4BB/1500V (xxx=320-345, in steps of 5)
72 cells: JAM72S01-xxx/PR (xxx=345-390, in steps of 5)
72 cells: JAM72S01-xxx/SC/1500V (xxx=320-365, in steps of 5)
72 cells: JAM72S01-xxx/MR/1500V (xxx=365-385, in steps of 5)
72 cells: JAM72S09-xxx/PR/1500V (xxx=370-405, in steps of 5)
72 cells: JAM72S09-xxx/BP/1500V (xxx=375-385, in steps of 5)
72 cells: JAM72S02-xxx/PR/1500V (xxx=345-390, in steps of 5)
72 cells: JAM72S02-xxx/SC/1500V (xxx=320-365, in steps of 5)
72 cells: JAM72S02-xxx/MR/1500V (xxx=365-385, in steps of 5)
72 cells: JAM72S12-xxx/PR/1500V (xxx=365-385, in steps of 5)
60 cells: JAM6(K)-60-xxx/PR/1500V (xxx=285-310, in steps of 5)
60 cells: JAM6(K)-60-xxx/4BB/1500V (xxx=265-285, in steps of 5)
60 cells: JAM60S01-xxx/PR/1500V (xxx=285-325, in steps of 5)
60 cells: JAM60S01-xxx/SC/1500V (xxx=265-305, in steps of 5)
60 cells: JAM60S01-xxx/MR/1500V (xxx=305-320, in steps of 5)
60 cells: JAM60S09-xxx/PR/1500V (xxx=310-335, in steps of 5)
60 cells: JAM60S09-xxx/BP/1500V (xxx=315-320, in steps of 5)
60 cells: JAM60S02-xxx/PR/1500V (xxx=285-325, in steps of 5)
60 cells: JAM60S02-xxx/SC/1500V (xxx=265-305, in steps of 5)
60 cells: JAM60S02-xxx/MR/1500V (xxx=305-320, in steps of 5)
60 cells: JAM60S12-xxx/PR/1500V (xxx=305-330, in steps of 5)
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)

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|---|---|
| | 72 cells: JAM72D09-xxx/BP (xxx=360-400, in steps of 5)<br>72 cells: JAM72D09-xxx/BP/1500V (xxx=360-400, in steps of 5)<br>60 cells: JAM6(DG)-60-xxx/1500V (xxx=250-270, in steps of 5)<br>60 cells: JAM6(K)(DG)-60-xxx/4BB/1500V (xxx=260-285, in steps of 5)<br>60 cells: JAM6(K)(DG)-60-xxx/PR/1500V (xxx=270-305, in steps of 5)<br>60 cells: JAM6(DG)-60-xxx/4BB/1500V (xxx=260-280, in steps of 5)<br>60 cells: JAM60D00-xxx/PR (xxx=285-320, in steps of 5)<br>60 cells: JAM60D00-xxx/PR/1500V (xxx=285-320, in steps of 5)<br>60 cells: JAM60D00-xxx/SC (xxx=260-285, in steps of 5)<br>60 cells: JAM60D00-xxx/BP (xxx=275-320, in steps of 5)<br>60 cells: JAM60D00-xxx/BP/1500V (xxx=275-320, in steps of 5)<br>60 cells: JAM60D00-xxx/MB (xxx=310-315, in steps of 5)<br>60 cells: JAM60D00-xxx/MB/1500V (xxx=310-315, in steps of 5)<br>60 cells: JAM60D09-xxx/BP (xxx=300-340, in steps of 5)<br>60 cells: JAM60D09-xxx/BP/1500V (xxx=300-340, in steps of 5) |
| Maximum system voltage: | 1500V |
| Maximum overcurrent protection rating: | 20A |
| Electrical protection class: | Class II |
| 98th percentile module operating temperature ($T_{98}$): | 70°C |
| Module types: | **PV Modules with Mono-crystalline Silicon half-cut Solar Cells (156mm to 158.75mm):**<br>72 cells: JAM72S03-xxx/PR/1500V (xxx=360-395, in steps of 5)<br>72 cells: JAM72S10-xxx/PR/1500V (xxx=380-410, in steps of 5)<br>72 cells: JAM72S10-xxx/BP/1500V (xxx=385-400, in steps of 5)<br>72 cells: JAM72S10-xxx/MR/1500V (xxx=390-430, in steps of 5)<br>72 cells: JAM72S10-xxx/MB/1500V (xxx=395-415, in steps of 5)<br>72 cells: JAM72S08-xxx/PR/1500V (xxx=360-395, in steps of 5)<br>72 cells: JAM72S17-xxx/PR/1500V (xxx=380-390, in steps of 5)<br>72 cells: JAM72S17-xxx/MR/1500V (xxx=390-430, in steps of 5)<br>72 cells: JAM72S17-xxx/GR/1500V (xxx=385-400, in steps of 5)<br>60 cells: JAM60S03-xxx/PR/1500V (xxx=300-330, in steps of 5)<br>60 cells: JAM60S10-xxx/PR/1500V (xxx=315-345, in steps of 5)<br>60 cells: JAM60S10-xxx/BP/1500V (xxx=320-330, in steps of 5)<br>60 cells: JAM60S10-xxx/MR/1500V (xxx=325-355, in steps of 5)<br>60 cells: JAM60S10-xxx/MB/1500V (xxx=330-345, in steps of 5) |

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60 cells: JAM60S20-xxx/MR/1500V (xxx=355-390, in steps of 5)
60 cells: JAM60S21-xxx/MR/1500V (xxx=355-390, in steps of 5)
60 cells: JAM60S08-xxx/PR/1500V (xxx=300-330, in steps of 5)
60 cells: JAM60S17-xxx/PR/1500V (xxx=315-325, in steps of 5)
60 cells: JAM60S17-xxx/MR/1500V (xxx=315-355, in steps of 5)
78 cells: JAM78S10-xxx/MR/1500V (xxx=435-465, in steps of 5)
66 cells: JAM66S10-xxx/MR/1500V (xxx=345-390, in steps of 5)
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 |
| Maximum overcurrent protection rating: | 20A |
| Electrical protection class: | Class II |
| 98th percentile module operating temperature ($T_{98}$): | 70°C |

Module types:

**PV Modules with Mono-crystalline Silicon half-cut Solar Cells (166mm to 168mm):**
72 cells: JAM72S20-xxx/MR/1500V (xxx=430-470, in steps of 5)
72 cells: JAM72S20-xxx/MB/1500V (xxx=450-465, in steps of 5)

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|---|---|
| | 60 cells: JAM60S20-xxx/MB/1500V (xxx=375-390, in steps of 5) |
| Maximum system voltage: | 1500V |
| Maximum overcurrent protection rating: | 25A |
| Electrical protection class: | Class II |
| 98th percentile module operating temperature ($T_{98}$): | 70°C |

Module types:

**PV Modules with 182mm Mono-crystalline Silicon half-cut Solar Cells:**
78 cells: JAM78S30-xxx/MR/1500V (xxx=580-605, in steps of 5)
72 cells: JAM72S30-xxx/MR/1500V (xxx=510-560, in steps of 5)
66 cells: JAM66S30-xxx/MR/1500V (xxx=470-510, in steps of 5)
60 cells: JAM60S30-xxx/MR/1500V (xxx=435-460, in steps of 5)
54 cells: JAM54S30-xxx/MR/1500V (xxx=390-425, in steps of 5)
78 cells: JAM78S30-xxx/GR/1500V (xxx=575-610, in steps of 5)
72 cells: JAM72S30-xxx/GR/1500V (xxx=510-560, in steps of 5)
66 cells: JAM66S30-xxx/GR/1500V (xxx=500-510, in steps of 5)
60 cells: JAM60S30-xxx/GR/1500V (xxx=445-470, in steps of 5)
54 cells: JAM54S30-xxx/GR/1500V (xxx=400-420, in steps of 5)
72 cells: JAM72S31-xxx/MR/1500V (xxx=510-545, in steps of 5)
66 cells: JAM66S31-xxx/MR/1500V (xxx=470-500, in steps of 5)
60 cells: JAM60S31-xxx/MR/1500V (xxx=425-450, in steps of 5)
54 cells: JAM54S31-xxx/MR/1500V (xxx=385-415, in steps of 5)
78 cells: JAM78S31-xxx/GR/1500V (xxx=570-590, in steps of 5)
72 cells: JAM72S31-xxx/GR/1500V (xxx=510-545, in steps of 5)
66 cells: JAM66S31-xxx/GR/1500V (xxx=480-500, in steps of 5)
60 cells: JAM60S31-xxx/GR/1500V (xxx=435-450, in steps of 5)
54 cells: JAM54S31-xxx/GR/1500V (xxx=395-415, in steps of 5)
72 cells: JAM72S40-xxx/GR/1500V (xxx=540-575, in steps of 5)
66 cells: JAM66S40-xxx/GR/1500V (xxx=495-525, in steps of 5)
60 cells: JAM60S40-xxx/GR/1500V (xxx=450-480, in steps of 5)
54 cells: JAM54S40-xxx/GR/1500V (xxx=405-430, in steps of 5)
72 cells: JAM72S41-xxx/GR/1500V (xxx=540-570, in steps of 5)
66 cells: JAM66S41-xxx/GR/1500V (xxx=495-525, in steps of 5)
60 cells: JAM60S41-xxx/GR/1500V (xxx=450-475, in steps of 5)
54 cells: JAM54S41-xxx/GR/1500V (xxx=405-430, in steps of 5)
72 cells: JAM72S30-xxx/LR/1500V (xxx=555-580, in steps of 5)

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54 cells: JAM54S30-xxx/LR/1500V (xxx=415-435, in steps of 5)
54 cells: JAM54S31-xxx/LR/1500V (xxx=415-425, in steps of 5)
72 cells: JAM72S30-xxx/MB/1500V (xxx=535-550, in steps of 5)
72 cells: JAM72S31-xxx/MB/1500V (xxx=525-540, in steps of 5)
54 cells: JAM54S30-xxx/MB/1500V (xxx=385-410, in steps of 5)
54 cells: JAM54S31-xxx/MB/1500V (xxx=385-405, in steps of 5)
54 cells: JAM54S30-xxx/LB/1500V (xxx=410-425, in steps of 5)
54 cells: JAM54S31-xxx/LB/1500V (xxx=410-415, in steps of 5)
72 cells: JAM72S40-xxx/MR/1500V (xxx=560-590, in steps of 5)
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=505-560, in steps of 5)
72 cells: JAM72D30-xxx/MB/1500V (xxx=505-560, in steps of 5)
72 cells: JAM72D30-xxx/MB/F (xxx=505-560, in steps of 5)
72 cells: JAM72D30-xxx/MB/F/1500V (xxx=505-560, 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)
78 cells: JAM78D30-xxx/GB/1500V (xxx=585-610, in steps of 5)
72 cells: JAM72D30-xxx/GB (xxx=505-560, in steps of 5)
72 cells: JAM72D30-xxx/GB/1500V (xxx=505-560, 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)

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72 cells: JAM72D30-xxx/HB/1500V (xxx=530-560, in steps of 5)
78 cells: JAM78D30-xxx/TB (xxx=580-630, in steps of 5)
78 cells: JAM78D30-xxx/TB/1500V (xxx=580-630, 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=580-655, in steps of 5)
78 cells: JAM78D40-xxx/MB/1500V (xxx=580-655, in steps of 5)
72 cells: JAM72D40-xxx/MB (xxx=540-610, in steps of 5)
72 cells: JAM72D40-xxx/MB/1500V (xxx=540-610, in steps of 5)
72 cells: JAM72D40-xxx/MB-US (xxx=585-615, in steps of 5)
72 cells: JAM72D40-xxx/MB-US/1500V (xxx=585-615, in steps of 5)
66 cells: JAM66D40-xxx/MB (xxx=500-545, in steps of 5)
66 cells: JAM66D40-xxx/MB/1500V (xxx=500-545, in steps of 5)
60 cells: JAM60D40-xxx/MB (xxx=455-495, in steps of 5)
60 cells: JAM60D40-xxx/MB/1500V (xxx=455-495, in steps of 5)
54 cells: JAM54D40-xxx/MB (xxx=405-455, in steps of 5)
54 cells: JAM54D40-xxx/MB/1500V (xxx=405-455, in steps of 5)
72 cells: JAM72D41-xxx/MB (xxx=575-590, in steps of 5)
72 cells: JAM72D41-xxx/MB/1500V (xxx=575-590, in steps of 5)
54 cells: JAM54D41-xxx/MB (xxx=405-445, in steps of 5)
54 cells: JAM54D41-xxx/MB/1500V (xxx=405-445, in steps of 5)
54 cells: JAM54D40-xxx/MR (xxx=405-455, in steps of 5)
54 cells: JAM54D40-xxx/MR/1500V (xxx=405-455, in steps of 5)
78 cells: JAM78D40-xxx/GB (xxx=580-655, in steps of 5)
78 cells: JAM78D40-xxx/GB/1500V (xxx=580-655, in steps of 5)
72 cells: JAM72D40-xxx/GB (xxx=540-610, in steps of 5)
72 cells: JAM72D40-xxx/GB/1500V (xxx=540-610, in steps of 5)
66 cells: JAM66D40-xxx/GB (xxx=500-560, in steps of 5)
66 cells: JAM66D40-xxx/GB/1500V (xxx=500-560, in steps of 5)
60 cells: JAM60D40-xxx/GB (xxx=455-505, in steps of 5)
60 cells: JAM60D40-xxx/GB/1500V (xxx=455-505, in steps of 5)
54 cells: JAM54D40-xxx/GB (xxx=405-455, in steps of 5)
54 cells: JAM54D40-xxx/GB/1500V (xxx=405-455, in steps of 5)
72 cells: JAM72D41-xxx/GB (xxx=575-590, in steps of 5)
72 cells: JAM72D41-xxx/GB/1500V (xxx=575-590, 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: JAM72D30-xxx/LB (xxx=555-575, in steps of 5)

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| | 72 cells: JAM72D30-xxx/LB/1500V (xxx=555-575, in steps of 5)<br>54 cells: JAM54D30-xxx/LB (xxx=420-430, in steps of 5)<br>54 cells: JAM54D30-xxx/LB/1500V (xxx=420-430, in steps of 5)<br>66 cells: JAM66D42-xxx/MB (xxx=540-600, in steps of 5)<br>66 cells: JAM66D42-xxx/MB/1500V (xxx=540-600, in steps of 5)<br>66 cells: JAM66D42-xxx/MR (xxx=540-600, in steps of 5)<br>66 cells: JAM66D42-xxx/MR/1500V (xxx=540-600, in steps of 5)<br>66 cells: JAM66D43-xxx/MB (xxx=565-580, in steps of 5)<br>66 cells: JAM66D43-xxx/MB/1500V (xxx=565-580, in steps of 5) |
| Maximum system voltage: | 1500V |
| Maximum overcurrent protection rating: | 25A or 30A |
| Electrical protection class: | Class II |
| 98th percentile module operating temperature ($T_{98}$): | 70°C |
| Module types: | **PV Modules with 182mm Mono-crystalline Silicon half-cut or Asymmetric cut Solar Cells:**<br>72 cells: JAM72D40-xxx/LB (xxx=560-620, in steps of 5)<br>72 cells: JAM72D40-xxx/LB/1500V (xxx=560-620, in steps of 5)<br>60 cells: JAM60D40-xxx/LB (xxx=485-515, in steps of 5)<br>60 cells: JAM60D40-xxx/LB/1500V (xxx=485-515, in steps of 5)<br>54 cells: JAM54D40-xxx/LB (xxx=420-475, in steps of 5)<br>54 cells: JAM54D40-xxx/LB/1500V (xxx=420-475, in steps of 5)<br>54 cells: JAM54D40-xxx/LR (xxx=420-475, in steps of 5)<br>54 cells: JAM54D40-xxx/LR/1500V (xxx=420-475, in steps of 5)<br>54 cells: JAM54D40-xxx/LR/AU (xxx=420-475, in steps of 5)<br>54 cells: JAM54D40-xxx/LR/1500V/AU (xxx=420-475, in steps of 5)<br>60 cells: JAM60D41-xxx/LB (xxx=485-505, in steps of 5)<br>60 cells: JAM60D41-xxx/LB/1500V (xxx=485-505, in steps of 5)<br>54 cells: JAM54D41-xxx/LB (xxx=420-475, in steps of 5)<br>54 cells: JAM54D41-xxx/LB/1500V (xxx=420-475, in steps of 5)<br>54 cells: JAM54D41-xxx/LB/AU (xxx=420-475, in steps of 5)<br>54 cells: JAM54D41-xxx/LB/AU/1500V (xxx=420-475, in steps of 5)<br>54 cells: JAM54D41-xxx/LR (xxx=440-475, in steps of 5)<br>54 cells: JAM54D41-xxx/LR/1500V (xxx=440-475, in steps of 5)<br>54 cells: JAM54D41-xxx/LR/AU (xxx=440-475, in steps of 5) |

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| | 54 cells: JAM54D41-xxx/LR/AU/1500V (xxx=440-475, in steps of 5)<br>72 cells: JAM72D42-xxx/LB (xxx=590-655, in steps of 5)<br>72 cells: JAM72D42-xxx/LB/1500V (xxx=590-655, in steps of 5)<br>60 cells: JAM60D42-xxx/LB (xxx=500-545, in steps of 5)<br>60 cells: JAM60D42-xxx/LB/1500V (xxx=500-545, in steps of 5)<br>54 cells: JAM54D42-xxx/LB (xxx=455-485, in steps of 5)<br>54 cells: JAM54D42-xxx/LB/1500V (xxx=455-485, in steps of 5)<br>78 cells: JAM78D49-xxx/LB (xxx=585-610, in steps of 5)<br>78 cells: JAM78D49-xxx/LB /1500V (xxx=585-610, in steps of 5)<br>66 cells: JAM66D45-xxx/LB (xxx=580-655, in steps of 5)<br>66 cells: JAM66D45-xxx/LB /1500V (xxx=580-655, in steps of 5)<br>66 cells: JAM66D45-xxx/LR (xxx=580-655, in steps of 5)<br>66 cells: JAM66D45-xxx/LR /1500V (xxx=580-655, in steps of 5)<br>48 cells: JAM48D45-xxx/MR (xxx=450-475, in steps of 5)<br>48 cells: JAM48D45-xxx/MR /1500V (xxx=450-475, in steps of 5)<br>54 cells: JAM54D44-xxx/LR (xxx=495-520, in steps of 5)<br>54 cells: JAM54D44-xxx/LR/1500V (xxx=495-520, in steps of 5)<br>72 cells: JAM72D40-xxx/HB (xxx=585-605, in steps of 5)<br>72 cells: JAM72D40-xxx/HB /1500V (xxx=585-605, in steps of 5)<br>54 cells: JAM54D40-xxx/HB (xxx=440-450, in steps of 5)<br>54 cells: JAM54D40-xxx/HB /1500V (xxx=440-450, in steps of 5)<br>54 cells: JAM54D41-xxx/HB (xxx=430-445, in steps of 5)<br>54 cells: JAM54D41-xxx/HB /1500V (xxx=430-445, in steps of 5)<br>66 cells: JAT66D45-xxx/LB/ZC (xxx=640-660, in steps of 5) |
| Maximum system voltage: | 1500V |
| Maximum overcurrent protection rating: | 25A or 30A or 35A |
| Electrical protection class: | Class II |
| 98th percentile module operating temperature ($T_{98}$): | 70°C |
| Module types: | **PV Modules with 182mm Mono-crystalline Silicon 1/3 cut Solar Cells:**<br>66 cells: JAM66D50-xxx/GB (xxx=635-670, in steps of 5)<br>66 cells: JAM66D50-xxx/GB /1500V (xxx=640-670, in steps of 5)<br>54 cells: JAM54D50-xxx/GR (xxx=525-545, in steps of 5)<br>54 cells: JAM54D50-xxx/GR/1500V (xxx=525-545, in steps of 5)<br>54 cells: JAM54D51-xxx/GR (xxx=515-535, in steps of 5) |

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|---|---|
| | 48 cells: JAM48D50-xxx/LR (xxx=470-490, in steps of 5)<br>48 cells: JAM48D50-xxx/LR/1500V (xxx=470-490, in steps of 5)<br>48 cells: JAM48D51-xxx/LR (xxx=460-475, in steps of 5) |
| Maximum system voltage: | 1500V |
| Maximum overcurrent protection rating: | 30A |
| Electrical protection class: | Class II |
| 98th percentile module operating temperature ($T_{98}$): | 70°C |
| Module types: | **PV Modules with 182mm Mono-crystalline Silicon 1/4 cut Solar Cells:**<br>66 cells: JAM66D54-xxx/GB (xxx=620-630, in steps of 5)<br>66 cells: JAM66D54-xxx/GB /1500V (xxx=620-630, in steps of 5) |
| Maximum system voltage: | 1500V |
| Maximum overcurrent protection rating: | 35A |
| Electrical protection class: | Class II |
| 98th percentile module operating temperature ($T_{98}$): | 70°C |
| Module types: | **PV Modules with 210mm Mono-crystalline Silicon 1/3-cut Solar Cells:**<br>50 cells: JAM50S40-xxx/MR (xxx=490-500, in steps of 5)<br>50 cells: JAM50S40-xxx/MR/1500V (xxx=490-500, in steps of 5)<br>50 cells: JAM50D40-xxx/MB (xxx=485-500, in steps of 5)<br>50 cells: JAM50D40-xxx/MB/1500V (xxx=485-500, in steps of 5) |
| Maximum system voltage: | 1500V |
| Maximum overcurrent protection rating: | 25A |
| Electrical protection class: | Class II |
| 98th percentile module operating temperature ($T_{98}$): | 70°C |
| Module types: | **PV Modules with 210mm Mono-crystalline Silicon 1/2-cut Solar Cells:**<br>66 cells: JAM66S35-xxx/MR/1500V (xxx=650-670, in steps of 5)<br>60 cells: JAM60S35-xxx/MR/1500V (xxx=590-610, in steps of 5) |

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|---|---|
| | 66 cells: JAM66D35-xxx/MB (xxx=650-665, in steps of 5)<br>66 cells: JAM66D35-xxx/MB/1500V (xxx=650-665, in steps of 5)<br>60 cells: JAM60D35-xxx/MB (xxx=590-605, in steps of 5)<br>60 cells: JAM60D35-xxx/MB/1500V (xxx=590-605, in steps of 5)<br>66 cells: JAM66D46-xxx/LB (xxx=685-745, in steps of 5)<br>66 cells: JAM66D46-xxx/LB /1500V (xxx=685-745, in steps of 5) |
| Maximum system voltage: | 1500V |
| Maximum overcurrent protection rating: | 25A |
| Electrical protection class: | Class II |
| 98th percentile module operating temperature ($T_{98}$): | 70°C |
| Module types: | **PV Modules with 182mm PERC Mono-crystalline Silicon 1/2-cut Solar Cells:**<br>72 cells: JAM72S30-xxx/MR (xxx=525-560, in steps of 5)<br>66 cells: JAM66S30-xxx/MR (xxx=480-510, in steps of 5)<br>54 cells: JAM54S30-xxx/MR (xxx=395-420, in steps of 5)<br>72 cells: JAM72S30-xxx/LR (xxx=560-580, in steps of 5)<br>54 cells: JAM54S30-xxx/LR (xxx=415-435, in steps of 5)<br>72 cells: JAM72S30-xxx/GR (xxx=530-570, in steps of 5)<br>54 cells: JAM54S30-xxx/GR (xxx=400-425, in steps of 5) |
| Maximum system voltage: | 1500V |
| Maximum overcurrent protection rating: | 25A |
| Electrical protection class: | Class II |
| 98th percentile module operating temperature ($T_{98}$): | 70°C |
| Module types: | **PV Modules with 182mm TOPCon Mono-crystalline Silicon 1/2-cut Solar Cells:**<br>72 cells: JAM72S40-xxx/MR (xxx=580-615, in steps of 5)<br>54 cells: JAM54S40-xxx/MR (xxx=435-450, in steps of 5)<br>72 cells: JAM72S40-xxx/LR (xxx=560-615, in steps of 5)<br>60 cells: JAM60S40-xxx/LR (xxx=475-515, in steps of 5)<br>54 cells: JAM54S40-xxx/LR (xxx=420-475, in steps of 5)<br>54 cells: JAM54S40-xxx/LR-X (xxx=420-475, in steps of 5)<br>72 cells: JAM72S41-xxx/LR (xxx=560-630, in steps of 5) |

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|---|---|
| | 60 cells: JAM60S41-xxx/LR (xxx=475-525, in steps of 5)<br>54 cells: JAM54S41-xxx/LR (xxx=420-470, in steps of 5)<br>72 cells: JAM72S41-xxx/MR (xxx=585-605, in steps of 5)<br>54 cells: JAM54S41-xxx/MR (xxx=440-450, in steps of 5)<br>72 cells: JAM72S42-xxx/LR (xxx=600-655, in steps of 5)<br>66 cells: JAM66S42-xxx/MR (xxx=550-600, in steps of 5)<br>60 cells: JAM60S42-xxx/LR (xxx=500-545, in steps of 5)<br>54 cells: JAM54S42-xxx/LR (xxx=450-490, in steps of 5)<br>72 cells: JAM72S43-xxx/LR (xxx=595-635, in steps of 5)<br>66 cells: JAM66S43-xxx/MR (xxx=545-585, in steps of 5)<br>60 cells: JAM60S43-xxx/LR (xxx=495-530, in steps of 5)<br>54 cells: JAM54S43-xxx/LR (xxx=445-475, in steps of 5) |
| Maximum system voltage: | 1500V |
| Maximum overcurrent protection rating: | 25A |
| Electrical protection class: | Class II |
| 98th percentile module operating temperature ($T_{98}$): | 70°C |
| Module types: | **PV Modules with 210mm TOPCon Mono-crystalline Silicon 1/2-cut Solar Cells:**<br>66 cells: JAM66S45-xxx/LR (xxx=600-635, in steps of 5) |
| Maximum system voltage: | 1500V |
| Maximum overcurrent protection rating: | 30A |
| Electrical protection class: | Class II |
| 98th percentile module operating temperature ($T_{98}$): | 70°C |
| Module types: | **PV Modules with 182mm ABC Mono-crystalline Silicon 1/2-cut Solar Cells:**<br>60 cells: JAT60S40-xxx/LR (xxx=510-540, in steps of 5)<br>54 cells: JAT54S40-xxx/LR (xxx=460-485, in steps of 5)<br>54 cells: JAT54S40-xxx/LR/AG (xxx=450-465, in steps of 5)<br>60 cells: JAT60S41-xxx/LR (xxx=505-530, in steps of 5)<br>54 cells: JAT54S41-xxx/LR (xxx=455-475, in steps of 5)<br>54 cells: JAT54S41-xxx/LR/AG (xxx=445-460, in steps of 5) |
| Maximum system voltage: | 1500V |

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|---|---|
| Maximum overcurrent protection rating: | 25A |
| Electrical protection class: | Class II |
| 98th percentile module operating temperature ($T_{98}$): | 70°C |
| Module types: | **PV Modules with 182mm Mono-crystalline Silicon 1/5-cut Solar Cells:**<br>76 cells: JAM76S11-xxx/PR(B)/1500V (xxx=395-415, in steps of 5) |
| Maximum system voltage: | 1500V |
| Maximum overcurrent protection rating: | 25A |
| Electrical protection class: | Class II |
| 98th percentile module operating temperature ($T_{98}$): | 70°C |
| Module types: | **PV Modules with Poly-crystalline Silicon Solar Cells (156mm to 158.75mm):**<br>72 cells: JAP6(K)-72-xxx/4BB/1500V (xxx=310-330, in steps of 5)<br>72 cells: JAP72S01-xxx/SC/1500V (xxx=310-345, in steps of 5)<br>72 cells: JAP72S01-xxx/PR/1500V (xxx=330-345, in steps of 5)<br>72 cells: JAP72S09-xxx/SC/1500V (xxx=320-345, in steps of 5)<br>72 cells: JAP72S01-xxx/MS/1500V (xxx=325-340, in steps of 5)<br>72 cells: JAP72S02-xxx/SC/1500V (xxx=310-345, in steps of 5)<br>72 cells: JAP72S02-xxx/PR/1500V (xxx=330-345, in steps of 5)<br>60 cells: JAP6(K)-60-xxx/4BB/1500V (xxx=255-275, in steps of 5)<br>60 cells: JAP60S01-xxx/SC/1500V (xxx=255-290, in steps of 5)<br>60 cells: JAP60S01-xxx/PR/1500V (xxx=275-285, in steps of 5)<br>60 cells: JAP60S09-xxx/SC/1500V (xxx=265-290, in steps of 5)<br>60 cells: JAP60S01-xxx/MS/1500V (xxx=270-280, in steps of 5)<br>60 cells: JAP60S02-xxx/SC/1500V (xxx=255-290, in steps of 5)<br>60 cells: JAP60S02-xxx/PR/1500V (xxx=275-285, in steps of 5)<br>72 cells: JAP6(DG)-72-xxx/4BB/1500V (xxx=305-325, in steps of 5)<br>72 cells: JAP6(DG)-72-xxx/3BB/1500V (xxx=305-315, in steps of 5)<br>72 cells: JAP6(DG)-72-xxx/4BB/RE/1500V (xxx=310-335, in steps of 5)<br>72 cells: JAP6(K)(DG)-72-xxx/4BB/1500V (xxx=310-335, in steps of 5)<br>72 cells: JAP72D00-xxx/SC (xxx=305-345, in steps of 5)<br>72 cells: JAP72D00-xxx/SC/1500V (xxx=310-340, in steps of 5) |

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|---|---|
| | 72 cells: JAP72D00-xxx/PR (xxx=330-350, in steps of 5)<br>72 cells: JAP72D00-xxx/PR/1500V (xxx=330-345, in steps of 5)<br>72 cells: JAP72D09-xxx/SC (xxx=325-345, in steps of 5)<br>72 cells: JAP72D09-xxx/SC/1500V (xxx=330-345, in steps of 5)<br>60 cells: JAP6(DG)-60-xxx/4BB/1500V (xxx=250-275, in steps of 5)<br>60 cells: JAP6(DG)-60-xxx/3BB/1500V (xxx=245-265, in steps of 5)<br>60 cells: JAP6(DG)-60-xxx/4BB/RE/1500V (xxx=255-280, in steps of 5)<br>60 cells: JAP6(K)(DG)-60-xxx/4BB/1500V (xxx=255-280, in steps of 5)<br>60 cells: JAP60D00-xxx/SC (xxx=255-290, in steps of 5)<br>60 cells: JAP60D00-xxx/SC/1500V (xxx=260-285, in steps of 5)<br>60 cells: JAP60D00-xxx/PR (xxx=275-290, in steps of 5)<br>60 cells: JAP60D00-xxx/PR/1500V (xxx=275-290, in steps of 5)<br>60 cells: JAP60D09-xxx/SC (xxx=270-290, in steps of 5)<br>60 cells: JAP60D09-xxx/SC/1500V (xxx=275-290, in steps of 5) |
| Maximum system voltage: | 1500V |
| Maximum overcurrent protection rating: | 20A |
| Electrical protection class: | Class II |
| 98th percentile module operating temperature ($T_{98}$): | 70°C |
| Module types: | **PV Modules with Poly-crystalline Silicon half-cut Solar Cells (156mm to 158.75mm):**<br>72 cells: JAP72S03-xxx/SC/1500V (xxx=320-345, in steps of 5)<br>72 cells: JAP72S03-xxx/PR/1500V (xxx=335-355, in steps of 5)<br>72 cells: JAP72S10-xxx/SC/1500V (xxx=335-350, in steps of 5)<br>72 cells: JAP72S03-xxx/MS/1500V (xxx=320-345, in steps of 5)<br>72 cells: JAP72S08-xxx/SC/1500V (xxx=320-345, in steps of 5)<br>72 cells: JAP72S08-xxx/PR/1500V (xxx=335-355, in steps of 5)<br>60 cells: JAP60S03-xxx/SC/1500V (xxx=270-290, in steps of 5)<br>60 cells: JAP60S03-xxx/PR/1500V (xxx=280-295, in steps of 5)<br>60 cells: JAP60S10-xxx/SC/1500V (xxx=275-290, in steps of 5)<br>60 cells: JAP60S03-xxx/MS/1500V (xxx=270-285, in steps of 5)<br>60 cells: JAP60S08-xxx/SC/1500V (xxx=270-290, in steps of 5)<br>60 cells: JAP60S08-xxx/PR/1500V (xxx=280-295, in steps of 5) |
| Maximum system voltage: | 1500V |
| Maximum overcurrent protection rating: | 20A |

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|---|---|
| Electrical protection class: | Class II |
| 98th percentile module operating temperature ($T_{98}$): | 70°C |
| Module types: | **PV Modules with Mono-crystalline Silicon Solar Cells (156mm to 158.75mm):**<br>72 cells: JAM72S01-xxx/SC (xxx=320-365, in steps of 5)<br>72 cells: JAM72S02-xxx/SC (xxx=320-365, in steps of 5)<br>72 cells: JAM72S02-xxx/PR (xxx=345-390, in steps of 5)<br>72 cells: JAM72S01-xxx/MR (xxx=365-385, in steps of 5)<br>72 cells: JAM72S02-xxx/MR (xxx=365-385, in steps of 5)<br>72 cells: JAM72S09-xxx/PR (xxx=370-405, in steps of 5)<br>72 cells: JAM72S12-xxx/PR (xxx=365-385, in steps of 5)<br>72 cells: JAM72S09-xxx/BP (xxx=375-385, in steps of 5)<br>60 cells: JAM60S01-xxx/SC (xxx=265-305, in steps of 5)<br>60 cells: JAM60S02-xxx/SC (xxx=265-305, in steps of 5)<br>60 cells: JAM60S01-xxx/PR (xxx=285-325, in steps of 5)<br>60 cells: JAM60S02-xxx/PR (xxx=285-325, in steps of 5)<br>60 cells: JAM60S01-xxx/MR (xxx=305-320, in steps of 5)<br>60 cells: JAM60S02-xxx/MR (xxx=305-320, in steps of 5)<br>60 cells: JAM60S09-xxx/PR (xxx=310-335, in steps of 5)<br>60 cells: JAM60S12-xxx/PR (xxx=305-330, in steps of 5)<br>60 cells: JAM60S09-xxx/BP (xxx=315-320, in steps of 5) |
| Maximum system voltage: | 1000V or 1500V |
| Maximum overcurrent protection rating: | 20A |
| Electrical protection class: | Class II |
| 98th percentile module operating temperature ($T_{98}$): | 70°C |
| Module types: | **PV Modules with Mono-crystalline Silicon half-cut Solar Cells (156mm to 158.75mm):**<br>72 cells: JAM72S03-xxx/PR (xxx=360-395, in steps of 5)<br>72 cells: JAM72S10-xxx/PR (xxx=380-410, insteps of 5)<br>72 cells: JAM72S17-xxx/PR (xxx=380-390, in steps of 5)<br>72 cells: JAM72S10-xxx/MR (xxx=390-430, in steps of 5)<br>72 cells: JAM72S17-xxx/MR (xxx=390-430, in steps of 5)<br>72 cells: JAM72S17-xxx/GR (xxx=385-400, in steps of 5)<br>72 cells: JAM72S10-xxx/BP (xxx=385-400, in steps of 5) |

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|---|---|
| | 72 cells: JAM72S10-xxx/MB (xxx=395-415, in steps of 5)<br>72 cells: JAM72S08-xxx/PR (xxx=360-395, in steps of 5)<br>60 cells: JAM60S03-xxx/PR (xxx=300-330, in steps of 5)<br>60 cells: JAM60S08-xxx/PR (xxx=300-330, in steps of 5)<br>60 cells: JAM60S10-xxx/PR (xxx=315-345, in steps of 5)<br>60 cells: JAM60S10-xxx/MR (xxx=325-355, in steps of 5)<br>60 cells: JAM60S10-xxx/BP (xxx=320-330, in steps of 5)<br>60 cells: JAM60S10-xxx/MB (xxx=330-345, in steps of 5)<br>60 cells: JAM60S17-xxx/PR (xxx=315-325, in steps of 5)<br>60 cells: JAM60S17-xxx/MR (xxx=315-355, in steps of 5)<br>78 cells: JAM78S10-xxx/MR (xxx=435-465, in steps of 5)<br>78 cells: JAM78S10-xxx/MR-J (xxx=435-465, in steps of 5)<br>66 cells: JAM66S10-xxx/MR (xxx=345-390, in steps of 5) |
| Maximum system voltage: | 1000V or 1500V |
| Maximum overcurrent protection rating: | 20A |
| Electrical protection class: | Class II |
| 98th percentile module operating temperature ($T_{98}$): | 70°C |
| Module types: | **PV Modules with Mono-crystalline Silicon half-cut Solar Cells (166mm to 168mm):**<br>72 cells: JAM72S20-xxx/MR (xxx=430-470, in steps of 5)<br>72 cells: JAM72S20-xxx/MB (xxx=450-465, in steps of 5)<br>60 cells: JAM60S20-xxx/MR (xxx=355-390, in steps of 5)<br>60 cells: JAM60S21-xxx/MR (xxx=355-390, in steps of 5)<br>60 cells: JAM60S20-xxx/MB (xxx=375-390, in steps of 5) |
| Maximum system voltage: | 1000V or 1500V |
| Maximum overcurrent protection rating: | 20A |
| Electrical protection class: | Class II |
| 98th percentile module operating temperature ($T_{98}$): | 70°C |
| Module types: | **PV Modules with 182mm Mono-crystalline Silicon half-cut Solar Cells:**<br>78 cells: JAM78S30-xxx/MR (xxx=580-605, in steps of 5)<br>72 cells: JAM72S30-xxx/MR (xxx=510-560, in steps of 5) |

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66 cells: JAM66S30-xxx/MR (xxx=470-510, in steps of 5)
60 cells: JAM60S30-xxx/MR (xxx=435-460, in steps of 5)
54 cells: JAM54S30-xxx/MR (xxx=390-425, in steps of 5)
78 cells: JAM78S30-xxx/GR (xxx=575-610, in steps of 5)
72 cells: JAM72S30-xxx/GR (xxx=510-560, in steps of 5)
66 cells: JAM66S30-xxx/GR (xxx=500-510, in steps of 5)
60 cells: JAM60S30-xxx/GR (xxx=445-470, in steps of 5)
54 cells: JAM54S30-xxx/GR (xxx=400-420, in steps of 5)
72 cells: JAM72S31-xxx/MR (xxx=510-545, in steps of 5)
66 cells: JAM66S31-xxx/MR (xxx=470-500, in steps of 5)
60 cells: JAM60S31-xxx/MR (xxx=425-450, in steps of 5)
54 cells: JAM54S31-xxx/MR (xxx=385-415, in steps of 5)
78 cells: JAM78S31-xxx/GR (xxx=570-590, in steps of 5)
72 cells: JAM72S31-xxx/GR (xxx=510-545, in steps of 5)
66 cells: JAM66S31-xxx/GR (xxx=480-500, in steps of 5)
60 cells: JAM60S31-xxx/GR (xxx=435-450, in steps of 5)
54 cells: JAM54S31-xxx/GR (xxx=395-415, in steps of 5)
72 cells: JAM72S40-xxx/GR (xxx=540-575, in steps of 5)
66 cells: JAM66S40-xxx/GR (xxx=495-525, in steps of 5)
60 cells: JAM60S40-xxx/GR (xxx=450-480, in steps of 5)
54 cells: JAM54S40-xxx/GR (xxx=405-430, in steps of 5)
72 cells: JAM72S41-xxx/GR (xxx=540-570, in steps of 5)
66 cells: JAM66S41-xxx/GR (xxx=495-525, in steps of 5)
60 cells: JAM60S41-xxx/GR (xxx=450-475, in steps of 5)
54 cells: JAM54S41-xxx/GR (xxx=405-430, in steps of 5)
72 cells: JAM72S30-xxx/LR (xxx=555-580, in steps of 5)
54 cells: JAM54S30-xxx/LR (xxx=415-435, in steps of 5)
54 cells: JAM54S31-xxx/LR (xxx=415-425, in steps of 5)
72 cells: JAM72S30-xxx/MB (xxx=535-550, in steps of 5)
72 cells: JAM72S31-xxx/MB (xxx=525-540, in steps of 5)
54 cells: JAM54S30-xxx/MB (xxx=385-410, in steps of 5)
54 cells: JAM54S31-xxx/MB (xxx=385-405, in steps of 5)
54 cells: JAM54S30-xxx/LB (xxx=410-425, in steps of 5)
54 cells: JAM54S31-xxx/LB (xxx=410-415, in steps of 5)
72 cells: JAM72S40-xxx/MR (xxx=560-590, in steps of 5)

| | |
|---|---|
| Maximum system voltage: | 1000V or 1500V |
| Maximum overcurrent protection rating: | 25A |

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|---|---|
| Electrical protection class: | Class II |
| 98th percentile module operating temperature ($T_{98}$): | 70°C |
| Module types: | **PV Modules with 210mm Mono-crystalline Silicon 1/3-cut Solar Cells:**<br>50 cells: JAM50S40-xxx/MR (xxx=490-500, in steps of 5)<br>66 cells: JAM66S35-xxx/MR (xxx=650-670, in steps of 5)<br>60 cells: JAM60S35-xxx/MR (xxx=590-610, in steps of 5) |
| Maximum system voltage: | 1000V or 1500V |
| Maximum overcurrent protection rating: | 25A |
| Electrical protection class: | Class II |
| 98th percentile module operating temperature ($T_{98}$): | 70°C |
| Module types: | **PV Modules with 182mm Mono-crystalline Silicon 1/5-cut Solar Cells:**<br>68 cells: JAM68S11-xxx/PR (xxx=355-365, in steps of 5)<br>68 cells: JAM68S11-xxx/PR(B) (xxx=345-365, in steps of 5)<br>76 cells: JAM76S11-xxx/PR(B) (xxx=395-415, in steps of 5) |
| Maximum system voltage: | 1000V or 1500V |
| Maximum overcurrent protection rating: | 25A |
| Electrical protection class: | Class II |
| 98th percentile module operating temperature ($T_{98}$): | 70°C |
| Module types: | **PV Modules with Poly-crystalline Silicon Solar Cells (156mm to 158.75mm):**<br>72 cells: JAP72S01-xxx/SC (xxx=310-345, in steps of 5)<br>72 cells: JAP72S02-xxx/SC (xxx=310-345, in steps of 5)<br>72 cells: JAP72S01-xxx/PR (xxx=330-345, in steps of 5)<br>72 cells: JAP72S02-xxx/PR (xxx=330-345, in steps of 5)<br>72 cells: JAP72S09-xxx/SC (xxx=320-345, in steps of 5)<br>72 cells: JAP72S01-xxx/MS (xxx=325-340, in steps of 5)<br>60 cells: JAP60S01-xxx/SC (xxx=255-290, in steps of 5)<br>60 cells: JAP60S02-xxx/SC (xxx=255-290, in steps of 5)<br>60 cells: JAP60S01-xxx/PR (xxx=275-285, in steps of 5) |

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|---|---|
| | 60 cells: JAP60S02-xxx/PR (xxx=275-285, in steps of 5)<br>60 cells: JAP60S09-xxx/SC (xxx=265-290, in steps of 5)<br>60 cells: JAP60S01-xxx/MS (xxx=270-280, in steps of 5)<br>54 cells: JAP54S01-xxx/SC (xxx=245-255, in steps of 5) |
| Maximum system voltage: | 1000V or 1500V |
| Maximum overcurrent protection rating: | 20A |
| Electrical protection class: | Class II |
| 98th percentile module operating temperature ($T_{98}$): | 70°C |

| | |
|---|---|
| Module types: | **PV Modules with Poly-crystalline Silicon half-cut Solar Cells (156mm to 158.75mm):**<br>72 cells: JAP72S03-xxx/PR (xxx=335-355, in steps of 5)<br>72 cells: JAP72S03-xxx/SC (xxx=320-345, in steps of 5)<br>72 cells: JAP72S10-xxx/SC (xxx=335-350, in steps of 5)<br>72 cells: JAP72S03-xxx/MS (xxx=320-345, in steps of 5)<br>72 cells: JAP72S08-xxx/SC (xxx=320-345, in steps of 5)<br>72 cells: JAP72S08-xxx/PR (xxx=335-355, in steps of 5)<br>60 cells: JAP60S03-xxx/PR (xxx=280-295, in steps of 5)<br>60 cells: JAP60S03-xxx/SC (xxx=270-290, in steps of 5)<br>60 cells: JAP60S10-xxx/SC (xxx=275-290, in steps of 5)<br>60 cells: JAP60S03-xxx/MS (xxx=270-285, in steps of 5)<br>60 cells: JAP60S08-xxx/SC (xxx=270-290, in steps of 5)<br>60 cells: JAP60S08-xxx/PR (xxx=280-295, in steps of 5) |
| Maximum system voltage: | 1000V or 1500V |
| Maximum overcurrent protection rating: | 20A |
| Electrical protection class: | Class II |
| 98th percentile module operating temperature ($T_{98}$): | 70°C |

Remark:
For detailed product information, please refer to CDF (Constructional Data Form) with the same file no.

Essen, 2026-06-17

Certification Body - Consumer Products

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