ZERTIFIKAT ◆ CERTIFICATE ◆ 認證證書 ◆ СЕРТИФИКАТ ◆ CERTIFICADO ◆ CERTIFICAT

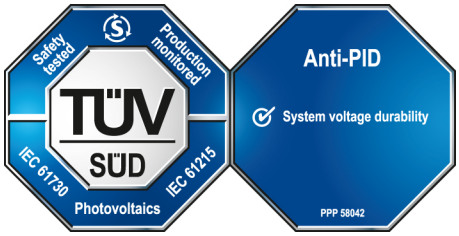
Product Service

C E R T I F I C A T E

No. Z2 070321 0150 Rev. 10

Holder of Certificate: **Trina Solar Co., Ltd.**
No. 2 TianHe Road, Trina PV Industrial Park
New District
213031 Changzhou City, Jiangsu Province
PEOPLE'S REPUBLIC OF CHINA

Certification Mark:



Product: **Crystalline Silicon Terrestrial Photovoltaic (PV) Modules**

Poly & Mono Crystalline Silicon Photovoltaic modules

The product was tested on a voluntary basis and complies with the essential requirements. The certification mark shown above can be affixed on the product. It is not permitted to alter the certification mark in any way. In addition, the certification holder must not transfer the certificate to third parties. This certificate is valid until the listed date, unless it is cancelled earlier. All applicable requirements of the testing and certification regulations of TÜV SÜD Group have to be complied. For details see: www.tuvsud.com/ps-cert

Test report no.: 704062210703-10

Valid until: 2029-01-18

Date, 2024-01-26

(Zhulin Zhang)

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Product Service

C E R T I F I C A T E

No. Z2 070321 0150 Rev. 10

Model(s):

mono series with 157 x 157 (mm) and 156.75 x 156.75 (mm) solar cells:
72 cells:
TSM-xxxDEG14(II), TSM-xxxDEG14.07(II), TSM-xxxDEG14.20(II), TSM-xxxDEG14.27(II), TSM-xxxDEG14.28(II), TSM-xxxDEG14.29(II), TSM-xxxDEG14.40(II), TSM-xxxDEG14.47(II) (xxx=330-390, in steps of 5).
60 cells:
TSM-xxxDEG5(II), TSM-xxxDEG5.07(II), TSM-xxxDEG5.20(II), TSM-xxxDEG5.27(II), TSM-xxxDEG5.28(II), TSM-xxxDEG5.29(II), TSM-xxxDEG5.40(II), TSM-xxxDEG5.47(II) (xxx=275-325, in steps of 5).

mono series with 158.75 x 158.75 (mm) solar cells:
72 cells:
TSM-xxxDEG15(II), TSM-xxxDEG15.07(II), TSM-xxxDEG15.20(II), TSM-xxxDEG15.27(II), TSM-xxxDEG15.28(II), TSM-xxxDEG15.29(II), TSM-xxxDEG15.40(II), TSM-xxxDEG15.47(II) (xxx=330-380, in steps of 5).
60 cells:
TSM-xxxDEG6(II), TSM-xxxDEG6.07(II), TSM-xxxDEG6.20(II), TSM-xxxDEG6.27(II), TSM-xxxDEG6.28(II), TSM-xxxDEG6.29(II), TSM-xxxDEG6.40(II), TSM-xxxDEG6.47(II) (xxx=275-315, in steps of 5).

mono series with 157 x 157 (mm) bifacial cell:
72 cells:
TSM-xxxDEG14C(II), TSM-xxxDEG14C.07(II), TSM-xxxDEG14C.20(II), TSM-xxxDEG14C.27(II), TSM-xxxDEG14C.28(II), TSM-xxxDEG14C.29(II) (xxx=335-370, in steps of 5).
60 cells:
TSM-xxxDEG5C(II), TSM-xxxDEG5C.07(II), TSM-xxxDEG5C.20(II), TSM-xxxDEG5C.27(II), TSM-xxxDEG5C.28(II), TSM-xxxDEG5C.29(II) (xxx=285-305, in steps of 5).

mono series with 158.75 x 158.75 (mm) bifacial cell:
72 cells:
TSM-xxxDEG15C(II), TSM-xxxDEG15C.07(II), TSM-xxxDEG15C.20(II), TSM-xxxDEG15C.27(II), TSM-xxxDEG15C.28(II), TSM-xxxDEG15C.29(II) (xxx=335-350, in steps of 5).
60 cells:
TSM-xxxDEG6C(II), TSM-xxxDEG6C.07(II), TSM-xxxDEG6C.20(II), TSM-xxxDEG6C.27(II), TSM-xxxDEG6C.28(II), TSM-xxxDEG6C.29(II) (xxx=285-295, in steps of 5).

mono series with 157 x 78.5 (mm) half cutting cell:
144 cells:
TSM-xxxDEG14H(II), TSM-xxxDEG14H.07(II), TSM-xxxDEG14H.20(II), TSM-xxxDEG14H.27(II), TSM-xxxDEG14H.28(II), TSM-xxxDEG14H.29(II), TSM-xxxDEG14H.40(II), TSM-xxxDEG14H.47(II) (xxx=345-395, in steps of 5).
120 cells:
TSM-xxxDEG5H(II), TSM-xxxDEG5H.07(II), TSM-xxxDEG5H.20(II), TSM-xxxDEG5H.27(II), TSM-xxxDEG5H.28(II), TSM-xxxDEG5H.29(II), TSM-xxxDEG5H.40(II), TSM-xxxDEG5H.47(II) (xxx=290-330, in steps of 5).

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mono series with 158.75 x 79.375 (mm) half cutting cell:
144 cells:
TSM-xxxDEG15H(II), TSM-xxxDEG15H.07(II), TSM-xxxDEG15H.20(II), TSM-xxxDEG15H.27(II), TSM-xxxDEG15H.28(II), TSM-xxxDEG15H.29(II), TSM-xxxDEG15H.40(II), TSM-xxxDEG15H.47(II) (xxx=380-410, in steps of 5).
120 cells:
TSM-xxxDEG6H(II), TSM-xxxDEG6H.07(II), TSM-xxxDEG6H.20(II), TSM-xxxDEG6H.27(II), TSM-xxxDEG6H.28(II), TSM-xxxDEG6H.29(II), TSM-xxxDEG6H.40(II), TSM-xxxDEG6H.47(II) (xxx=310-340, in steps of 5).

mono series with 157 x 78.5 (mm) half cutting MBB cell:
144 cells:
TSM-xxxDEG14M(II), TSM-xxxDEG14M.07(II), TSM-xxxDEG14M.20(II), TSM-xxxDEG14M.27(II), TSM-xxxDEG14M.28(II), TSM-xxxDEG14M.29(II), TSM-xxxDEG14M.40(II), TSM-xxxDEG14M.47(II) (xxx=345-385, in steps of 5).
120 cells:
TSM-xxxDEG5M(II), TSM-xxxDEG5M.07(II), TSM-xxxDEG5M.20(II), TSM-xxxDEG5M.27(II), TSM-xxxDEG5M.28(II), TSM-xxxDEG5M.29(II), TSM-xxxDEG5M.40(II), TSM-xxxDEG5M.47(II) (xxx=290-320, in steps of 5).

mono series with 158.75 x 79.375 (mm) half cutting MBB cells:
144 cells:
TSM-xxxDEG15M(II), TSM-xxxDEG15M.07(II), TSM-xxxDEG15M.20(II), TSM-xxxDEG15M.27(II), TSM-xxxDEG15M.28(II), TSM-xxxDEG15M.29(II), TSM-xxxDEG15M.40(II), TSM-xxxDEG15M.47(II) (xxx=350-420, in steps of 5).
120 cells:
TSM-xxxDEG6M(II), TSM-xxxDEG6M.07(II), TSM-xxxDEG6M.20(II), TSM-xxxDEG6M.27(II), TSM-xxxDEG6M.28(II), TSM-xxxDEG6M.29(II), TSM-xxxDEG6M.40(II), TSM-xxxDEG6M.47(II) (xxx=295-350, in steps of 5).

mono series with 166.0 x 83.0 (mm) half cutting MBB cells:
144 cells:
TSM-xxxDEG17M(II), TSM-xxxDEG17M.07(II), TSM-xxxDEG17M.20(II), TSM-xxxDEG17M.27(II), TSM-xxxDEG17M.28(II), TSM-xxxDEG17M.29(II), TSM-xxxDEG17M.40(II), TSM-xxxDEG17M.47(II) (xxx=425-460, in steps of 5).
120 cells:
TSM-xxxDEG8M(II), TSM-xxxDEG8M.07(II), TSM-xxxDEG8M.20(II), TSM-xxxDEG8M.27(II), TSM-xxxDEG8M.28(II), TSM-xxxDEG8M.29(II), TSM-xxxDEG8M.40(II), TSM-xxxDEG8M.47(II) (xxx=355-380, in steps of 5).

mono series with 157 x 78.5 (mm) half cutting bifacial cell:
144 cells:
TSM-xxxDEG14HC(II), TSM-xxxDEG14HC.07(II), TSM-xxxDEG14HC.20(II), TSM-xxxDEG14HC.27(II), TSM-xxxDEG14HC.28(II), TSM-xxxDEG14HC.29(II) (xxx=350-395, in steps of 5).
120 cells:
TSM-xxxDEG5HC(II), TSM-xxxDEG5HC.07(II), TSM-xxxDEG5HC.20(II), TSM-xxxDEG5HC.27(II), TSM-xxxDEG5HC.28(II), TSM-xxxDEG5HC.29(II) (xxx=295-330, in steps of 5).

mono series with 158.75 x 79.375 (mm) half cutting bifacial cell:
144 cells:

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**TSM-xxxDEG15HC(II), SM-xxxDEG15HC.07(II), TSM-xxxDEG15HC.20(II),
TSM-xxxDEG15HC.27(II), TSM-xxxDEG15HC.28(II),
TSM-xxxDEG15HC.29(II) (xxx=350-410, in steps of 5).
120 cells:
TSM-xxxDEG6HC(II), TSM-xxxDEG6HC.07(II), TSM-xxxDEG6HC.20(II),
TSM-xxxDEG6HC.27(II), TSM-xxxDEG6HC.28(II),
TSM-xxxDEG6HC.29(II) (xxx=295-340, in steps of 5).**

**mono series with 157 x 78.5 (mm) half cutting MBB bifacial cell:
144 cells:
TSM-xxxDEG14MC(II), TSM-xxxDEG14MC.07(II), TSM-xxxDEG14MC.20(II),
TSM-xxxDEG14HMC.20(II), TSM-xxxDEG14MC.27(II),
TSM-xxxDEG14MC.28(II), TSM-xxxDEG14MC.29(II)
(xxx=350-395, in steps of 5).
120 cells:
TSM-xxxDEG5MC(II), TSM-xxxDEG5MC.07(II), TSM-xxxDEG5MC.20(II),
TSM-xxxDEG5MC.27(II), TSM-xxxDEG5MC.28(II),
TSM-xxxDEG5MC.29(II) (xxx=295-330, in steps of 5).**

**mono series with 158.75 x 79.375 (mm) half cutting bifacial cell:
144 cells:
TSM-xxxDEG15MC(II), TSM-xxxDEG15MC.07(II), TSM-xxxDEG15MC.20(II), TSM-xxxDEG15MC.27(II), TSM-xxxDEG15MC.28(II), TSM-xxxDEG15MC.29(II) (xxx=350-425, in steps of 5).
120 cells:
TSM-xxxDEG6MC(II), TSM-xxxDEG6MC.07(II), TSM-xxxDEG6MC.20(II),
TSM-xxxDEG6MC.27(II), TSM-xxxDEG6MC.28(II),
TSM-xxxDEG6MC.29(II) (xxx=295-350, in steps of 5).**

**mono series with 166.0 x 83.0 (mm) half cutting bifacial cell:
144 cells:
TSM-xxxDEG17MC(II), TSM-xxxDEG17MC.07(II),
TSM-xxxDEG17MC.20(II), TSM-xxxDEG17MC.27(II),
TSM-xxxDEG17MC.28(II), TSM-xxxDEG17MC.29(II)
(xxx=425-460, in steps of 5).
120 cells:
TSM-xxxDEG8MC(II), TSM-xxxDEG8MC.07(II), TSM-xxxDEG8MC.20(II),
TSM-xxxDEG8MC.27(II), TSM-xxxDEG8MC.28(II),
TSM-xxxDEG8MC.29(II) (xxx=355-380, in steps of 5).**

**mono series with 210.0 x 70.0 (mm) 1/3 cutting MBB bifacial cell:
150 cells:
TSM-xxxDEG18MC(II), TSM-xxxDEG18MC.07(II),
TSM-xxxDEG18MC.20(II), TSM-xxxDEG18MC.27(II),
TSM-xxxDEG18MC.28(II), TSM-xxxDEG18MC.29(II),
TSM-xxxDEG18MC.20W(II)
(xxx=460-510, in steps of 5).
120 cells:
TSM-xxxDEG9C.20, TSM-xxxDEG9C.27,
TSM-xxxDEG9C.28, TSM-xxxDEG9C.29
(xxx=370-405, in steps of 5).**

**mono series with 210.0 x 70.0 (mm) 1/3 cutting MBB bifacial cell:
(Module Type for rear side with white EVA or Glass white)
150 cells:
TSM-xxxDEG18M(II), TSM-xxxDEG18M.07(II), TSM-xxxDEG18M.20(II),**

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TSM-xxxDEG18M.27(II), TSM-xxxDEG18M.28(II), TSM-xxxDEG18M.29(II) (xxx=460-510, in steps of 5).
120 cells:
TSM-xxxDEG9.20, TSM-xxxDEG9.27,
TSM-xxxDEG9.28, TSM-xxxDEG9.29
(xxx=370-405, in steps of 5).

mono series with 166 x 83 (mm) half cutting MBB bifacial cell (for cells splicing technology):
156 cells:
TSM-xxxDEG17XC.20(II), TSM-xxxDEG17XC.27(II),
TSM-xxxDEG17XC.28(II), TSM-xxxDEG17XC.29(II)
(xxx=445-490, in steps of 5).

mono series with 166 x 83 (mm) half cutting MBB bifacial cell (for cells splicing technology)
(Module Type for rear side with white EVA or Glass white):
156 cells:
TSM-xxxDEG17X.20(II), TSM-xxxDEG17X.27(II), TSM-xxxDEG17X.28(II),
TSM-xxxDEG17X.29(II) (xxx=445-490, in steps of 5).

mono series with 210.0 x 105.0 (mm) half cutting MBB bifacial cell:
120 cells:
TSM-xxxDEG20C.20, TSM-xxxDEG20C.27, TSM-xxxDEG20C.28,
TSM-xxxDEG20C.29, TSM-xxxDEG20C.20W, TSM-xxxDEG20C.28W,
TSM-xxxDEG20C.70 (xxx=570-610, in steps of 5).
110 cells:
TSM-xxxDEG19C.20, TSM-xxxDEG19C.27, TSM-xxxDEG19C.28,
TSM-xxxDEG19C.29, TSM-xxxDEG19C.20W
(xxx=525-555, in steps of 5).
132 cells:
TSM-xxxDEG21C.20, TSM-xxxDEG21C.27, TSM-xxxDEG21C.28,
TSM-xxxDEG21C.29, TSM-xxxDEG21C.20W,TSM-xxxDEG21C.70
(xxx=625-675, in steps of 5).

mono series with 210.0 x 105.0 (mm) half cutting MBB bifacial cell:
(Module Type for rear side with white EVA or Glass white)
120 cells:
TSM-xxxDEG20.20, TSM-xxxDEG20.27, TSM-xxxDEG20.28,
TSM-xxxDEG20.29 (xxx=575-605, in steps of 5).
110 cells:
TSM-xxxDEG19.20, TSM-xxxDEG19.27, TSM-xxxDEG19.28,
TSM-xxxDEG19.29 (xxx=525-555, in steps of 5).

mono series with 182.0 x 91.0/91.875 (mm) half cutting MBB bifacial cell:
144 cells:
TSM-xxxDEG18C.20, TSM-xxxDEG18C.27, TSM-xxxDEG18C.28,
TSM-xxxDEG18C.29, TSM-xxxDEG18C.20W (xxx=520-555, in steps of 5).
120 cells:
TSM-xxxDEG10C.20, TSM-xxxDEG10C.25,
TSM-xxxDEG10C.27, TSM-xxxDEG10C.28,
TSM-xxxDEG10C.29 (xxx=425-450, in steps of 5).

mono series with 182.0 x 91.0/91.875 (mm) half cutting MBB bifacial cell:
(Module Type for rear side with white EVA or Glass white)
144 cells:
TSM-xxxDEG18.20, TSM-xxxDEG18.27, TSM-xxxDEG18.28,
TSM-xxxDEG18.29 (xxx=520-555, in steps of 5).

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120 cells:
TSM-xxxDEG10.20, TSM-xxxDEG10.27, TSM-xxxDEG10.28, TSM-xxxDEG10.29 (xxx=425-450, in steps of 5).

mono series with 182 x 105 (mm) half cutting MBB bifacial cell:
132 cells:
TSM-xxxDEG19RC.20, TSM-xxxDEG19RC.25, TSM-xxxDEG19RC.27, TSM-xxxDEG19RC.28, TSM-xxxDEG19RC.29, TSM-xxxDEG19RC.B0, TSM-xxxDEG19RC.B5, TSM-xxxDEG19RC.B7, TSM-xxxDEG19RC.B8, TSM-xxxDEG19RC.B9, TSM-xxxDEG19RC.20W,TSM-xxxDEG19RC.70 (xxx=540-590, in steps of 5)

mono series with 182 x 105 (mm) half cutting MBB bifacial cell:
(Module Type for rear side with white EVA or Glass white)
132 cells:
TSM-xxxDEG19R.20, TSM-xxxDEG19R.25, TSM-xxxDEG19R.27, TSM-xxxDEG19R.28, TSM-xxxDEG19R.29, TSM-xxxDEG19R.B0, TSM-xxxDEG19R.B5, TSM-xxxDEG19R.B7, TSM-xxxDEG19R.B8, TSM-xxxDEG19R.B9, (xxx=540-590, in steps of 5)

mono series with 182 x 70 (mm) 1/3 cutting MBB bifacial cell:
144 cells:
TSM-xxxDEG9RC.B0, TSM-xxxDEG9RC.B5, TSM-xxxDEG9RC.B7, TSM-xxxDEG9RC.B8, TSM-xxxDEG9RC.B9, TSM-xxxDEG9RC.20, TSM-xxxDEG9RC.25,TSM-xxxDEG9RC.28, TSM-xxxDEG9RC.27, TSM-xxxDEG9RC.29, TSM-xxxDEG9RC.27W (xxx=395-435, in steps of 5)

mono series with 182 x 70 (mm) 1/3 cutting MBB bifacial cell:
(Module Type for rear side with white EVA or Glass white)
144 cells:
TSM-xxxDEG9R.B0, TSM-xxxDEG9R.B5, TSM-xxxDEG9R.B7, TSM-xxxDEG9R.B8, TSM-xxxDEG9R.B9, TSM-xxxDEG9R.20, TSM-xxxDEG9R.25, TSM-xxxDEG9R.27, TSM-xxxDEG9R.28, TSM-xxxDEG9R.29, TSM-xxxDEG9R.20W, TSM-xxxDEG9R.28W (xxx=395-435, in steps of 5)

mono series with 158.75 x 52.9 (mm) 1/3 cutting MBB bifacial cell:
252 cells:
TSM-xxxDEG15VC.20(II), TSM-xxxDEG15VC.27(II), TSM-xxxDEG15VC.28(II), TSM-xxxDEG15VC.29(II) (xxx=465-490, in steps of 5).

mono series with 157 x 157 (mm) N type MBB bifacial cell:
72 cells:
TSM-xxxNEG14C(II), TSM-xxxNEG14C.07(II), TSM-xxxNEG14C.20(II), TSM-xxxNEG14C.27(II), TSM-xxxNEG14C.28(II), TSM-xxxNEG14C.29(II) (xxx=350-370, in steps of 5).
60 cells:
TSM-xxxNEG5C(II), TSM-xxxNEG5C.07(II), TSM-xxxNEG5C.20(II), TSM-xxxNEG5C.27(II), TSM-xxxNEG5C.28(II), TSM-xxxNEG5C.29(II) (xxx=295-305, in steps of 5).

mono series with 158.75 x 158.75 (mm) N type MBB bifacial cell:
72 cells:

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TSM-xxxNEG15C(II), TSM-xxxNEG15C.07(II), TSM-xxxNEG15C.20(II), TSM-xxxNEG15C.27(II), TSM-xxxNEG15C.28(II), TSM-xxxNEG15C.29(II) (xxx=350-370, in steps of 5).
60 cells:
TSM-xxxNEG6C(II), TSM-xxxNEG6C.07(II), TSM-xxxNEG6C.20(II), TSM-xxxNEG6C.27(II), TSM-xxxNEG6C.28(II), TSM-xxxNEG6C.29(II) (xxx=295-305, in steps of 5).

mono series with 161.7 x 161.7 (mm) N type MBB bifacial cell:
72 cells:
TSM-xxxNEG16C(II), TSM-xxxNEG16C.07(II), TSM-xxxNEG16C.20(II), TSM-xxxNEG16C.27(II), TSM-xxxNEG16C.28(II), TSM-xxxNEG16C.29(II) (xxx=350-410, in steps of 5).
60 cells:
TSM-xxxNEG7C(II), TSM-xxxNEG7C.07(II), TSM-xxxNEG7C.20(II), TSM-xxxNEG7C.27(II), TSM-xxxNEG7C.28(II), TSM-xxxNEG7C.29(II) (xxx=295-340, in steps of 5).

mono series with 157 x 78.5 (mm) half cutting N type MBB bifacial cell:
144 cells:
TSM-xxxNEG14MC(II), TSM-xxxNEG14MC.07(II), TSM-xxxNEG14MC.20(II), TSM-xxxNEG14MC.27(II), TSM-xxxNEG14MC.28(II), TSM-xxxNEG14MC.29(II) (xxx=350-380, in steps of 5).
120 cells:
TSM-xxxNEG5MC(II), TSM-xxxNEG5MC.07(II), TSM-xxxNEG5MC.20(II),
TSM-xxxNEG5MC.27(II), TSM-xxxNEG5MC.28(II), TSM-xxxNEG5MC.29(II) (xxx=295-315, in steps of 5).

mono series with 158.75 x 79.375 (mm) half cutting N type MBB bifacial cell:
144 cells:
TSM-xxxNEG15MC(II), TSM-xxxNEG15MC.07(II), TSM-xxxNEG15MC.20(II), TSM-xxxNEG15MC.27(II), TSM-xxxNEG15MC.28(II), TSM-xxxNEG15MC.29(II) (xxx=350-420, in steps of 5).
120 cells:
TSM-xxxNEG6MC(II), TSM-xxxNEG6MC.07(II), TSM-xxxNEG6MC.20(II),
TSM-xxxNEG6MC.27(II), TSM-xxxNEG6MC.28(II), TSM-xxxNEG6MC.29(II) (xxx=295-345, in steps of 5).

mono series with 158.75 x 79.375 (mm) half cutting N type MBB bifacial cell (Module Type for rear side with white EVA or Glass white):
144 cells:
TSM-xxxNEG15M(II), TSM-xxxNEG15M.07(II), TSM-xxxNEG15M.20(II), TSM-xxxNEG15M.27(II), TSM-xxxNEG15M.28(II), TSM-xxxNEG15M.29(II) (xxx=350-420, in steps of 5).
120 cells:
TSM-xxxNEG6M(II), TSM-xxxNEG6M.07(II), TSM-xxxNEG6M.20(II), TSM-xxxNEG6M.27(II), TSM-xxxNEG6M.28(II), TSM-xxxNEG6M.29(II) (xxx=295-345, in steps of 5).

mono series with 161.7 x 80.85 (mm) half cutting N type MBB bifacial cell (Module Type for rear side with white EVA or white Glass):
144 cells:
TSM-xxxNEG16M(II), TSM-xxxNEG16M.07(II), TSM-xxxNEG16M.20(II), TSM-xxxNEG16M.27(II), TSM-xxxNEG16M.28(II), TSM-xxxNEG16M.29(II) (xxx=390-435, in steps of 5).

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120 cells:
TSM-xxxNEG7M(II), TSM-xxxNEG7M.07(II), TSM-xxxNEG7M.20(II), TSM-xxxNEG7MC.27(II), TSM-xxxNEG7M.28(II), TSM-xxxNEG7M.29(II) (xxx=325-360, in steps of 5).

mono series with 161.7 x 80.85 (mm) half cutting N type MBB bifacial cell:
144 cells:
TSM-xxxNEG16MC(II), TSM-xxxNEG16MC.07(II), TSM-xxxNEG16MC.20(II), TSM-xxxNEG16MC.27(II), TSM-xxxNEG16MC.28(II), TSM-xxxNEG16MC.29(II) (xxx=390-435, in steps of 5).
120 cells:
TSM-xxxNEG7MC(II), TSM-xxxNEG7MC.07(II), TSM-xxxNEG7MC.20(II),
TSM-xxxNEG7MC.27(II), TSM-xxxNEG7MC.28(II), TSM-xxxNEG7MC.29(II) (xxx=325-360, in steps of 5).

mono series with 210.0 x 70.0 (mm) N type 1/3 cutting MBB bifacial cell:
150 cells:
TSM-xxxNEG18MC.20(II), TSM-xxxNEG18MC.27(II),
TSM-xxxNEG18MC.28(II), TSM-xxxNEG18MC.29(II),
TSM-xxxNEG18MC.30(II)
(xxx=500-520, in steps of 5).
120 cells:
TSM-xxxNEG9C.20, TSM-xxxNEG9C.27,
TSM-xxxNEG9C.28, TSM-xxxNEG9C.29
(xxx=390-430, in steps of 5).

mono series with 210.0 x 70.0 (mm) N type 1/3 cutting MBB bifacial cell:
(Module Type for rear side with white EVA or Glass white)
120 cells:
TSM-xxxNEG9.20, TSM-xxxNEG9.27, TSM-xxxNEG9.28,
TSM-xxxNEG9.29 (xxx=390-430, in steps of 5).

mono series with 210.0 x 105.0 (mm) half cutting N type MBB bifacial cell:
120 cells:
TSM-xxxNEG20C.20, TSM-xxxNEG20C.27, TSM-xxxNEG20C.28,
TSM-xxxNEG20C.29, TSM-xxxNEG20C.70, TSM-xxxNEG20C.C0
(xxx=580-645, in steps of 5).
110 cells:
TSM-xxxNEG19C.20, TSM-xxxNEG19C.27, TSM-xxxNEG19C.28,
TSM-xxxNEG19C.29 (xxx=530-570, in steps of 5).
132 cells:
TSM-xxxNEG21C.20, TSM-xxxNEG21C.27, TSM-xxxNEG21C.28,
TSM-xxxNEG21C.29, TSM-xxxNEG21C.70 (xxx=635-710, in steps of 5).

mono series with 182.0 x 70.0 (mm) N type 1/3 cutting MBB bifacial cell:
144 cells:
TSM-xxxNEG9RC.20, TSM-xxxNEG9RC.25,
TSM-xxxNEG9RC.28, TSM-xxxNEG9RC.27,
TSM-xxxNEG9RC.29, TSM-xxxNEG9RC.B0,
TSM-xxxNEG9RC.B5, TSM-xxxNEG9RC.B8,
TSM-xxxNEG9RC.B7, TSM-xxxNEG9RC.B9,
(xxx=375-460, in steps of 5).

mono series with 182.0 x 70.0 (mm) N type 1/3 cutting MBB bifacial

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cell:
(Module Type for rear side with white EVA or Glass white)
144 cells:
TSM-xxxNEG9R.20, TSM-xxxNEG9R.25,
TSM-xxxNEG9R.28, TSM-xxxNEG9R.27,
TSM-xxxNEG9R.29, TSM-xxxNEG9R.B0,
TSM-xxxNEG9R.B5, TSM-xxxNEG9R.B8,
TSM-xxxNEG9R.B7, TSM-xxxNEG9R.B9,
(xxx=375-460 in steps of 5).

mono series with 182.0 x 105.0 (mm) half cutting N type MBB bifacial cell:
132 cells:
TSM-xxxNEG19RC.20, TSM-xxxNEG19RC.25,
TSM-xxxNEG19RC.27, TSM-xxxNEG19RC.28,
TSM-xxxNEG19RC.29, TSM-xxxNEG19RC.70 (xxx=525-620, in steps of 5).

mono series with 182.0 x 105.0 (mm) half cutting N type MBB bifacial cell:
(Module Type for rear side with white EVA or Glass white)
132 cells:
TSM-xxxNEG19R.20, TSM-xxxNEG19R.25,
TSM-xxxNEG19R.27, TSM-xxxNEG19R.28,
TSM-xxxNEG19R.29, (xxx=525-620, in steps of 5)
108 cells:
TSM-xxxNEG18R.20, TSM-xxxNEG18R.25,
TSM-xxxNEG18R.27, TSM-xxxNEG18R.28,
TSM-xxxNEG18R.29, (xxx=470-505, in steps of 5).

mono series with 182.0 x 91.0 (mm) or 182.2 x 91.875(mm) half cutting N type MBB bifacial cell:
144 cells:
TSM-xxxNEG18C.20, TSM-xxxNEG18C.25,
TSM-xxxNEG18C.27, TSM-xxxNEG18C.28,
TSM-xxxNEG18C.29, (xxx=555-595, in steps of 5)

mono series with 158.75 x 79.375 (mm) half cutting N type MBB bifacial cell (for cells splicing technology):
156 cells:
TSM-xxxNEG15XC(II), TSM-xxxNEG15XC.07(II), TSM-xxxNEG15XC.20(II), TSM-xxxNEG15XC.27(II), TSM-xxxNEG15XC.28(II), TSM-xxxNEG15XC.29(II)
(xxx=425-445, in steps of 5).

mono series with 210.0 x 105.0 (mm) half cutting MBB bifacial HJT cell:
(Longitudinal version: the long side of the cell is parallel to the short side of the module)
132 cells:
TSM-xxxHEG21C.20, TSM-xxxHEG21C.27,
TSM-xxxHEG21C.28, TSM-xxxHEG21C.29
(xxx=640-685, in steps of 5).
120 cells:
TSM-xxxHEG20C.20, TSM-xxxHEG20C.27,
TSM-xxxHEG20C.28, TSM-xxxHEG20C.29
(xxx=585-620, in steps of 5).
110 cells:
TSM-xxxHEG19C.20, TSM-xxxHEG19C.27,
TSM-xxxHEG19C.28, TSM-xxxHEG19C.29
(xxx=530-565, in steps of 5).

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poly series with 157 x 157 (mm) and 156 x 156 (mm) solar cells:
72 cells:
TSM-xxxPEG14, TSM-xxxPEG14.07, TSM-xxxPEG14.20, TSM-xxxPEG14.27, TSM-xxxPEG14.28, TSM-xxxPEG14.29, TSM-xxxPEG14.40,
TSM-xxxPEG14.47 (xxx=315-360, in steps of 5);
TSM-xxxPEG14(II), TSM-xxxPEG14.07(II), TSM-xxxPEG14.20(II), TSM-xxxPEG14.27(II), TSM-xxxPEG14.28(II), TSM-xxxPEG14.29(II), TSM-xxxPEG14.40(II), TSM-xxxPEG14.47(II) (xxx=315-360, in steps of 5).
60 cells:
TSM-xxxPEG5, TSM-xxxPEG5.07, TSM-xxxPEG5.20, TSM-xxxPEG5.27,
TSM-xxxPEG5.28, TSM-xxxPEG5.29, TSM-xxxPEG5.40, TSM-xxxPEG5.47 (xxx=265-300, in steps of 5);
TSM-xxxPEG5(II), TSM-xxxPEG5.07(II), TSM-xxxPEG5.20(II), TSM-xxxPEG5.27(II), TSM-xxxPEG5.28(II), TSM-xxxPEG5.29(II), TSM-xxxPEG5.40(II), TSM-xxxPEG5.47(II) (xxx=265-300, in steps of 5).

poly series with 158.75 x 158.75 (mm) solar cells:
72 cells:
TSM-xxxPEG15, TSM-xxxPEG15.07, TSM-xxxPEG15.20, TSM-xxxPEG15.27, TSM-xxxPEG15.28, TSM-xxxPEG15.29, TSM-xxxPEG15.40,
TSM-xxxPEG15.47 (xxx=315-360, in steps of 5);
TSM-xxxPEG15(II), TSM-xxxPEG15.07(II), TSM-xxxPEG15.20(II), TSM-xxxPEG15.27(II), TSM-xxxPEG15.28(II), TSM-xxxPEG15.29(II), TSM-xxxPEG15.40(II), TSM-xxxPEG15.47(II) (xxx=315-360, in steps of 5).
60 cells:
TSM-xxxPEG6, TSM-xxxPEG6.07, TSM-xxxPEG6.20, TSM-xxxPEG6.27,
TSM-xxxPEG6.28, TSM-xxxPEG6.29, TSM-xxxPEG6.40, TSM-xxxPEG6.47 (xxx=265-300, in steps of 5);
TSM-xxxPEG6(II), TSM-xxxPEG6.07(II), TSM-xxxPEG6.20(II), TSM-xxxPEG6.27(II), TSM-xxxPEG6.28(II), TSM-xxxPEG6.29(II), TSM-xxxPEG6.40(II), TSM-xxxPEG6.47(II) (xxx=265-300, in steps of 5).

poly series with 157 x 78.5 (mm) half cutting cell:
144 cells:
TSM-xxxPEG14H, TSM-xxxPEG14H.07, TSM-xxxPEG14H.20, TSM-xxxPEG14H.27, TSM-xxxPEG14H.28, TSM-xxxPEG14H.29, TSM-xxxPEG14H.40, TSM-xxxPEG14H.47 (xxx=330-360, in steps of 5);
TSM-xxxPEG14H(II), TSM-xxxPEG14H.07(II), TSM-xxxPEG14H.20(II), TSM-xxxPEG14H.27(II), TSM-xxxPEG14H.28(II), TSM-xxxPEG14H.29(II),
TSM-xxxPEG14H.40(II), TSM-xxxPEG14H.47(II) (xxx=330-360, in steps of 5).
120 cells:
TSM-xxxPEG5H, TSM-xxxPEG5H.07, TSM-xxxPEG5H.20, TSM-xxxPEG5H.27, TSM-xxxPEG5H.28, TSM-xxxPEG5H.29, TSM-xxxPEG5H.40,
TSM-xxxPEG5H.47 (xxx=275-300, in steps of 5);
TSM-xxxPEG5H(II), TSM-xxxPEG5H.07(II), TSM-xxxPEG5H.20(II), TSM-xxxPEG5H.27(II), TSM-xxxPEG5H.28(II), TSM-xxxPEG5H.29(II), TSM-xxxPEG5H.40(II), TSM-xxxPEG5H.47(II) (xxx=275-300, in steps of 5).

poly series with 158.75 x 79.375 (mm) half cutting cell:
144 cells:
TSM-xxxPEG15H, TSM-xxxPEG15H.07, TSM-xxxPEG15H.20,

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TSM-xxxPEG15H.27, TSM-xxxPEG15H.28, TSM-xxxPEG15H.29, SM-xxxPEG15H.40, TSM-xxxPEG15H.47 (xxx=340-360, in steps of 5);
TSM-xxxPEG15H(II), TSM-xxxPEG15H.07(II), TSM-xxxPEG15H.20(II), TSM-xxxPEG15H.27(II), TSM-xxxPEG15H.28(II), TSM-xxxPEG15H.29(II),
TSM-xxxPEG15H.40(II), TSM-xxxPEG15H.47(II) (xxx=340-400, in steps of 5).
120 cells:
TSM-xxxPEG6H, TSM-xxxPEG6H.07, TSM-xxxPEG6H.20, TSM-xxxPEG6H.27, TSM-xxxPEG6H.28, TSM-xxxPEG6H.29, TSM-xxxPEG6H.40,
TSM-xxxPEG6H.47 (xxx=280-300, in steps of 5);
TSM-xxxPEG6H(II), TSM-xxxPEG6H.07(II), TSM-xxxPEG6H.20(II), TSM-xxxPEG6H.27(II), TSM-xxxPEG6H.28(II), TSM-xxxPEG6H.29(II), TSM-xxxPEG6H.40(II), TSM-xxxPEG6H.47(II) (xxx=280-330, in steps of 5).

poly series with 157 x 78.5 (mm) half cutting MBB cell:
144 cells:
TSM-xxxPEG14M(II), TSM-xxxPEG14M.07(II), TSM-xxxPEG14M.20(II), TSM-xxxPEG14M.27(II), TSM-xxxPEG14M.28(II), TSM-xxxPEG14M.29(II), TSM-xxxPEG14M.40(II), TSM-xxxPEG14M.47(II) (xxx=330-360, in steps of 5).
120 cells:
TSM-xxxPEG5M(II), TSM-xxxPEG5M.07(II), TSM-xxxPEG5M.20(II), TSM-xxxPEG5M.27(II), TSM-xxxPEG5M.28(II), TSM-xxxPEG5M.29(II), TSM-xxxPEG5M.40(II), TSM-xxxPEG5M.47(II) (xxx=275-300, in steps of 5).

poly series with 158.75 x 79.375 (mm) half cutting MBB cell:
144 cells:
TSM-xxxPEG15M(II), TSM-xxxPEG15M.07(II), TSM-xxxPEG15M.20(II), TSM-xxxPEG15M.27(II), TSM-xxxPEG15M.28(II), TSM-xxxPEG15M.29(II), TSM-xxxPEG15M.40(II), TSM-xxxPEG15M.47(II) (xxx=340-405, in steps of 5).
120 cells:
TSM-xxxPEG6M(II), TSM-xxxPEG6M.07(II), TSM-xxxPEG6M.20(II), TSM-xxxPEG6M.27(II), TSM-xxxPEG6M.28(II), TSM-xxxPEG6M.29(II), TSM-xxxPEG6M.40(II), TSM-xxxPEG6M.47(II) (xxx=280-335, in steps of 5).
xxx stands for rated output power at STC

Smart PV modules:
(Module Type with junction box TSD301xy)
mono series with 210.0 x 105.0 (mm) half cutting MBB bifacial cell:
132 cells:
TSM-xxxDEG21C.20S (xxx=625-675, in steps of 5)
120 cells:
TSM-xxxDEG20C.20S (xxx=570-605, in steps of 5)
110 cells:
TSM-xxxDEG19C.20S (xxx=525-555, in steps of 5)

mono series with 182 x 105 (mm) half cutting MBB bifacial cell:
132 cells:
TSM-xxxDEG19RC.20S (xxx=540-590, in steps of 5)

mono series with 182 x 70 (mm) 1/3 cutting MBB bifacial cell:
144 cells:
TSM-xxxDEG9RC.B7S (xxx=395-435, in steps of 5)

mono series with 182 x 70 (mm) 1/3 cutting MBB bifacial cell:

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(Module Type for rear side with white EVA or Glass white)
144 cells:
TSM-xxxDEG9R.B0S, TSM-xxxDEG9R.B8S
(xxx=395-435, in steps of 5)

mono series with 210.0 x 70.0 (mm) 1/3 cutting MBB bifacial cell:
150 cells:
TSM-xxxDEG18MC.20S(II) (xxx=460-510, in steps of 5)

mono series with 210.0 x 70.0 (mm) 1/3 cutting MBB bifacial cell:
(Module Type for rear side with white EVA or Glass white)
150 cells:
TSM-xxxDEG18M.20S(II) (xxx=460-510, in steps of 5)

mono series with 210.0 x 105.0 (mm) half cutting N type MBB bifacial cell:
132 cells:
TSM-xxxNEG21C.20S (xxx=635-690, in steps of 5)

mono series with 182.0 x 105.0 (mm) half cutting N type MBB bifacial cell:
132 cells:
TSM-xxxNEG19RC.20S (xxx=565-595, in steps of 5)

mono series with 182.0 x 70.0 (mm) N type 1/3 cutting MBB bifacial cell:
(Module Type for rear side with white EVA or Glass white)
144 cells:
TSM-xxxNEG9R.20S, TSM-xxxNEG9R.28S
(xxx=395-445, in steps of 5)
xxx stands for rated output power at STC

Parameters:

Construction:	Framed or Frameless with Junction box,cable and connector.
Safety Class:	Class II
Maximum System Voltage:	1500 V DC
PID test condition:	±1500 V, 192 Hours, 85 °C, 85 % RH
	Remark: PID testing method: PID test is according to test method a of IEC TS 62804-1:2015

Tested according to:

IEC 61215-1:2016
IEC 61215-1-1:2016
IEC 61215-2:2016
IEC 61730-1:2016
IEC 61730-2:2016
PPP 58042B:2015

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