C E R T I F I C A T E
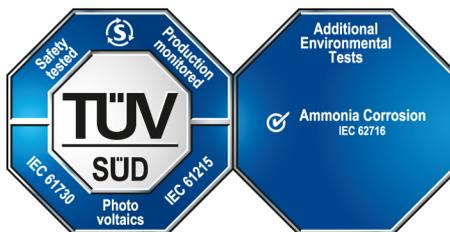
No. Z2 070321 0148 Rev. 21

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, Certification, Validation and Verification Regulations of TÜV SÜD Group have to be complied. For details see: www.tuvsud.com/ps-cert

Test report no.: 704062210702-21

Valid until: 2030-07-23

Date, 2025-09-26

(Zhulin Zhang)

C E R T I F I C A T E

No. Z2 070321 0148 Rev. 21

Model(s):

1500V system voltage PV modules:
mono series with 157 x 157 (mm) and 156.75 x 156.75 (mm) solar cells:
72 cells:
TSM-xxxDEG14(II), TSM-xxxDEG14.05(II), TSM-xxxDEG14.25(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-xxxDEG5.05(II), TSM-xxxDEG5.25(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-xxxDEG15.05(II), TSM-xxxDEG15.25(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-xxxDEG6.05(II), TSM-xxxDEG6.25(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.05(II), TSM-xxxDEG14C.25(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.05(II), TSM-xxxDEG5C.25(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.05(II), TSM-xxxDEG15C.25(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.05(II), TSM-xxxDEG6C.25(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.05(II), TSM-xxxDEG14H.25(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.05(II),
TSM-xxxDEG5H.25(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).

mono series with 158.75 x 79.375 (mm) half cutting cell:
144 cells:
TSM-xxxDEG15H(II), TSM-xxxDEG15H.05(II),
TSM-xxxDEG15H.25(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.05(II),
TSM-xxxDEG6H.25(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
(or module type with MBB bifacial cell for rear side with white EVA or
Glass white):
144 cells:
TSM-xxxDEG14M(II), TSM-xxxDEG14M.05(II),
TSM-xxxDEG14M.25(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.05(II),
TSM-xxxDEG5M.25(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
(or module type with MBB bifacial cell for rear side with white EVA or
Glass white):
144 cells:
TSM-xxxDEG15M(II), TSM-xxxDEG15M.07(II),
TSM-xxxDEG15M.20(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.05(II),
TSM-xxxDEG6M.25(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).

C E R T I F I C A T E

No. Z2 070321 0148 Rev. 21

mono series with 166.0 x 83.0 (mm) half cutting MBB cells (or module type with MBB bifacial cell for rear side with white EVA or Glass white):
144 cells:
TSM-xxxDEG17M(II), TSM-xxxDEG17M.07(II),
TSM-xxxDEG17M.25(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.05(II),
TSM-xxxDEG8M.25(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.05(II),
TSM-xxxDEG14HC.25(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.05(II),
TSM-xxxDEG5HC.25(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 MBB bifacial cell:
144 cells:
TSM-xxxDEG15HC(II), TSM-xxxDEG15HC.05(II),
TSM-xxxDEG15HC.25(II), TSM-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.05(II),
TSM-xxxDEG6HC.25(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.05(II),
TSM-xxxDEG14MC.25(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.05(II), TSM-xxxDEG5MC.25(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:

TÜV®

TSM-xxxDEG15MC(II), TSM-xxxDEG15MC.05(II), TSM-xxxDEG15MC.25(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.05(II), TSM-xxxDEG6MC.25(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 MBB bifacial cell:
144 cells:
TSM-xxxDEG17MC(II), TSM-xxxDEG17MC.05(II), TSM-xxxDEG17MC.25(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.05(II), TSM-xxxDEG8MC.25(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.05(II), TSM-xxxDEG18MC.25(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.25, 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.05(II), TSM-xxxDEG18M.25(II), TSM-xxxDEG18M.07(II), TSM-xxxDEG18M.20(II), 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-xxxDEG9.25, 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.25(II), 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

TÜV SÜD Product Service GmbH • Certification Body • Ridlerstraße 65 • 80339 Munich • Germany

(for cells splicing technology)
(Module Type for rear side with white EVA or Glass white):
156 cells:
TSM-xxxDEG17X.25(II), 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.25,
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.25,
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.25,
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-xxxDEG20.25,
TSM-xxxDEG20.27, TSM-xxxDEG20.28,
TSM-xxxDEG20.29 (xxx=575-605, in steps of 5).
110 cells:
TSM-xxxDEG19.20, TSM-xxxDEG19.25,
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.25,
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-xxxDEG18.25,
TSM-xxxDEG18.27, TSM-xxxDEG18.28,
TSM-xxxDEG18.29 (xxx=520-555, in steps of 5).
120 cells:
TSM-xxxDEG10.20, TSM-xxxDEG10.25,
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:

CERTIFICATE

No. Z2 070321 0148 Rev. 21

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.25(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.05(II),
TSM-xxxNEG14C.25(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.05(II), TSM-xxxNEG5C.25(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:
TSM-xxxNEG15C(II), TSM-xxxNEG15C.05(II), TSM-xxxNEG15C.25(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.05(II), TSM-xxxNEG6C.25(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.05(II), TSM-xxxNEG16C.25(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.05(II), TSM-xxxNEG7C.25(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.05(II), TSM-
xxxNEG14MC.25(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.05(II), TSM-
xxxNEG5MC.25(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.05(II), TSM-
xxxNEG15MC.25(II), TSM-xxxNEG15MC.07(II), TSM-
xxxNEG15MC.20(II), TSM-xxxNEG15MC.27(II), TSM-
xxxNEG15MC.28(II), TSM-xxxNEG15MC.29(II)
(xxx=350-400, in steps of 5).
120 cells:
TSM-xxxNEG6MC(II), TSM-xxxNEG6MC.05(II), TSM-
xxxNEG6MC.25(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.05(II), TSM-xxxNEG15M.25(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.05(II), TSM-xxxNEG6M.25(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.05(II), TSM-xxxNEG16M.25(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).
120 cells:
TSM-xxxNEG7M(II), TSM-xxxNEG7M.05(II), TSM-xxxNEG7M.25(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.05(II), TSM-xxxNEG16MC.25(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.05(II), TSM-xxxNEG7MC.25(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.25(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.25, 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-xxxNEG9.25, 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.25, TSM-xxxNEG20C.27, TSM-xxxNEG20C.28, TSM-xxxNEG20C.29，TSM-xxxNEG20C.70, TSM-xxxNEG20C.C0   (xxx=580-670, in steps of 5).

C E R T I F I C A T E

No. Z2 070321 0148 Rev. 21

110 cells:
TSM-xxxNEG19C.20, TSM-xxxNEG19C.25,
TSM-xxxNEG19C.27, TSM-xxxNEG19C.28,
TSM-xxxNEG19C.29 (xxx=530-570, in steps of 5).
132 cells:
TSM-xxxNEG21C.20, TSM-xxxNEG21C.25,
TSM-xxxNEG21C.27, TSM-xxxNEG21C.28,
TSM-xxxNEG21C.29，TSM-xxxNEG21C.70,
TSM-xxxNEG21C.B0, TSM-xxxNEG21C.22,
TSM-xxxNEG21C.20K, TSM-xxxNEG21C.20M
(xxx=635-740, in steps of 5).
64 cells:
TSM-xxxNEG9M5C.26(xxx=305-345, in steps of 5).
56 cells:
TSM-xxxNEG9M4C.26(xxx=265-300, 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,
TSM-xxxNED9RC.20, TSM-xxxNED9RC.25,
TSM-xxxNED9RC.28, TSM-xxxNED9RC.27,
TSM-xxxNED9RC.29
(xxx=375-460, 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.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,
TSM-xxxNED9R.20, TSM-xxxNED9R.25,
TSM-xxxNED9R.28, TSM-xxxNED9R.27,
TSM-xxxNED9R.29
(xxx=375-470, 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,
TSM-xxxNEG19RC.20K,TSM-xxxNED19RC.20,
TSM-xxxNED19RC.25, TSM-xxxNED19RC.27,
TSM-xxxNED19RC.28,
TSM-xxxNED19RC.29(xxx=525-645, 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=525-635, in steps of 5)
108 cells:
TSM-xxxNEG18R.20, TSM-xxxNEG18R.25,
TSM-xxxNEG18R.27, TSM-xxxNEG18R.28,
TSM-xxxNEG18R.29, (xxx=470-520, in steps of 5)
96 cells
TSM-xxxIEG9RH.25 (xxx=440-470, in steps of 5)

mono series with 182.0 x 105.0 (mm) half cutting N type MBB bifacial cell:
b)108 cells

TSM-xxxNEG18RC.20, TSM-xxxNEG18RC.25,

TSM-xxxNEG18RC.27, TSM-xxxNEG18RC.28,

TSM-xxxNEG18RC.29, (xxx=470-520, 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=555-610, in steps of 5)

mono series with 182.2 x 91.875(mm) half cutting N type MBB bifacial cell:
a)156 cells:
TSM-xxxNEG20MC.20, TSM-xxxNEG20MC.25,
TSM-xxxNEG20MC.27, TSM-xxxNEG20MC.28,
TSM-xxxNEG20MC.29, (xxx=600-650, in steps of 5)

mono series with 182.3 x 105.0 (mm) N type MBB bifacial cell:
a)132 cells:

TSM-xxxNEG19RC.20U, TSM-xxxNEG19RC.25U,

TSM-xxxNEG19RC.27U, TSM-xxxNEG19RC.28U,

TSM-xxxNEG19RC.29U, TSM-xxxNEG19RC.70U,
TSM-xxxNEG19RC.88U
(xxx=620-650, in steps of 5)

mono series with 182.3 x 70.0 (mm) N type MBB bifacial cell:
(Module Type for rear side with white EVA or Glass white)
a)144 cells:

TSM-xxxNEG9R.20U, TSM-xxxNEG9R.25U,

TSM-xxxNEG9R.28U, TSM-xxxNEG9R.27U,

TSM-xxxNEG9R.29U
(xxx=430-470, 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.05(II), TSM-xxxNEG15XC.25(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 158.75 x 79.375 (mm) half cutting MBB bifacial HJT
cell:
(Horizontal version: the long side of the cell is parallel to the long
side of the module)
156 cells:
TSM-xxxHEG15XKC.203, TSM-xxxHEG15XKC.253,
TSM-xxxHEG15XKC.273, TSM-xxxHEG15XKC.283,
TSM-xxxHEG15XKC.293 (xxx=435-455, in steps of 5).
182 cells:
TSM-xxxHEG15YKC.20, TSM-xxxHEG15YKC.25,
TSM-xxxHEG15YKC.27, TSM-xxxHEG15YKC.28,
TSM-xxxHEG15YKC.29 (xxx=515-530, in steps of 5).
168 cells:
TSM-xxxHEG15VKC.20, TSM-xxxHEG15VKC.25,
TSM-xxxHEG15VKC.27, TSM-xxxHEG15VKC.28,
TSM-xxxHEG15VKC.29 (xxx=475-485, in steps of 5).
130 cells:
TSM-xxxHEG6XKC.20, TSM-xxxHEG6XKC.25,
TSM-xxxHEG6XKC.27, TSM-xxxHEG6XKC.28,
TSM-xxxHEG6XKC.29 (xxx=370-375, in steps of 5).

mono series with 158.75 x 79.375 (mm) half cutting MBB bifacial HJT
cell:
(Longitudinal version: the long side of the cell is parallel to the short
side of the module)
156 cells:
TSM-xxxHEG15XC.20, TSM-xxxHEG15XC.25,
TSM-xxxHEG15XC.27, TSM-xxxHEG15XC.28,
TSM-xxxHEG15XC.29 (xxx=440-460, in steps of 5).
144 cells:
TSM-xxxHEG15C.20, TSM-xxxHEG15C.25,
TSM-xxxHEG15C.27, TSM-xxxHEG15C.28,
TSM-xxxHEG15C.29 (xxx=410-425, in steps of 5).
120 cells:
TSM-xxxHEG6C.20, TSM-xxxHEG6C.25,
TSM-xxxHEG6C.27, TSM-xxxHEG6C.28,
TSM-xxxHEG6C.29 (xxx=340-350, in steps of 5).

mono series with 210.0 x 105.0 (mm) half cutting MBB bifacial HJT
cell:
132 cells:
TSM-xxxHEG21C.20, TSM-xxxHEG21C.25,
TSM-xxxHEG21C.27, TSM-xxxHEG21C.28,
TSM-xxxHEG21C.29 (xxx=680-740, in steps of 5).
120 cells:
TSM-xxxHEG20C.20, TSM-xxxHEG20C.25,
TSM-xxxHEG20C.27, TSM-xxxHEG20C.28,
TSM-xxxHEG20C.29 (xxx=585-620, in steps of 5).
110 cells:
TSM-xxxHEG19C.20, TSM-xxxHEG19C.25,
TSM-xxxHEG19C.27, TSM-xxxHEG19C.28,
TSM-xxxHEG19C.29 (xxx=530-565, in steps of 5).

mono series with 182.0 x 105.0 (mm) half cutting MBB bifacial HJT
cell:
a)132 cells:
TSM-xxxHEG19RC.20(xxx=585-620, in steps of 5).

C E R T I F I C A T E

No. Z2 070321 0148 Rev. 21

mono series with 157 x 31.4 (mm) 1/5 cutting cells:
336 cells:
TSM-xxxDEG5ZV(II), TSM-xxxDEG5ZV.05(II), TSM-xxxDEG5ZV.07(II), TSM-xxxDEG5ZV.40(II), TSM-xxxDEG5ZV.47(II) (xxx=305-330, in steps of 5).

poly series with 157 x 157 (mm) and 156 x 156 (mm) solar cells:
72 cells:
TSM-xxxPEG14, TSM-xxxPEG14.05, TSM-xxxPEG14.25, 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-xxxPEG14.05(II), TSM-xxxPEG14.25(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-xxxPEG5.05, TSM-xxxPEG5.25, 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-xxxPEG5.05(II), TSM-xxxPEG5.25(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-xxxPEG15.05, TSM-xxxPEG15.25, 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-xxxPEG15.05(II), TSM-xxxPEG15.25(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-xxxPEG6.05, TSM-xxxPEG6.25, 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-xxxPEG6.05(II), TSM-xxxPEG6.25(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.05, TSM-xxxPEG14H.25, 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.05(II), TSM-xxxPEG14H.25(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.05, TSM-xxxPEG5H.25, 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.05(II), TSM-xxxPEG5H.25(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.05, TSM-xxxPEG15H.25,
TSM-xxxPEG15H.07, TSM-xxxPEG15H.20, TSM-xxxPEG15H.27,
TSM-xxxPEG15H.28, TSM-xxxPEG15H.29, TSM-xxxPEG15H.40,
TSM-xxxPEG15H.47 (xxx=340-360, in steps of 5).
TSM-xxxPEG15H(II), TSM-xxxPEG15H.05(II), TSM-xxxPEG15H.25(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.05, TSM-xxxPEG6H.25, 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.05(II), TSM-xxxPEG6H.25(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.05(II), TSM-xxxPEG14M.25(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.05(II), TSM-xxxPEG5M.25(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.05(II), TSM-xxxPEG15M.25(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.05(II), TSM-xxxPEG6M.25(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).

poly series with 166 x 83 (mm) half cutting MBB cell:
144 cells:
TSM-xxxPEG17MC(II), TSM-xxxPEG17MC.05(II),
TSM-xxxPEG17MC.25(II), TSM-xxxPEG17MC.07(II),
TSM-xxxPEG17MC.20(II), TSM-xxxPEG17MC.27(II),
TSM-xxxPEG17MC.28(II), TSM-xxxPEG17MC.29(II)

(xxx=410-445, in steps of 5).
120 cells:
TSM-xxxPEG8MC(II), TSM-xxxPEG8MC.05(II), TSM-xxxPEG8MC.25(II), TSM-xxxPEG8MC.07(II), TSM-xxxPEG8MC.20(II), TSM-xxxPEG8MC.27(II), TSM-xxxPEG8MC.28(II), TSM-xxxPEG8MC.29(II) (xxx=350-365, in steps of 5).

poly series with 166 x 83 (mm) half cutting MBB cell:
(Module Type for rear side with white EVA or Glass white)
144 cells:
TSM-xxxPEG17M(II), TSM-xxxPEG17M.05(II), TSM-xxxPEG17M.25(II), TSM-xxxPEG17M.07(II), TSM-xxxPEG17M.20(II), TSM-xxxPEG17M.27(II), TSM-xxxPEG17M.28(II), TSM-xxxPEG17M.29(II) (xxx=410-445, in steps of 5).
120 cells:
TSM-xxxPEG8M(II), TSM-xxxPEG8M.05(II), TSM-xxxPEG8M.25(II), TSM-xxxPEG8M.07(II), TSM-xxxPEG8M.20(II), TSM-xxxPEG8M.27(II), TSM-xxxPEG8M.28(II), TSM-xxxPEG8M.29(II) (xxx=350-365, in steps of 5).

poly series with 157 x 31.4 (mm) 1/5 cutting cells:
336 cells:
TSM-xxxPEG5ZV, TSM-xxxPEG5ZV.05, TSM-xxxPEG5ZV.07, TSM-xxxPEG5ZV.40, TSM-xxxPEG5ZV.47
(xxx=280-300, 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:
(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

C E R T I F I C A T E

No. Z2 070321 0148 Rev. 21

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)

1000V system voltage PV modules:
mono series with 182.0 x 105.0 (mm) half cutting N type MBB bifacial cell:
(Module Type for rear side with white EVA)
48 cells:
TSM-xxxNDG05R.78, TSM-xxxNDG05R.78A
(xxx=215-235, 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 or 1000 V DC

Tested according to:

IEC 61215-1:2016
IEC 61215-1-1:2016
IEC 61215-2:2016
IEC 61730-1:2016
IEC 61730-2:2016
IEC 62716:2013