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C E R T I F I C A T E

No. Z2 070321 0169 Rev. 11

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**

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.: 704062400501-11

Valid until: 2031-07-22

Date, 2026-07-29

(Zhulin Zhang)

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Model(s):

mono series with 210.0 x 105.0 (mm) half cutting MBB bifacial cell:
a)120 cells:
TSM-xxxDEG20C.20, TSM-xxxDEG20C.25,
TSM-xxxDEG20C.27, TSM-xxxDEG20C.28,
TSM-xxxDEG20C.29 (xxx=580-610, in steps of 5).
b)132 cells:
TSM-xxxDEG21C.20, TSM-xxxDEG21C.25,
TSM-xxxDEG21C.27, TSM-xxxDEG21C.28,
TSM-xxxDEG21C.29 (xxx=640-670, in steps of 5)

mono series with 210.0 x 105.0 (mm) half cutting N type MBB bifacial cell:
a)120 cells:
TSM-xxxNEG20C.20, TSM-xxxNEG20C.25,
TSM-xxxNEG20C.27, TSM-xxxNEG20C.28,
TSM-xxxNEG20C.29 (xxx=585-655, in steps of 5).
b)132 cells:
TSM-xxxNEG21C.20, TSM-xxxNEG21C.25,
TSM-xxxNEG21C.27, TSM-xxxNEG21C.28,
TSM-xxxNEG21C.29, TSM-xxxNEG21C.B0,
TSM-xxxNEG21C.88, TSM-xxxNEG21C.60,
TSM-xxxNEG21C.70,(xxx=645-740, in steps of 5)
c)64 cells:
TSM-xxxNEG9M5C.26(xxx=305-345, in steps of 5).
d)56 cells:
TSM-xxxNEG9M4C.26(xxx=265-300, in steps of 5).
e)144 cells:
TSM-xxxNEG22C.20, TSM-xxxNEG22C.25,
TSM-xxxNEG22C.27, TSM-xxxNEG22C.28,
TSM-xxxNEG22C.29 (xxx=770-800, in steps of 5)

mono series with 210.0 x 105.0 (mm) half cutting N type MBB bifacial cell:
(Module Type for rear side with white EVA)
a)144 cells:
TSM-xxxNEG22.20, TSM-xxxNEG22.25,
TSM-xxxNEG22.27, TSM-xxxNEG22.28,
TSM-xxxNEG22.29 (xxx=770-800, in steps of 5)

mono series with 182.0 x 70.0 (mm) N type 1/3 cutting MBB bifacial cell:
a)144 cells:
TSM-xxxNEG9RC.20, TSM-xxxNEG9RC.25,
TSM-xxxNEG9RC.28, TSM-xxxNEG9RC.27,
TSM-xxxNEG9RC.29, TSM-xxxNED9RC.20,
TSM-xxxNED9RC.25, TSM-xxxNED9RC.28,
TSM-xxxNED9RC.27, TSM-xxxNED9RC.29
(xxx=410-450, 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)

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a)144 cells:

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

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

TSM-xxxNEG9R.29, TSM-xxxNED9R.20,

TSM-xxxNED9R.25, TSM-xxxNED9R.28,

TSM-xxxNED9R.27, TSM-xxxNED9R.29

(xxx=410-480, in steps of 5)

mono series with 182.3 x 71.1 (mm) N type 1/3 cutting MBB bifacial cell:

a)198 cells:

TSM-xxxNEG19RC.20Z, TSM-xxxNEG19RC.25Z,

TSM-xxxNEG19RC.27Z, TSM-xxxNEG19RC.28Z,

TSM-xxxNEG19RC.29Z, TSM-xxxNEG19RC.70Z,

TSM-xxxNEG19RC.88Z (xxx=615-665, in steps of 5)

mono series with 210 x 70 (mm) N type 1/3 cutting MBB bifacial cell:

a) 216 cells:

TSM-xxxNEG22C.20Z, TSM-xxxNEG22C.27Z

(xxx=770-800, in steps of 5)

mono series with 182.3 x 53.25 (mm) or 183 x 53.25 (mm)
N type 1/4 cutting MBB bifacial cell:

a)264 cells:

TSM-xxxNEG19RC.20Q, TSM-xxxNEG19RC.25Q,

TSM-xxxNEG19RC.27Q, TSM-xxxNEG19RC.28Q,

TSM-xxxNEG19RC.29Q, TSM-xxxNEG19RC.70Q,

TSM-xxxNEG19RC.88Q (xxx=615-670, in steps of 5)

mono series with 182.0 x 105.0 (mm) or 183.0 x 106.05 (mm)
or 183.0 x 106.5 (mm)
half cutting N type MBB bifacial cell:
a)132 cells:

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

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

TSM-xxxNEG19RC.29, TSM-xxxNEG19RC.70,

TSM-xxxNEG19RC.88, TSM-xxxNEG19RC.60,
TSM-xxxNED19RC.20, TSM-xxxNED19RC.25,
TSM-xxxNED19RC.27, TSM-xxxNED19RC.28,
TSM-xxxNED19RC.29 (xxx=575-650, in steps of 5)

b)108 cells

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

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

TSM-xxxNEG18RC.29, (xxx=470-515, in steps of 5)

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mono series with 182.0 x 105.0 (mm) or 183.0 x 106.05 (mm) or 183.0 x 106.5 (mm)
half cutting N type MBB bifacial cell:
(Module Type for rear side with white EVA or Glass white)
a)132 cells:

TSM-xxxNEG19R.20, TSM-xxxNEG19R.25,

TSM-xxxNEG19R.27, TSM-xxxNEG19R.28,

TSM-xxxNEG19R.29, (xxx=575-650, in steps of 5)
b)108 cells

TSM-xxxNEG18R.20, TSM-xxxNEG18R.25,

TSM-xxxNEG18R.27, TSM-xxxNEG18R.28,

TSM-xxxNEG18R.29 (xxx=470-525, in steps of 5)
c) 96 cells:

TSM-xxxNEG9RH.20, TSM-xxxNEG9RH.28 (xxx=440-475, in steps of 5)

TSM-xxxNEG9RH.25 (xxx=415-445, 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 182.0 x 91.0 (mm) or 182.2 x 91.875(mm) half cutting N type MBB bifacial cell:
a)144 cells:
TSM-xxxNEG18C.20, TSM-xxxNEG18C.25,
TSM-xxxNEG18C.27, TSM-xxxNEG18C.28,
TSM-xxxNEG18C.29 (xxx=555-605, 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 182.3 x 71.1 (mm) N type 1/3 cutting

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MBB bifacial cell:
(Module Type for rear side with white EVA or Glass white)
a)156 cells:
TSM-xxxNEG10R.20Z, TSM-xxxNEG10R.25Z,
TSM-xxxNEG10R.27Z, TSM-xxxNEG10R.28Z,
TSM-xxxNEG10R.29Z (xxx=480-515, in steps of 5)

mono series with 182.3 x 71.1 (mm) N type 1/3 cutting
MBB bifacial cell:
(Module Type for rear side with white EVA or Glass white)
a)150 cells:
TSM-xxxNEG9RP.28Z, TSM-xxxNEG9RP.20Z,
TSM-xxxNEG9RP.25Z (xxx=460-490, in steps of 5)

mono series with 210.3 x 53.5 (mm) (mm) N type 1/4 cutting
MBB bifacial cell:
a)264 cells:
TSM-xxxNEG21C.20Q (xxx=705-760, in steps of 5)
xxx stands for rated output power at STC.

Parameters:

Construction:	Framed with Junction box, Cable and Connectors.
Safety Class:	Class II
Maximum System Voltage:	1500 V DC
Fire Safety Class:	Class C according to UL 790
Test Laboratory:	Yangzhou Opto-Electrical Products Testing Institute Co., Ltd. No. 10 West Kaifa Road, Yangzhou, Jiangsu, 225009, P. R. China.

Tested according to:

IEC 61215-1:2021
IEC 61215-1-1:2021
IEC 61215-2:2021
IEC 61730-1:2023
IEC 61730-2:2023

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