

Vertex N

BIFACIAL DUAL GLASS MONOCRYSTALLINE MODULE

PRODUCT: TSM-NEG19RC.20

PRODUCT RANGE: 570-590W

590W

MAXIMUM POWER OUTPUT

0~+5W

POSITIVE POWER TOLERANCE

21.8%

MAXIMUM EFFICIENCY



Increased Customer Value

- Lower LCOE, reduced BOS cost, faster ROI
- Lowest guaranteed first year and annual degradation
- Designed for compatibility with existing mainstream system components
- Higher return on investment



High Power up to 590W

- Up to 21.8% module efficiency with high density interconnect technology
- Multi-busbar technology for better light trapping effect, lower series resistance and improved current collection



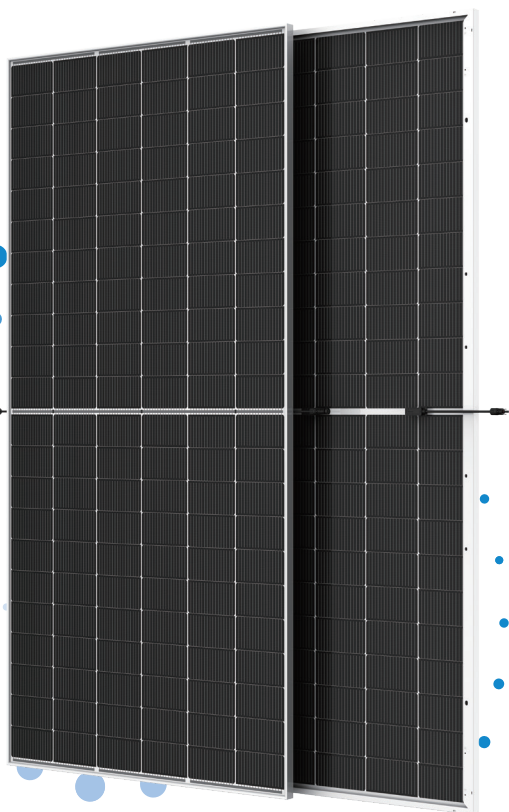
Improved Reliability

- Minimized micro-cracks with innovative non-destructive cutting technology
- Ensured PID resistance through cell process and module material control
- Resistant to harsh environments such as salt, ammonia, sand, high temperature and high humidity areas
- Mechanical performance up to 5400 Pa positive load and 2400 Pa negative load

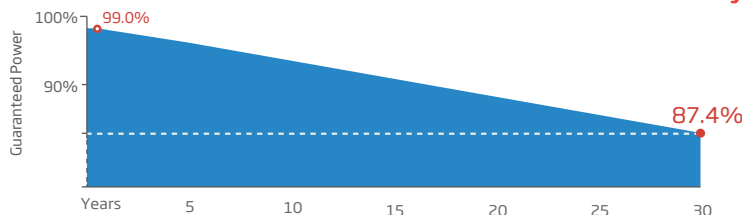


Better Energy Yield

- Excellent IAM and low irradiation performance, validated by 3rd party certifications
- The unique design provides optimized energy production under inter-row shading conditions
- Lower temperature coefficient (-0.30%) and operating temperature
- Up to 30% additional power gain from back side depending on albedo



Trina Solar's Vertex Bifacial Dual Glass Performance Warranty



Comprehensive Products and System Certificates



IEC61215/IEC61730/IEC61701/IEC62716/UL61730

ISO 9001: Quality Management System

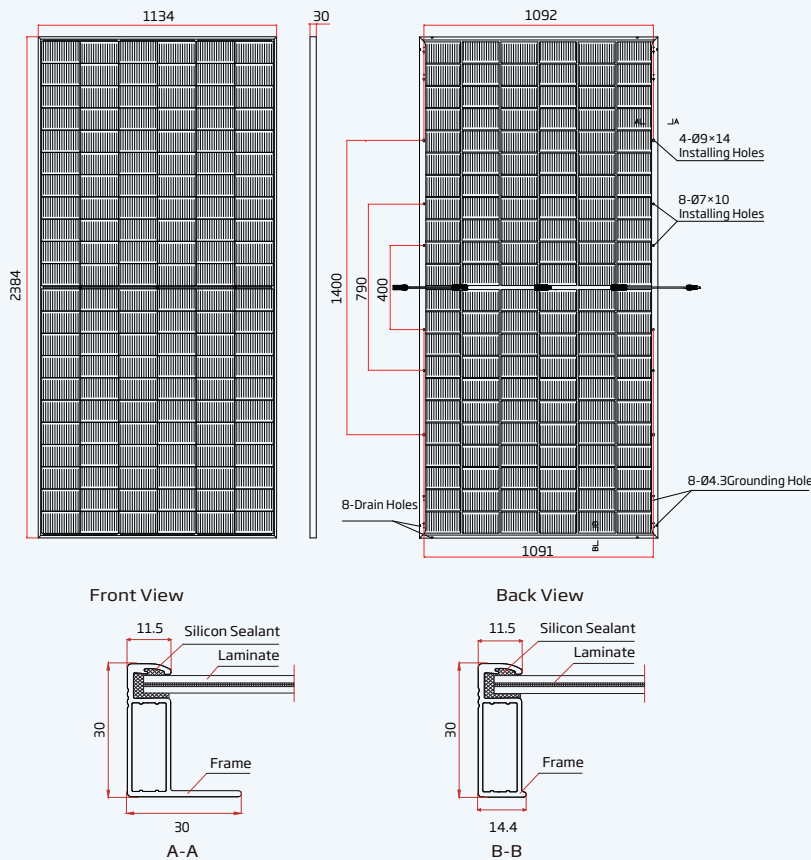
ISO 14001: Environmental Management System

ISO14064: Greenhouse Gases Emissions Verification

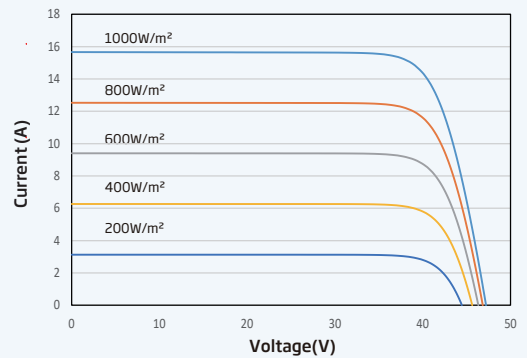
ISO45001: Occupational Health and Safety Management System



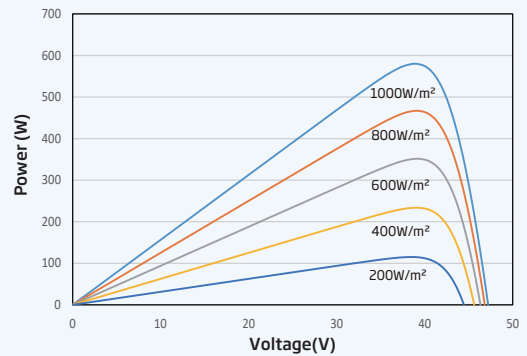
DIMENSIONS OF PV MODULE (mm)



I-V CURVES OF PV MODULE (580W)



P-V CURVES OF PV MODULE (580W)



ELECTRICAL DATA (STC)

Peak Power Watts - P _{MAX} (Wp)*	570	575	580	585	590
Power Tolerance - P _{MAX} (W)			0 ~ +5		
Maximum Power Voltage - V _{MPP} (V)	38.6	38.9	39.2	39.5	39.7
Maximum Power Current - I _{MPP} (A)	14.75	14.78	14.79	14.82	14.86
Open Circuit Voltage - V _{OC} (V)	46.6	46.9	47.2	47.5	47.8
Short Circuit Current - I _{SC} (A)	15.61	15.63	15.65	15.68	15.72
Module Efficiency η _m (%)	21.1	21.3	21.5	21.6	21.8

STC: Irradiance 1000W/m², Cell Temperature 25°C, Air Mass AM1.5. *Measuring tolerance: ±3%.

ELECTRICAL CHARACTERISTICS with BIFACIAL GAINS (10% Irradiance Ratio)

Total Equivalent power - P _{MAX} (Wp)	616	621	626	632	637
Maximum Power Voltage - V _{MPP} (V)	38.6	38.9	39.2	39.5	39.7
Maximum Power Current - I _{MPP} (A)	15.93	15.96	15.97	16.01	16.05
Open Circuit Voltage - V _{OC} (V)	46.6	46.9	47.2	47.5	47.8
Short Circuit Current - I _{SC} (A)	16.86	16.88	16.90	16.93	16.98
Irradiance ratio (rear/front)			10%		

Power Bifaciality: 80±5%.

ELECTRICAL DATA (NOCT)

Maximum Power - P _{MAX} (Wp)	434	438	442	446	450
Maximum Power Voltage - V _{MPP} (V)	36.3	36.5	36.8	37.1	37.3
Maximum Power Current - I _{MPP} (A)	11.97	11.99	12.00	12.02	12.05
Open Circuit Voltage - V _{OC} (V)	44.2	44.5	44.7	45.0	45.3
Short Circuit Current - I _{SC} (A)	12.58	12.59	12.61	12.64	12.67

NOCT: Irradiance at 800W/m², Ambient Temperature 20°C, Wind Speed 1m/s.

MECHANICAL DATA

Solar Cells	Monocrystalline 210Rmm N-type
No. of cells	132 cells
Module Dimensions	2384×1134×30 mm (93.86×44.65×1.18 in)
Weight	33.1kg (72.97lb)
Front Glass	2.0 mm (0.08 in), High Transmission, AR Coated Heat Strengthened Glass
Encapsulant material	EVA/POE
Back Glass	2.0 mm (0.08 in), Heat Strengthened Glass (White Grid Glass)
Frame	30mm (1.18 in) Anodized Aluminium Alloy
J-Box	IP 68 rated
Cables	Photovoltaic Technology Cable 4.0mm ² (0.006 in ²) Portrait: 350/280 mm (13.78/11.02 in)* Landscape: 1400 mm (55.12 in)*
Connector	MC4 EVO2 or TS4

*Lengths can be customized

TEMPERATURE RATINGS

NOCT (Nominal Operating Cell Temperature)	43°C (±2°C)
Temperature Coefficient of P _{MAX}	-0.30%/°C
Temperature Coefficient of V _{OC}	-0.24%/°C
Temperature Coefficient of I _{SC}	0.04%/°C

*Recommended

WARRANTY

- 12 year Product Workmanship Warranty
- 30 year Power Warranty
- 1% first year degradation
- 0.40% Annual Power Attenuation

(Please refer to product warranty for details)

MAXIMUM RATINGS

Operational Temperature	-40~+85°C
Maximum System Voltage	1500V DC (IEC) 1500V DC (UL)
Max Series Fuse Rating	30A*

PACKAGING CONFIGURATION

- Modules per box: 36 pieces
- Modules per 40' container: 504 pieces
- Pallets per 40' container: 14



Product Service

CERTIFICATE

No. Z2 070321 0097 Rev. 50

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 & Poly Crystalline Silicon Photovoltaic (PV) Module(s)

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.: 64290170581765

Valid until: 2029-02-01

Date, 2024-02-06

(Zhulin Zhang)

CERTIFICATE

No. Z2 070321 0097 Rev. 50

Model(s):

mono series with 157 x 157 (mm) and 156.75 x 156.75 (mm) solar cells:

72 cells:

TSM-xxxDEG14(II), TSM-xxxDEG14.05(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)

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(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:

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:

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).

mono series with 166.0 x 83.0 (mm) half cutting MBB cells:

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),

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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 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-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:

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-

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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 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

(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:

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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:

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)

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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),

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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=350-370, 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=295-305, 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=350-420, 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=295-330, 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)

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(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=390-415, 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=325-345, 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=580-650, in steps of 5).

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

(xxx=635-720, in steps of 5).

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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 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.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)

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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:

(Longitudinal version: the long side of the cell is parallel to the short side of the module)

132 cells:

TSM-xxxHEG21C.20, TSM-xxxHEG21C.25,
TSM-xxxHEG21C.27, TSM-xxxHEG21C.28,
TSM-xxxHEG21C.29 (xxx=640-685, 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 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-

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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,

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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),

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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).

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 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:



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TSM-xxxNEG9R.20S, TSM-xxxNEG9R.28S (xxx=395-445, in steps of 5)

xxx stands for rated output power at STC

Parameters:

Construction:	Framed and Frameless 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, No. 10 West Kaifa Road, Yangzhou, 225009 Jiangsu, P. R. China.

Tested according to:

IEC 61215-1:2016
 IEC 61215-1-1:2016
 IEC 61215-2:2016
 IEC 61730-1:2016
 IEC 61730-2:2016
 EN IEC 61730-1:2018
 EN IEC 61730-2:2018
 EN IEC 61730-1:2018/AC:2018-06
 EN IEC 61730-2:2018/AC:2018-06