

TSM-PC14

Utility Scale Solar Module



Enhanced module durability with 4.0mm thick tempered glass



Module can bear snow loads (5400PA) and wind loads (2400PA)



More power (up to 285W)



Guaranteed power output (0~+3%)



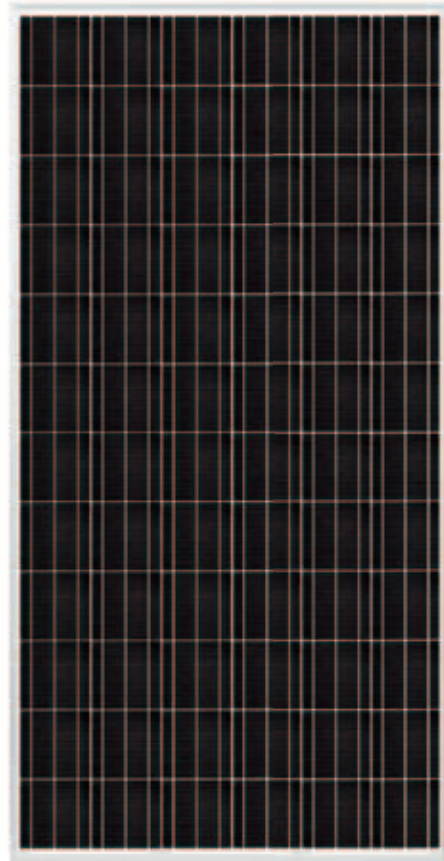
High performance under low light conditions (Cloudy days, mornings and evenings)



Independently certified by international certification body*



Manufactured according to International Quality and Environment Management System (ISO9001, ISO14001)



The NEW TSM-PC14 is the newest addition to Trina Solar's premium portfolio of Multicrystalline modules. With power outputs ranging from 265 to 285 Watt, the modules are designed specially for utility-scale installations. Along with the rest of Trina Solar's module portfolios, the PC14 provides the highest Quality and power output to our utility-scale customers.

Trina Solar, **the best €/kWh** value under the sun



Trina Solar Limited

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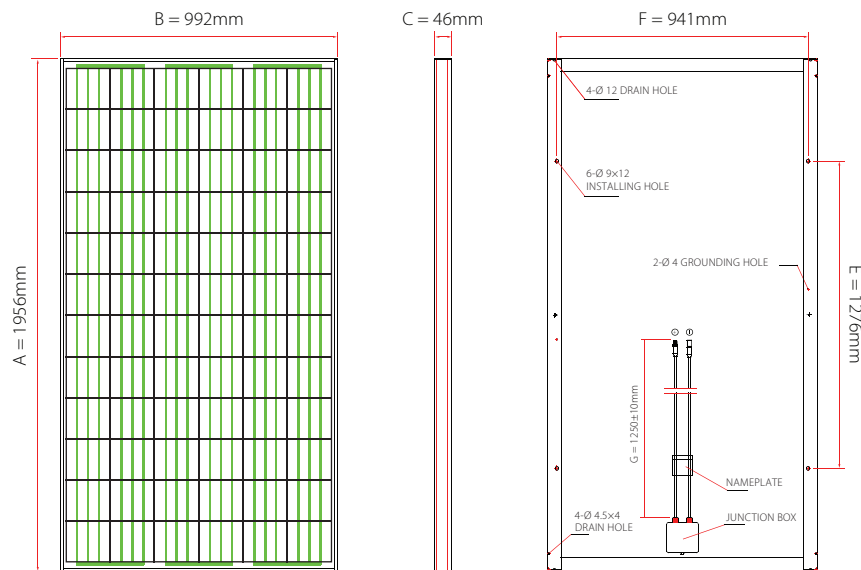
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Founded in 1997, Trina Solar is a vertically integrated PV manufacturer, producing everything from ingots to modules, using both mono and multicrystalline technologies. At the end of 2010, the company will have a nameplate module capacity of 950MW. Trina Solar's wide range of products are used in residential, commercial, industrial and public utility applications throughout the world.

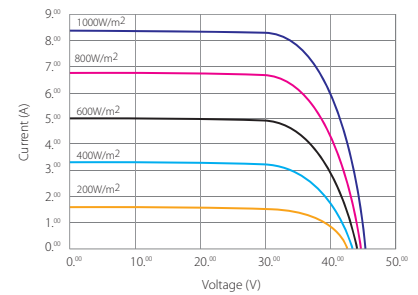
Only by matching an efficient cost-structure with proven performance will we, as an industry, achieve grid parity. And at Trina Solar, we have both.

TSM-PC14 Utility Scale Solar Module

Dimensions of PV module TSM-PC14



I-V Curves of PV module TSM-280PC14



| | |
|----------------|------------|
| Efficiency | up to 14.7 |
| Wattage | up to 285 |
| Years warranty | 25 |

Certification



| Electrical Data @ STC | TSM-265PC14 | TSM-270PC14 | TSM-275PC14 | TSM-280PC14 | TSM-285PC14 |
|---|-------------|-------------|-------------|-------------|-------------|
| Peak Power Watts- P_{MAX} (WP) | 265 | 270 | 275 | 280 | 285 |
| Power Output Tolerance- P_{MAX} (%) | 0/+3 | 0/+3 | 0/+3 | 0/+3 | 0/+3 |
| Maximum Power Voltage- V_{MAX} (V) | 35.3 | 35.5 | 35.9 | 36.0 | 36.3 |
| Maximum Power Current- I_{MPP} (A) | 7.50 | 7.60 | 7.7 | 7.8 | 7.86 |
| Open Circuit Voltage- V_{OC} (V) | 44.2 | 44.3 | 44.4 | 44.4 | 44.5 |
| Short Circuit Current- I_{SC} (A) | 8.20 | 8.29 | 8.39 | 8.45 | 8.49 |
| Encapsulated Cell Efficiency η_c (%) | 15.1 | 15.4 | 15.7 | 16.0 | 16.3 |
| Module Efficiency η_m (%) | 13.7 | 13.9 | 14.2 | 14.4 | 14.7 |

Values at Standard Test Conditions STC (Air Mass AM1.5, Irradiance 1000W/m², Cell Temperature 25°C)

General Data

| | |
|-------------------|--|
| Cell Type | 156 x 156mm Multicrystalline silicon, 72pcs (6x12) |
| Glass | High Transmission, Low Iron, Tempered Glass 4mm |
| Frame | Anodized Aluminum |
| J-Box / Connector | Renhe / 05-6 or MC4, IP65 |

Temperature Ratings

| | |
|---|-------------|
| Nominal Operating Cell Temperature (NOCT) | 46°C (±2°C) |
| Temperature Coefficient of P_{MPP} | - 0.45%/°C |
| Temperature Coefficient of V_{OC} | - 0.35%/°C |
| Temperature Coefficient of I_{SC} | 0.05%/°C |

Mechanical and Packing Configuration

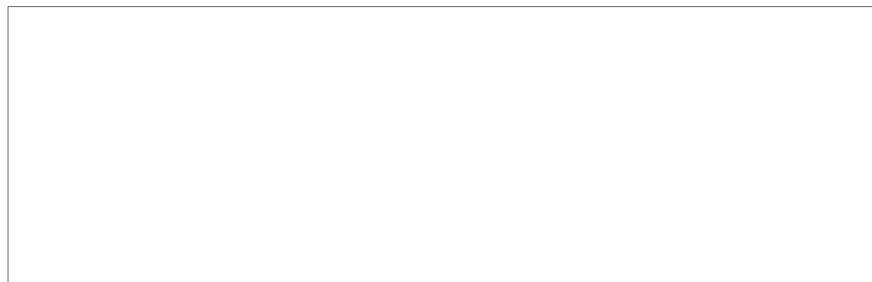
| | |
|--------------------------------------|--------------------------|
| Dimensions (A x B X C) | 1956 x 992 x 46mm |
| Installation Hole Dimensions (E x F) | 1276 x 941mm |
| Cable length (G) | 1250mm |
| Weight | 28kg |
| Packing Configuration | 20pcs/carton |
| Quantity/Pallet | 1 carton/pallet |
| Loading Capacity | 440pcs/40ft, 100pcs/20ft |

Maximum Ratings

| | |
|-------------------------|-----------|
| Operating Temperature | -40~+85°C |
| Storage Temperature | -40~+85°C |
| Maximum System Voltage | 1000VDC |
| Number of Bypass Diodes | 3pcs |
| Maximum Series Fuse | 15A |

Warranty

| |
|-------------------------------------|
| 5 years manufacturing warranty |
| 10 years warranty, 90% power output |
| 25 years warranty, 80% power output |



CAUTION: READ SAFETY AND INSTALLATION INSTRUCTIONS BEFORE USING THE PRODUCT.

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