

TSM-PC14

Utility Scale Solar Module



Module can bear snow loads up to 5400Pa and wind loads up to 2400Pa



Guaranteed power output (0~+3%)



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



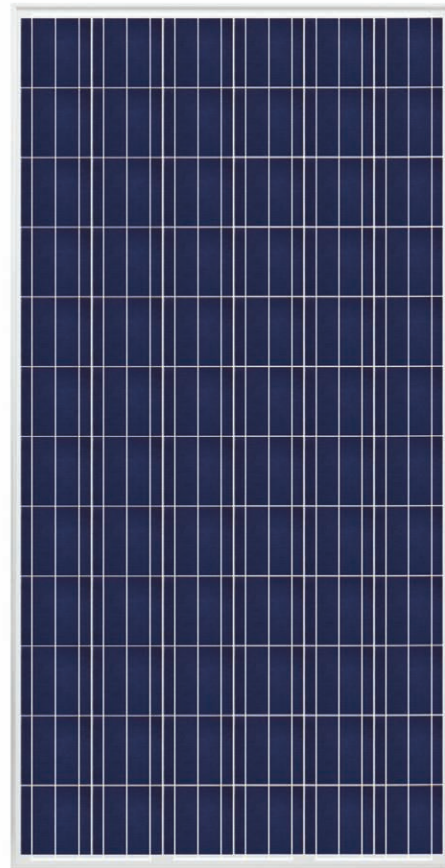
Enhanced module durability with 4.0mm thick tempered glass



Independently certified by international certification bodies*



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



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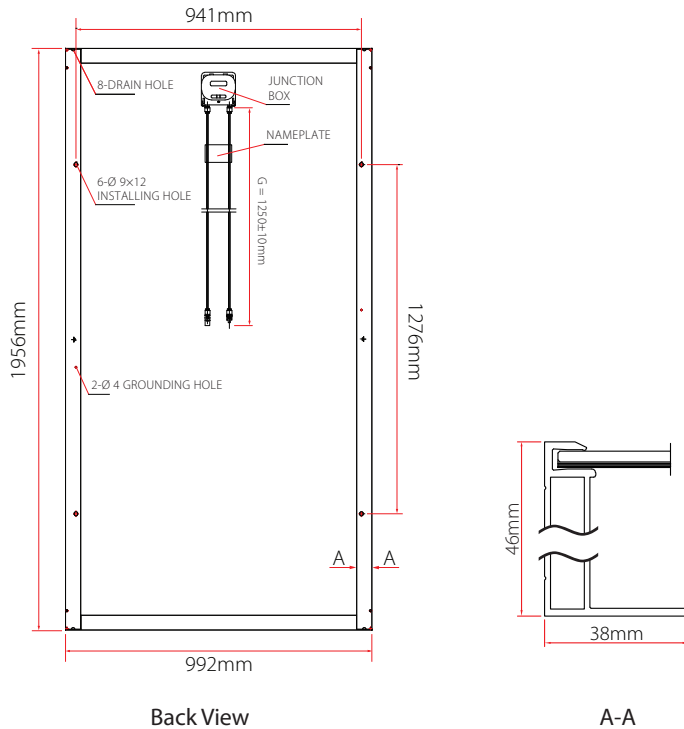
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Founded in 1997, Trina Solar is a vertically integrated PV manufacturer, producing everything from ingots to modules, using both mono and multicrystalline technologies. At the end of 2011, the company had a nameplate module capacity of 1.7GW. Trina Solar's wide range of products are used in residential, commercial, industrial and public utility applications throughout the world.

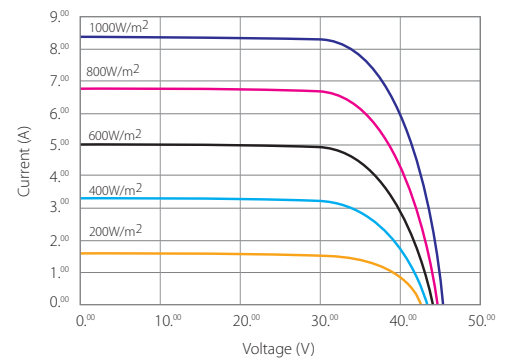
Only by matching an efficient cost-structure with proven performance will we, as an industry, achieve grid parity. And at Trina Solar, we have both.

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 285W
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	7.68	7.78	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
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)

Mechanical Data

Solar cells	Multicrystalline 156 x 156mm (6 inches)
Cells orientation	72 cells (6x12)
Module dimension	1956 x 992 x 46mm (77 x 39.05 x 1.81inches)
Weight	28kg (61.7lb)
Glass	High transparency solar glass 4.0mm (0.16inches)
Frame	Anodized aluminium alloy
J-Box	IP 65 rated
Cables/Connector	Photovoltaic Technology cable 4.0mm ² (0.006inches ²), 1250mm (49.2inches), MC4

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

Maximum Ratings

Operational Temperature	-40~+85°C
Maximum System Voltage	1000VDC
Max Series Fuse Rating	15A

Warranty

5 years workmanship warranty
10 years warranty, 90% power output
25 years warranty, 80% power output

Packaging Configuration

Modules per box	20 pcs
Modules per 40" container	440 pcs