

TSM-PA14

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)



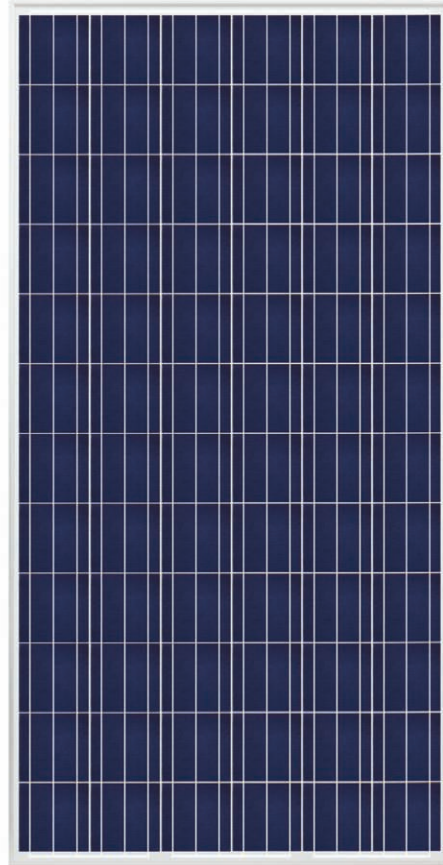
Enhanced module durability with 4.0mm thick tempered glass



Independently certified by international certification bodies*



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

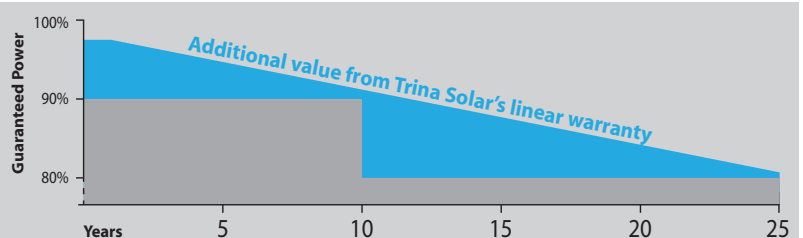


The NEW TSM-PA14 is the newest addition to Trina Solar's premium portfolio of Multicrystalline modules. With power outputs ranging from 265 to 285 Watt, the modules are designed specially for utility-scale installations. Along with the rest of Trina Solar's module portfolios, the PA14 provides the highest Quality and power output to our utility-scale customers.



linear performance warranty

10 year product warranty
25 year linear power warranty



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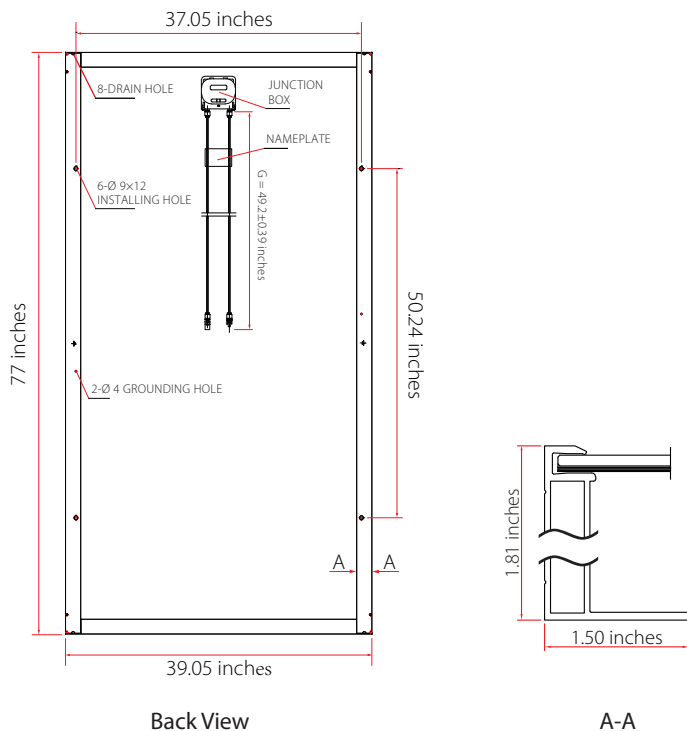
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Founded in 1997, Trina Solar is a vertically integrated PV manufacturer, producing everything from ingots to modules, using both mono and multicrystalline technologies. By the end of 2011, the company will have a nameplate module capacity of 1.9GW. Trina Solar's wide range of products are used in residential, commercial, industrial and public utility applications throughout the world.

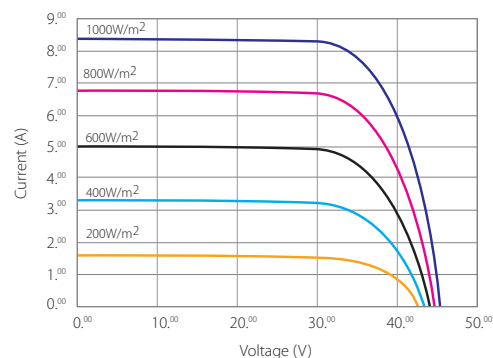
Only by matching an efficient cost-structure with proven performance will we, as an industry, achieve grid parity. And at Trina Solar, we have both.

TSM-PA14 Utility Scale Solar Module

Dimensions of PV module TSM-PA14



I-V Curves of PV module TSM-280PA14



Efficiency	up to 14.7%
Wattage	up to 285W
Years warranty	25

Certification



Electrical Data @ STC	TSM-265PA14	TSM-270PA14	TSM-275PA14	TSM-280PA14	TSM-285PA14
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 6 inches (156 x 156mm)
Cells orientation	72 cells (6x12)
Module dimension	77 x 39.05 x 1.81 inches (1956 x 992 x 46mm)
Weight	61.7lb (28kg)
Glass	High transparency solar glass 0.16inches (4.0mm)
Frame	Anodized aluminium alloy
J-Box	IP 65 rated
Cables/Connector	Photovoltaic Technology cable 0.006inches ² (4.0mm ²), 49.2inches (1250mm), 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

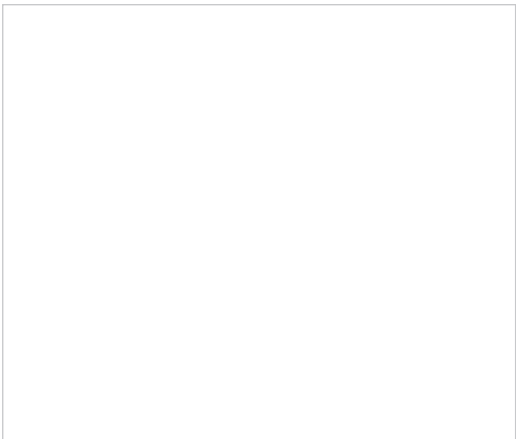
Operational Temperature	-40~+85°C
Maximum System Voltage	600VDC
Max Series Fuse Rating	15A

Warranty

10 years workmanship warranty
 25 years linear performance warranty
 (Please refer to Trina Solar product warranty for details)

Packaging Configuration

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



TSM_US_2011_RevB