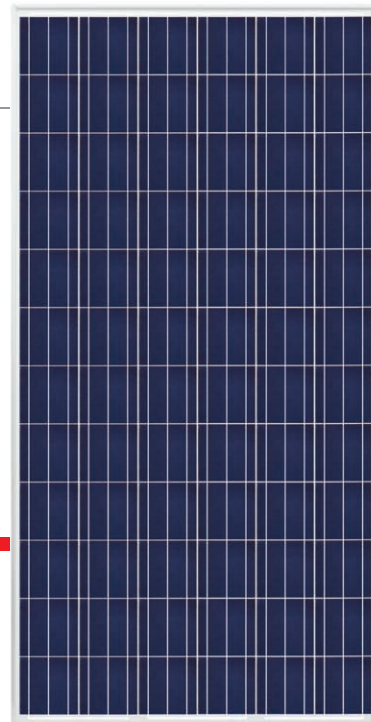


TSM-PC14 TSM-PA14

THE UTILITY SOLUTION



15.2%
MAX EFFICIENCY

295W
MAX POWER OUTPUT

10 YEAR
PRODUCT WARRANTY

25 YEAR
LINEAR POWER WARRANTY

Founded in 1997, Trina Solar (NYSE: TSL) has established itself as a leader in the solar community with its vertically integrated business model. Our modules and system solutions provide clean solar power in on-grid and off-grid residential, commercial, industrial and utility-scale systems.

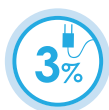
With more than 22 offices worldwide, Trina Solar has partnerships with leading installers, distributors, utilities and developers in all major PV markets. Trina Solar is committed to driving smarter energy choices.

Trina Solar Limited
www.trinasolar.com

Trinasolar
The power behind the panel



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



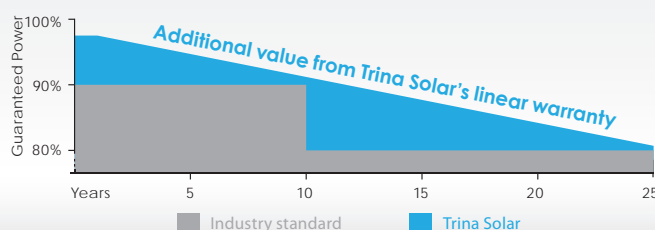
Manufactured according to International Quality and Environment Management System Standards
ISO9001, ISO14001



MC4 photovoltaic connectors increase system reliability

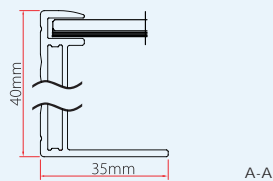
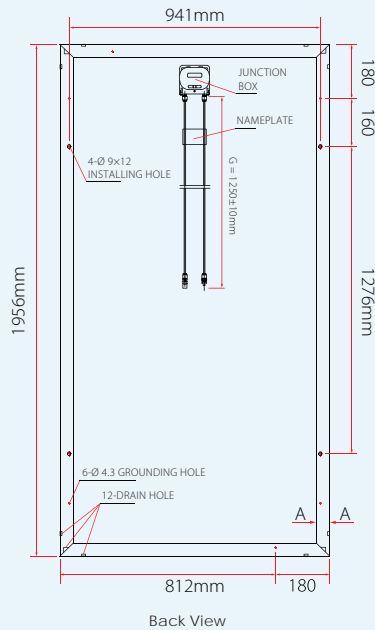
LINEAR PERFORMANCE WARRANTY

10 Year Product Warranty • 25 Year Linear Power Warranty

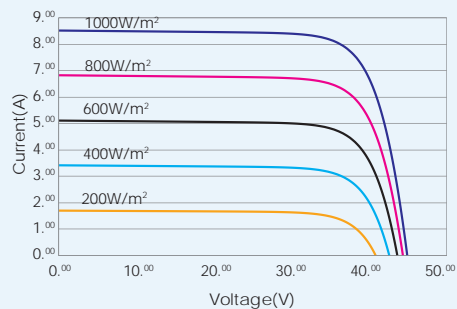


TSM-PC14 / TSM-PA14 Utility Scale Solar Module

DIMENSIONS OF PV MODULE TSM-PC/PA14

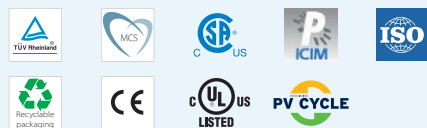


I-V CURVES OF PV MODULE TSM-290 PC/PA14



Average efficiency reduction of 4.5% at 200W/m² according to EN 60904-1.

CERTIFICATION





ELECTRICAL DATA @ STC	TSM-280 PC/PA14	TSM-285 PC/PA14	TSM-290 PC/PA14	TSM-295 PC/PA14
Peak Power Watts- P_{MAX} (Wp)	280	285	290	295
Power Output Tolerance- P_{MAX} (%)	0/+3	0/+3	0/+3	0/+3
Maximum Power Voltage- V_{MP} (V)	35.4	35.6	36.1	36.6
Maximum Power Current- I_{MP} (A)	7.91	8.02	8.04	8.07
Open Circuit Voltage- V_{OC} (V)	44.4	44.7	44.9	45.2
Short Circuit Current- I_{SC} (A)	8.41	8.50	8.53	8.55
Module Efficiency η_m (%)	14.4	14.7	14.9	15.2

Values at Standard Test Conditions STC (Air Mass AM1.5, Irradiance 1000W/m², Cell Temperature 25°C). Power measurement tolerance: $\pm 3\%$

ELECTRICAL DATA @ NOCT	TSM-280 PC/PA14	TSM-285 PC/PA14	TSM-290 PC/PA14	TSM-295 PC/PA14
Maximum Power- P_{MAX} (Wp)	204	207	211	214
Maximum Power Voltage- V_{MP} (V)	32.0	32.1	32.6	33.0
Maximum Power Current- I_{MP} (A)	6.37	6.46	6.47	6.48
Open Circuit Voltage (V)- V_{OC} (V)	40.6	40.7	40.9	41.2
Short Circuit Current (A)- I_{SC} (A)	6.85	6.93	6.97	7.00

NOCT: Irradiance at 800W/m², Ambient Temperature 20°C, Wind Speed 1m/s. Power measurement tolerance: $\pm 3\%$

MECHANICAL DATA

Solar cells	Multicrystalline 156 × 156mm (6 inches)
Cell orientation	72 cells (6 × 12)
Module dimensions	1956 × 992 × 40mm (77 × 39.05 × 1.57 inches)
Weight	27.6kg (60.8 lb)
Glass	High transparency solar glass 4.0mm (0.16 inches)
Frame	Anodized aluminium alloy
J-Box	IP 67 rated
Cables	Photovoltaic Technology cable 4.0mm² (0.006 inches²), 1250mm (49.2 inches)
Connector	MC4  

TEMPERATURE RATINGS

Nominal Operating Cell Temperature (NOCT)	45°C ($\pm 2^\circ\text{C}$)
Temperature Coefficient of P_{MAX}	-0.44%/°C
Temperature Coefficient of V_{OC}	-0.33%/°C
Temperature Coefficient of I_{SC}	0.046%/°C

MAXIMUM RATINGS

Operational Temperature	-40 ~ +85°C
Maximum System Voltage	1000V DC(IEC)/600V DC(UL)
Max Series Fuse Rating	15A

WARRANTY

10 year Product Workmanship Warranty

25 year Linear Power Warranty

(Please refer to product warranty for details)

PACKAGING CONFIGURATION

Modules per box: 24 pieces

Modules per 40' container: 528 pieces