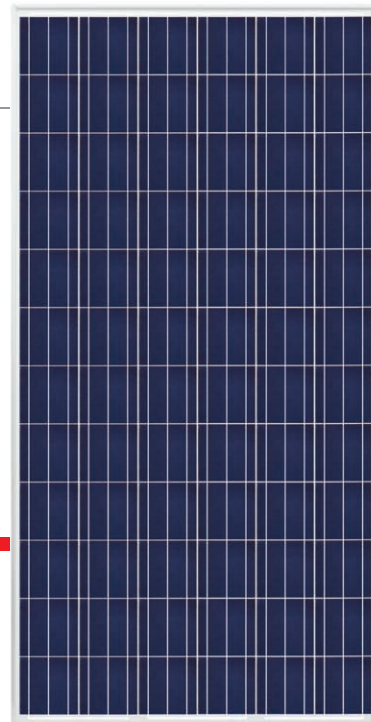


# TSM-PC14A TSM-PA14A

## THE Honey MODULE

by **Trina**solar



**16.0%**  
MAX EFFICIENCY

**310W**  
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](http://www.trinasolar.com)

**Trina**solar  
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



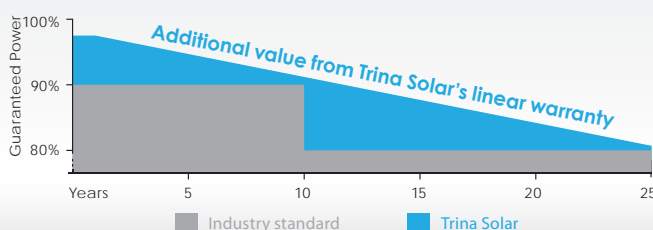
Manufactured according to International Quality and Environment Management System Standards  
**ISO9001, ISO14001**



**MC4** photovoltaic connectors increase system reliability

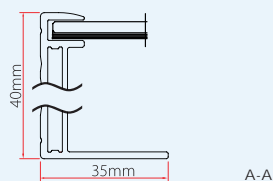
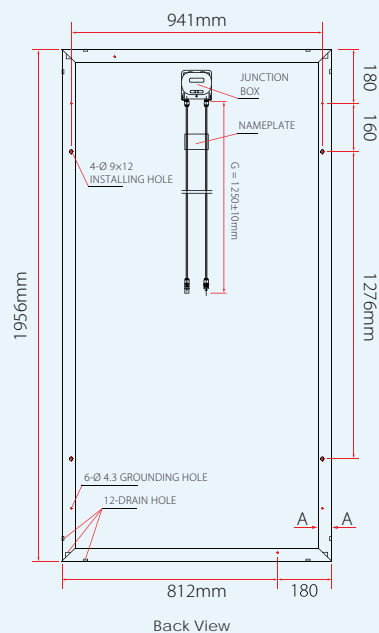
### LINEAR PERFORMANCE WARRANTY

10 Year Product Warranty • 25 Year Linear Power Warranty

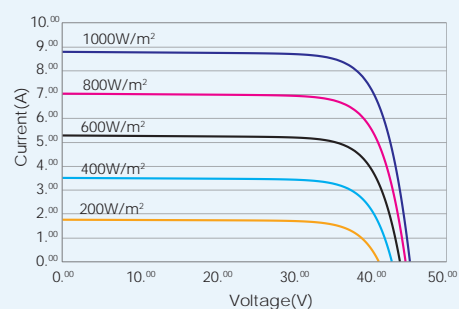


# TSM-PC14A / TSM-PA14A THE MODULE

## DIMENSIONS OF PV MODULE TSM-PC/PA14A



## I-V CURVES OF PV MODULE TSM-305 PC/PA14A



Average efficiency reduction of 4.5% at 200W/m<sup>2</sup> according to EN 60904-1.

## CERTIFICATION





ELECTRICAL DATA @ STC	TSM-300 PC/PA14A	TSM-305 PC/PA14A	TSM-310 PC/PA14A
Peak Power Watts-P <sub>MAX</sub> (Wp)	300	305	310
Power Output Tolerance-P <sub>MAX</sub> (%)	0/+3	0/+3	0/+3
Maximum Power Voltage-V <sub>MP</sub> (V)	36.2	36.4	36.7
Maximum Power Current-I <sub>MPP</sub> (A)	8.30	8.38	8.45
Open Circuit Voltage-V <sub>OC</sub> (V)	45.0	45.2	45.4
Short Circuit Current-I <sub>SC</sub> (A)	8.70	8.80	8.90
Module Efficiency $\eta_m$ (%)	15.5	15.7	16.0

Values at Standard Test Conditions STC (Air Mass AM1.5, Irradiance 1000W/m<sup>2</sup>, Cell Temperature 25°C). Power measurement tolerance: ±3%

ELECTRICAL DATA @ NOCT	TSM-300 PC/PA14A	TSM-305 PC/PA14A	TSM-310 PC/PA14A
Maximum Power-P <sub>MAX</sub> (Wp)	219	223	226
Maximum Power Voltage-V <sub>MP</sub> (V)	32.3	32.7	32.9
Maximum Power Current-I <sub>MPP</sub> (A)	6.77	6.81	6.86
Open Circuit Voltage (V)-V <sub>OC</sub> (V)	41.5	41.8	42.0
Short Circuit Current (A)-I <sub>SC</sub> (A)	7.03	7.06	7.15

NOCT: Irradiance at 800W/m<sup>2</sup>, Ambient Temperature 20°C, Wind Speed 1m/s. Power measurement tolerance: ±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 4.0mm <sup>2</sup> (0.006 inches <sup>2</sup> ) , 1250mm (49.2 inches)
Connector	MC4   STAUBLI GROUP

## TEMPERATURE RATINGS

Nominal Operating Cell Temperature (NOCT)	44°C (±2°C)
Temperature Coefficient of P <sub>MAX</sub>	- 0.42%/°C
Temperature Coefficient of V <sub>OC</sub>	- 0.32%/°C
Temperature Coefficient of I <sub>SC</sub>	0.059%/°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