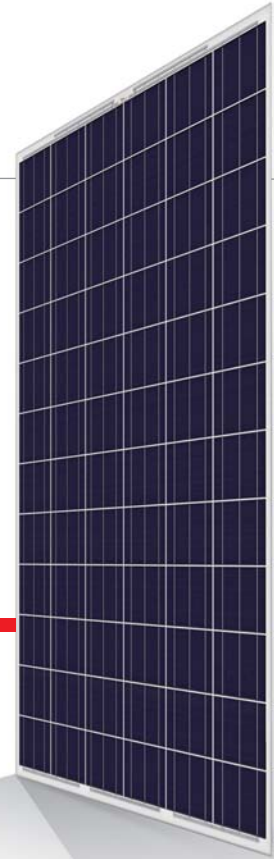


# THE DUOMAX MODULE

## TSM-PEG14



**72 CELL**  
MULTICRYSTALLINE MODULE

**300-315W**  
POWER OUTPUT RANGE

**15.8%**  
MAXIMUM EFFICIENCY

**0 ~ +3%**  
POSITIVE POWER TOLERANCE

**TRINA SOLAR: A STRONG AND RELIABLE PARTNER**

As a leading global manufacturer of next generation photovoltaic products, Trina Solar is committed to building mutually beneficial alliances with installers, developers, distributors and technological partners as the backbone of our shared goal to drive Smart Energy Together. Thanks to an extensive sales and service network with local expert teams throughout Europe, Trina Solar is perfectly positioned to support your needs. With Trina Solar as your strong, bankable partner you can rest assured knowing that you've made the right choice.

[www.trinasolar.com](http://www.trinasolar.com)



**Improved durability**

- PID resistant and free of snail trails
- Reduced soiling
- Increased module robustness to minimize micro-cracks



**Enhanced safety**

- Fire class A certified by TUV Rheinland according to fire test IEC 61730-2 / MST 23
- Certified for fire type13 (UL 1703)



**Increased value**

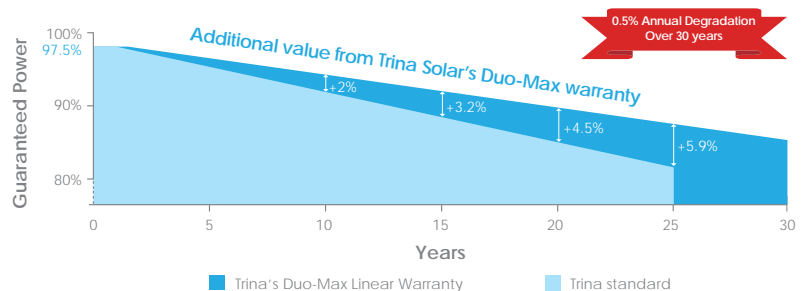
- Higher maximum system voltage reduces BOS costs
- 30 year linear warranty
- 0.5% annual degradation



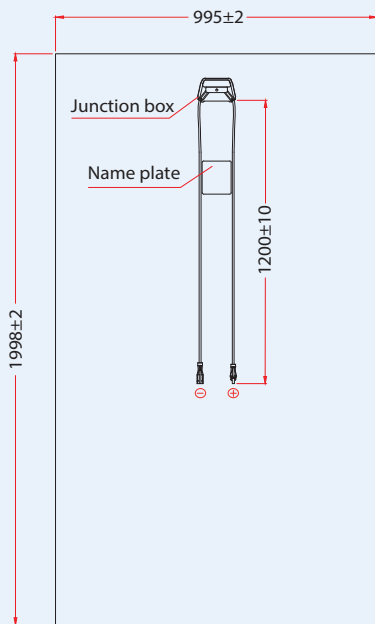
**Certified to withstand the most challenging environmental conditions**

- Module coating resistant to sand, acid, and alkali
- 2400 Pa wind load\* • 5400 Pa snow load\*
- 35 mm hail stones at 97 km/h

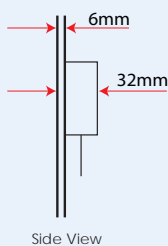
**Trina Solar's Duo-Max Linear Performance Warranty**



## DIMENSIONS OF PV MODULE (Unit:mm)

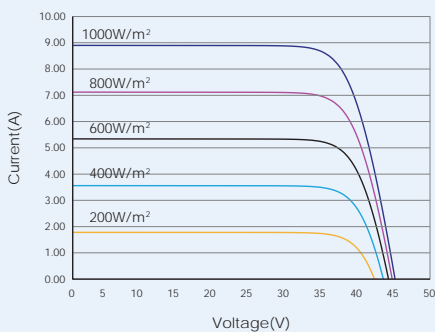


Back View



Side View

## I-V CURVES OF PV MODULE (305W)



## CERTIFICATION



## ELECTRICAL DATA @ STC

	300	305	310	315
Peak Power Watts- $P_{MAX}$ (Wp)	300	305	310	315
Power Output Tolerance- $P_{MAX}$ (%)	0 ~ +3			
Maximum Power Voltage- $V_{MPP}$ (V)	36.4	36.6	36.8	37.0
Maximum Power Current- $I_{MPP}$ (A)	8.24	8.33	8.42	8.51
Open Circuit Voltage- $V_{OC}$ (V)	45.2	45.4	45.6	45.7
Short Circuit Current- $I_{SC}$ (A)	8.74	8.82	8.91	8.99
Module Efficiency $\eta_m$ (%)	15.1	15.3	16.1	16.3

STC: Irradiance 1000 W/m<sup>2</sup>, Cell Temperature 25°C, Air Mass AM1.5 according to EN 60904-3. Typical efficiency reduction of 4.5% of 200 W/m<sup>2</sup> according to EN 60904-1.

## ELECTRICAL DATA @ NOCT

	223	227	230	234
Maximum Power- $P_{MAX}$ (Wp)	223	227	230	234
Maximum Power Voltage- $V_{MP}$ (V)	33.6	33.8	33.9	34.1
Maximum Power Current- $I_{MPP}$ (A)	6.65	6.72	6.79	6.86
Open Circuit Voltage (V)- $V_{OC}$ (V)	42.0	42.1	42.3	42.4
Short Circuit Current (A)- $I_{SC}$ (A)	7.06	7.12	7.20	7.26

NOCT: Irradiance at 800 W/m<sup>2</sup>, Ambient Temperature 20°C, Wind Speed 1 m/s.

## MECHANICAL DATA

Solar cells	Multicrystalline 156 × 156 mm
Cell orientation	72 cells (6 × 12)
Module dimensions	1998 × 995 × 6 mm (1998 x 995 x 32 mm with junction box)
Weight	29.0 kg
Front Glass	High Transmission, Low Iron, Heat Strengthened Glass, 2.5 mm
EVA	White
Back Glass	Heat Strengthened Glass, 2.5 mm
Frame	Frameless
J-Box	IP 65 rated or IP67 rated
Cables	Photovoltaic Technology cable 4.0 mm <sup>2</sup> , 1200 mm
Connector	MC4-EVO3 or UTX(Amphentol)

## TEMPERATURE RATINGS

Nominal Operating Cell Temperature (NOCT)	44°C (±2°C)
Temperature Coefficient of $P_{MAX}$	- 0.41%/°C
Temperature Coefficient of $V_{OC}$	- 0.32%/°C
Temperature Coefficient of $I_{SC}$	0.05%/°C

## MAXIMUM RATINGS

Operational Temperature	-40 ~ +85°C
Maximum System Voltage	1500V DC(IEC) 1000V DC(UL)
Max Series Fuse Rating	15A

## WARRANTY

10 year Product Workmanship Warranty

30 year Linear Power Warranty

(Please refer to product warranty for details)

## PACKAGING CONFIGURATION

Modules per box: 30 pieces

Modules per 40' container: 660 pieces

\*The mechanical loading is dependent upon the mounting method used and only mounting hardware and methods should be used. For best results, please follow the Trina Solar Duomax installation guidelines.

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