

# TALLMAX<sup>M</sup> PLUS<sup>†</sup>

TSM-DE14A (II)

## THE FRAMED 72-CELL MODULE (1500V)



**72 CELL**  
MONOCRYSTALLINE MODULE

**340-375W**  
POWER OUTPUT RANGE

**19.3%**  
MAXIMUM EFFICIENCY

**0/+5W**  
POSITIVE POWER TOLERANCE

Founded in 1997, Trina Solar is the world's leading comprehensive solutions provider for solar energy. We believe close cooperation with our partners is critical to success. Trina Solar now distributes its PV products to over 60 countries all over the world. Trina Solar is able to provide exceptional service to each customer in each market and supplement our innovative, reliable products with the backing of Trina Solar as a strong, bankable partner. We are committed to building strategic, mutually beneficial collaboration with installers, developers, distributors and other partners.

### Comprehensive Product And System Certificates

IEC61215/IEC61730/UL1703/IEC61701/IEC62716  
 ISO 9001: Quality Management System  
 ISO 14001: Environmental Management System  
 ISO14064: Greenhouse Gas Emissions Verification  
 OHSAS 18001: Occupational Health and Safety Management System



### Ideal for large scale installations

- High power footprint reduces installation time & BOS costs
- Reduce BOS cost by connecting more modules in a string
- 1500V UL/1500V IEC certified



### Excellent low light performance on cloudy days, mornings and evenings

- Advanced surface texturing
- Back surface field
- Selective emitter



### Maximize Limited Space with high efficiency

- Up to 193 W/m<sup>2</sup> power density
- Low thermal coefficients for greater energy production at high operating temperatures



### Highly reliable due to stringent quality control

- All modules have to pass electroluminescence (EL) inspection
- Over 30 in-house tests (UV, TC, HF, and many more)
- In-house testing goes well beyond certification requirements
- PID resistant



### Certified to withstand challenging environmental conditions

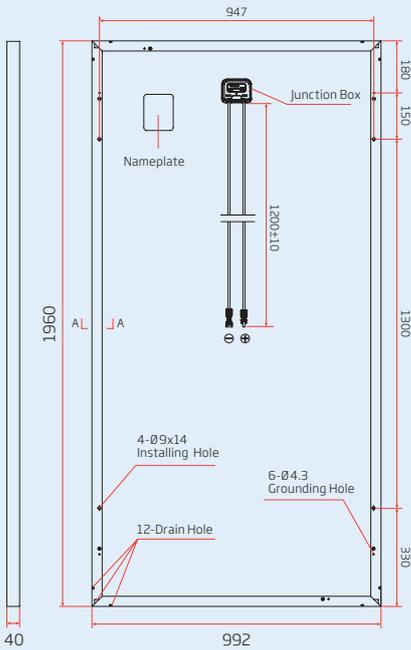
- Module coating resistant to sand, acid, and alkali
- 2400 Pa wind load
- 5400 Pa snow load
- 35 mm hail stones at 97 km/h

### LINEAR PERFORMANCE WARRANTY

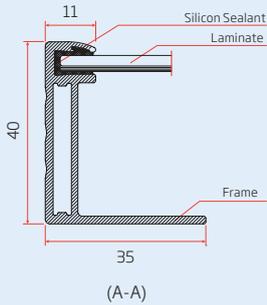
10 Year Product Warranty · 25 Year Linear Power Warranty



**DIMENSIONS OF PV MODULE**  
TSM-DE14A (II)  
(unit: mm)

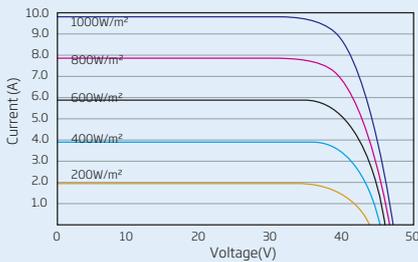


Back View

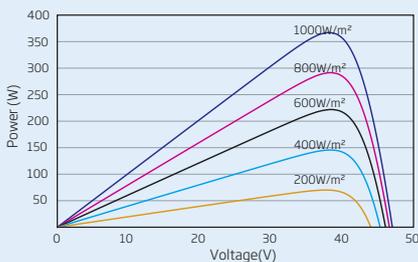


(A-A)

**I-V CURVES OF PV MODULE (365W)**



**P-V CURVES OF PV MODULE (365W)**



**ELECTRICAL DATA @ STC**

	TSM-340	TSM-345	TSM-350	TSM-355	TSM-360	TSM-365	TSM-370	TSM-375
Peak Power Watts-P <sub>MAX</sub> (Wp)*	340	345	350	355	360	365	370	375
Power Output Tolerance-P <sub>MAX</sub> (W)	0/+5	0/+5	0/+5	0/+5	0/+5	0/+5	0/+5	0/+5
Maximum Power Voltage-V <sub>MPP</sub> (V)	38.2	38.5	38.7	38.8	39.0	39.3	39.7	40.0
Maximum Power Current-I <sub>MPP</sub> (A)	8.90	8.96	9.04	9.14	9.24	9.30	9.33	9.37
Open Circuit Voltage-V <sub>OC</sub> (V)	46.2	46.7	47.0	47.4	47.7	48.0	48.3	48.5
Short Circuit Current-I <sub>SC</sub> (A)	9.50	9.55	9.60	9.65	9.70	9.77	9.83	9.88
Module Efficiency η <sub>m</sub> (%)	17.5	17.7	18.0	18.3	18.5	18.8	19.0	19.3

STC: Irradiance 1000 W/m<sup>2</sup>, Cell Temperature 25°C, Air Mass AM1.5  
\* Measuring tolerance: ±3%

**ELECTRICAL DATA @ NOCT**

	TSM-340	TSM-345	TSM-350	TSM-355	TSM-360	TSM-365	TSM-370	TSM-375
Maximum Power-P <sub>MAX</sub> (Wp)	253	257	261	264	268	272	276	279
Maximum Power Voltage-U <sub>MPP</sub> (V)	35.4	35.7	35.9	36.0	36.2	36.4	36.8	37.1
Maximum Power Current-I <sub>MPP</sub> (A)	7.15	7.20	7.26	7.34	7.42	7.47	7.50	7.53
Open Circuit Voltage-U <sub>OC</sub> (V)	42.9	43.4	43.7	44.1	44.3	44.6	44.9	45.1
Short Circuit Current-I <sub>SC</sub> (A)	7.67	7.71	7.75	7.79	7.83	7.89	7.94	7.98

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

**MECHANICAL DATA**

Solar Cells	Monocrystalline 156.75 × 156.75 mm
Cell Orientation	72 cells (6 × 12)
Module Dimensions	1960 × 992 × 40 mm
Weight	26.0 kg with 4.0 mm glass; 22.5 kg with 3.2 mm glass
Glass	4.0 mm for PERC Mono; 3.2 mm for Std Mono, high transparency, AR coated and heat tempered solar glass
Backsheet	White
Frame	Silver Anodized Aluminium Alloy
J-Box	IP 67 or IP 68 rated
Cables	Photovoltaic Technology Cable 4.0mm <sup>2</sup> , 1200 mm
Connector	MC4 EV02/UTX/TS4

**TEMPERATURE RATINGS**

Nominal Operating Cell Temperature (NOCT)	44°C (±2K)
Temperature Coefficient of P <sub>MAX</sub>	- 0.39%/K
Temperature Coefficient of V <sub>OC</sub>	- 0.29%/K
Temperature Coefficient of I <sub>SC</sub>	0.05%/K

**MAXIMUM RATINGS**

Operational Temperature	-40 to +85°C
Maximum System Voltage	1000VDC (IEC) 1000VDC (UL)
Max Series Fuse Rating*	15A (Power ≤ 350W) 20A (Power ≥ 355W)
Mechanical Load	5400Pa
Wind Load	2400Pa

\*DO NOT connect fuse in combiner box with two or more strings in parallel connection

**WARRANTY**

10 year Product Workmanship Warranty

25 year Linear Performance Warranty

(Please refer to product warranty for details)

**PACKAGING CONFIGURATION**

Modules per box:	27 pieces
Modules per 40' container:	648 pieces

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