THE



FRAMED 72-CELL MODULE (1500V)



**MULTICRYSTALLINE MODULE** 

320-340W

**POWER OUTPUT RANGE** 

**17.5% 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 is able to provide exceptional service to each customer in each market and supplement our innovative, reliable products with the backing of Trina as a strong, bankable partner. We are committed to building strategic, mutually beneficial collaboration with installers, developers, distributors and other partners.

## **Comprehensive Products And System Certificates**

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























## Ideal for large scale installations

- Reduce BOS cost by connecting more modules in a string
- 1500V UL/1500V IEC certified



## One of the industry's most trusted modules

• Field proven performance



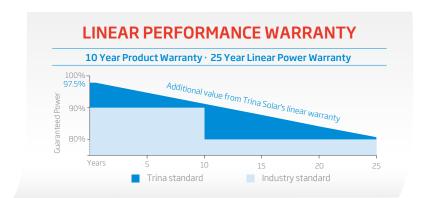
## Highly reliable due to stringent quality control

- Over 30 in-house tests (UV, TC, HF, and many more)
- In-house testing goes well beyond certification requirements
- 100% EL double inspection



## Certified to withstand the most challenging environmental conditions

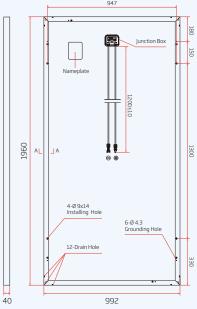
- 2400 Pa wind load
- 5400 Pa snow load
- 35 mm hail stones at 97 km/h



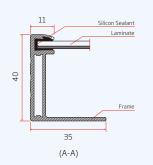


#### **PRODUCTS POWER RANGE** TSM-PE14A 320-340W

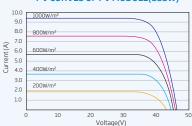
#### DIMENSIONS OF PV MODULE(mm)



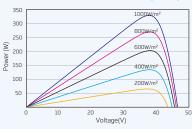




#### I-V CURVES OF PV MODULE(335W)



#### P-V CURVES OF PV MODULE(335W)



#### **ELECTRICAL DATA (STC)**

| Peak Power Watts-P <sub>MAX</sub> (Wp)* | 320  | 325  | 330  | 335  | 340  |
|---|------|------|------|------|------|
| Power Output Tolerance-PMAX (W)         | 0~+5 |      |      |      |      |
| Maximum Power Voltage-VMPP (V)          | 37.1 | 37.2 | 37.4 | 37.6 | 37.8 |
| Maximum Power Current-Impp (A)          | 8.63 | 8.73 | 8.83 | 8.91 | 8.99 |
| Open Circuit Voltage-Voc (V)            | 45.5 | 45.6 | 45.8 | 46.0 | 46.2 |
| Short Circuit Current-Isc (A)           | 9.15 | 9.19 | 9.28 | 9.35 | 9.42 |
| Module Efficiency η <sup>m</sup> (%)    | 16.5 | 16.7 | 17.0 | 17.2 | 17.5 |

STC: Irradiance 1000W/m², Cell Temperature 25°C, Air Mass AM1.5. \*Measuring tolerance: ±3%.

#### **ELECTRICAL DATA (NOCT)**

| Maximum Power-P <sub>MAX</sub> (Wp) | 237  | 241  | 245  | 249  | 252  |
|-------------------------------------|------|------|------|------|------|
| Maximum Power Voltage-VMPP (V)      | 34.3 | 34.4 | 34.6 | 34.8 | 35.0 |
| Maximum Power Current-Impp (A)      | 6.92 | 7.00 | 7.08 | 7.14 | 7.21 |
| Open Circuit Voltage-Voc (V)        | 42.1 | 42.2 | 42.4 | 42.6 | 42.8 |
| Short Circuit Current-Isc (A)       | 7.39 | 7.42 | 7.49 | 7.55 | 7.60 |

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

#### **MECHANICAL DATA**

| Solar Cells       | Multicrystalline 156.75 × 156.75 mm (6 inches)                    |
|-------------------|---|
| Cell Orientation  | 72 cells (6 × 12)   |
| Module Dimensions | 1960 × 992 × 40 mm (77.2 × 39.1 × 1.57 inches)                    |
| Weight            | 22.5 kg (49.6 lb)   |
| Glass             | 3.2 mm (0.13 inches), High Transmission, AR Coated Tempered Glass |
| Backsheet         | White   |
| Frame             | Silver Anodized Aluminium Alloy                                   |
| J-Box             | IP 67 or IP 68 rated  |
| Cables            | Photovoltaic Technology Cable 4.0mm² (0.006 inches²),             |
|                   | 1200 mm (47.2 inches)   |
| Connector         | UTX/MC4 EV02/TS4*   |
| +                 |   |

<sup>\*</sup>Please refer to regional datasheet for specified connector.

#### **TEMPERATURE RATINGS**

| NOCT (Nominal Operating Cell Temperature) | 44°C (±2°C) |  |
|---|-------------|--|
| Temperature Coefficient of PMAX           | - 0.41%/°C  |  |
| Temperature Coefficient of Voc            | - 0.32%/°C  |  |
| Temperature Coefficient of Isc            | 0.05%/°C    |  |

## **MAXIMUM RATINGS**

| Operational Temperature  | -40~+85°C      |  |
|--|----------------|--|
| Maximum System Voltage   | 1500V DC (IEC) |  |
|  | 1500V DC (UL)  |  |
| Max Series Fuse Rating   | 15A            |  |
| COLUMN ASSESSMENT OF THE PROPERTY OF THE PROPE |                |  |

<sup>(</sup>DO NOT connect Fuse in Combiner Box with two or more strings in parallel connection)

### WARRANTY

10 year Product Workmanship Warranty

25 year Linear Power Warranty

(Please refer to product warranty for details)

### PACKAGING CONFIGURATION

Modules per box: 27 pieces

Modules per 40' container: 648 pieces

