

# THE SPLITMAX

FRAMED 120-CELL MODULE (1500V)

**120 CELL**  
MULTICRYSTALLINE MODULE

**280-290W**  
POWER OUTPUT RANGE

**17.5%**  
MAXIMUM EFFICIENCY

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

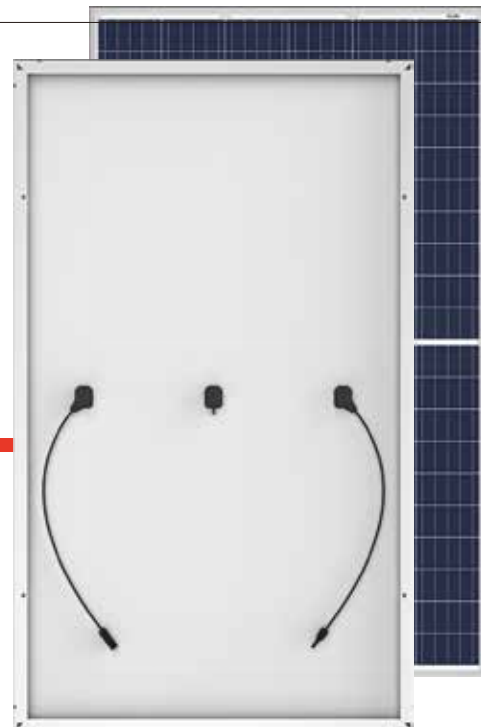
Founded in 1997, Trina Solar is the world's leading comprehensive solutions provider for solar energy. We believe close cooperation with our partners is critical to success. Trina Solar now distributes its PV products to over 60 countries all over the world. Trina is able to provide exceptional service 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



**Trina**solar



### Ideal for large scale installations

- Anti-shading design
- Reduce BOS cost by connecting more modules in a string
- 1500V IEC certified



### Half-cell design brings higher efficiency

- Half-Cell layout (120 multicrystalline)
- LRF integrated to gain more power, need avoid light sensitive case
- Low thermal coefficients for greater energy production at high operating temperatures



### 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
- PID resistant
- 100% EL double inspection

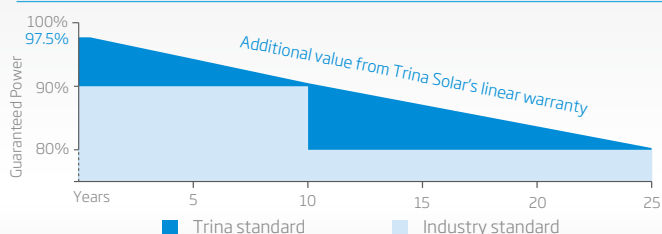


### Certified to withstand the most challenging environmental conditions

- 2400 Pa negative load
- 5400 Pa positive load

## LINEAR PERFORMANCE WARRANTY

10 Year Product Warranty · 25 Year Linear Power Warranty



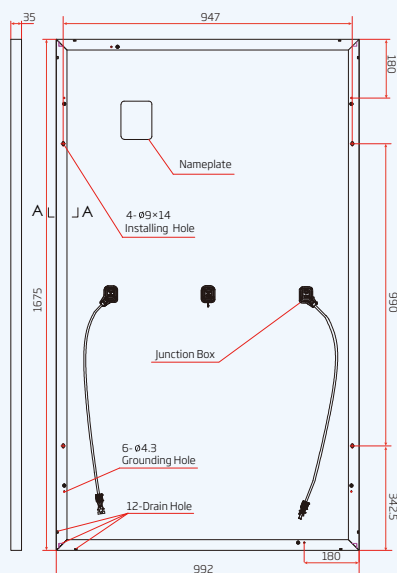
### PRODUCTS

TSM-PE05H

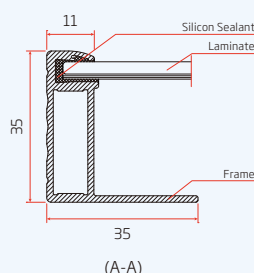
### POWER RANGE

280-290W

### DIMENSIONS OF PV MODULE(mm)

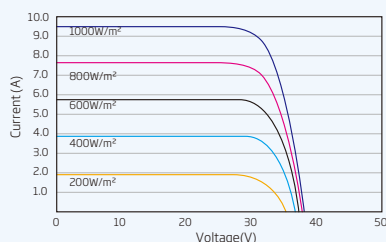


Back View

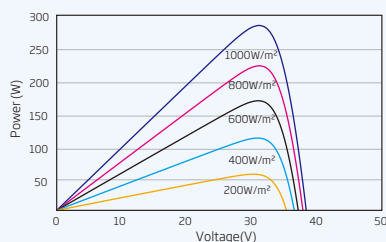


(A-A)

### I-V CURVES OF PV MODULE(285W)



### P-V CURVES OF PV MODULE(285W)



### ELECTRICAL DATA (STC)

|                                       |        |      |      |
|---------------------------------------|--------|------|------|
| Peak Power Watts- $P_{MAX}$ (Wp)*     | 280    | 285  | 290  |
| Power Output Tolerance- $P_{MAX}$ (W) | 0 ~ +5 |      |      |
| Maximum Power Voltage- $V_{MPP}$ (V)  | 31.3   | 31.4 | 31.5 |
| Maximum Power Current- $I_{MPP}$ (A)  | 8.95   | 9.08 | 9.20 |
| Open Circuit Voltage- $V_{OC}$ (V)    | 38.7   | 38.8 | 39.0 |
| Short Circuit Current- $I_{SC}$ (A)   | 9.40   | 9.45 | 9.50 |
| Module Efficiency $\eta_m$ (%)        | 16.9   | 17.2 | 17.5 |

STC: Irradiance 1000W/m<sup>2</sup>, Cell Temperature 25°C, Air Mass AM1.5.

\*Measuring tolerance:  $\pm 3\%$ .

### ELECTRICAL DATA (NOCT)

|                                      |      |      |      |
|--------------------------------------|------|------|------|
| Maximum Power- $P_{MAX}$ (Wp)        | 207  | 211  | 215  |
| Maximum Power Voltage- $V_{MPP}$ (V) | 29.1 | 29.4 | 29.7 |
| Maximum Power Current- $I_{MPP}$ (A) | 7.11 | 7.18 | 7.24 |
| Open Circuit Voltage- $V_{OC}$ (V)   | 35.8 | 35.9 | 36.1 |
| Short Circuit Current- $I_{SC}$ (A)  | 7.59 | 7.63 | 7.67 |

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

### MECHANICAL DATA

|                   |  |
|-------------------|--|
| Solar Cells       | Multicrystalline 156.75 × 78.375 mm (6 × 3 inches)   |
| Cell Orientation  | 120 cells (6 × 20)   |
| Module Dimensions | 1675 × 992 × 35 mm (65.9 × 39.1 × 1.38 inches)   |
| Weight            | 18.8 kg (40.8 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 4.0mm <sup>2</sup> (0.006 inches <sup>2</sup> ),<br>Portrait: N 140mm/P 285mm((5.5/11.2inches)<br>Landscape: N 1200 mm /P 1200 mm (47.2/47.2 inches) |
| Connector         | UTX/MC4 EV02/TS4*  |

\*Please refer to regional datasheet for specified connector.

### TEMPERATURE RATINGS

|   |                                |
|---|--------------------------------|
| NOCT (Nominal Operating Cell Temperature) | 44°C ( $\pm 2^\circ\text{C}$ ) |
| 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) |
| Max Series Fuse Rating  | 15A            |

(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: 30 pieces
- Modules per 40' container: 780 pieces