THE



# **60 LAYOUT**

**MULTICRYSTALLINE** 

285-300W

**POWER OUTPUT RANGE** 

17.6% **MAXIMUM EFFICIENCY** 

# 0~+5W

#### POSITIVE POWER TOLERANCE

Founded in 1997, Trina Solar is the world's leading total solutions provider for solar energy. With local presence around the globe, Trina Solar is able to provide exceptional service to each customer in each market and deliver our innovative, reliable products with the backing of Trina as a strong, bankable brand. Trina Solar now distributes its PV products to over 100 countries all over the world. We are committed to building strategic, mutually beneficial collaborations with installers, developers, distributors and other partners in driving smart energy together.

#### **Comprehensive Products And System Certificates**

IEC61215/IEC61730

ISO 9001: Quality Management System ISO 14001: Environmental Management System ISO14064: Greenhouse gases Emissions Verification OHSAS 18001: Occupation Health and Safety Management System

















**PRODUCTS POWER RANGE** TSM-PD06H

285-300W





## Ideal for large scale installations

• Reduce BOS cost with higher power bin



### Half-cell design brings higher efficiency

- Low thermal coefficients for greater energy production at high operating temperature
- Low cell connection power loss due to half-cell layout (120 multicrystalline)



#### Highly reliable due to stringent quality control

- Over 30 in-house tests (UV, TC, HF etc)
- Internal test requirement of Trina more stringent than certification authority
- 100% EL double inspection



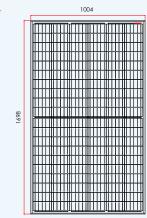
### Certified to withstand the most challenging environmental conditions

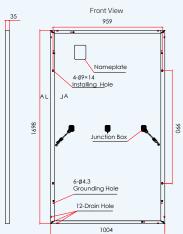
- 2400 Pa negative load
- 5400 Pa positive load
- \* 2400/5400 is the measured load, and the safety factor is 1.5 times
- Fire class rating C

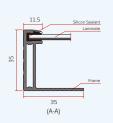




#### DIMENSIONS OF PV MODULE(mm)

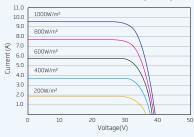




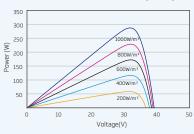


Back View

#### I-V CURVES OF PV MODULE(290W)



#### P-V CURVES OF PV MODULE(290W)



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

| Peak Power Watts-PMAX (Wp)*     | 285  | 290  | 295  | 300  |
|---------------------------------|------|------|------|------|
| Power Output Tolerance-PMAX (W) | 0~+5 |      |      |      |
| Maximum Power Voltage-VMPP (V)  | 31.5 | 31.8 | 32.1 | 32.3 |
| Maximum Power Current-IMPP (A)  | 9.05 | 9.12 | 9.19 | 9.29 |
| Open Circuit Voltage-VOC (V)    | 38.8 | 39.2 | 39.5 | 39.8 |
| Short Circuit Current-ISC (A)   | 9.53 | 9.60 | 9.67 | 9.77 |
| Module Efficiency η m (%)       | 16.7 | 17.0 | 17.3 | 17.6 |

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

#### **ELECTRICAL DATA (NMOT)**

| Maximum Power-PMAX (Wp)        | 216  | 219  | 223  | 227  |
|--------------------------------|------|------|------|------|
| Maximum Power Voltage-VMPP (V) | 29.8 | 30.1 | 30.4 | 30.6 |
| Maximum Power Current-IMPP (A) | 7.24 | 7.29 | 7.35 | 7.42 |
| Open Circuit Voltage-VOC (V)   | 36.5 | 36.9 | 37.2 | 37.4 |
| Short Circuit Current-ISC (A)  | 7.69 | 7.74 | 7.80 | 7.88 |

NMOT: Irradiance at  $800 \text{W/m}^2$ , Ambient Temperature  $20 ^{\circ}\text{C}$ , Wind Speed 1 m/s

#### **MECHANICAL DATA**

| Solar Cells          | Multicrystalline   |
|----------------------|--|
| Cell Orientation     | 120 cells (6 × 20)   |
| Module Dimensions    | 1698 × 1004 × 35 mm (66.85× 39.53 × 1.38 inches)   |
| Weight               | 18.7kg (41.2 lb)   |
| Glass                | 3.2 mm (0.13 inches), High Transmission, AR Coated Heat Strengthened Glass   |
| Encapsulant Material | EVA  |
| Backsheet            | White  |
| Frame                | 35 mm (1.38 inches) Anodized Aluminium Alloy   |
| J-Box                | IP 68 rated  |
| Cables               | Photovoltaic Technology Cable 4.0mm² (0.006 inches²), Portrait: N 140mm/P 285mm(5.51/11.22inches) Landscape: N 1200 mm /P 1200 mm (47.24/47.24 inches) |
| Connector            | Genunie MC4 / Trina TS4  |

#### TEMPERATURE RATINGS

| NMOT (Nominal Module Operating Temperature) | 41°C (±3°C) |
|---|-------------|
| Temperature Coefficient of PMAX             | - 0.38%/°C  |
| Temperature Coefficient of VOC              | - 0.31%/°C  |
| Temperature Coefficient of ISC              | 0.05%/°C    |

MAXIMUM RATINGS

Operational Temper

| Operational Temperature | -40~+85°C      |  |
|-------------------------|----------------|--|
| Maximum System Voltage  | 1000V DC (IEC) |  |
|                         | 1000V DC (UL)  |  |
| Max Series Fuse Rating  | 20A            |  |

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

#### WARRANTY

12 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: 720 pieces





Country of origin: China