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.

### Our most versatile product
- Compatible with all major BOS components and system designs
- 1000V UL/1000V IEC certified

### Maximize Limited Space
- 60-cell module power output up to 280W
- Up to 171 W/m² power density

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

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**LINEAR PERFORMANCE WARRANTY**

10 Year Product Warranty · 25 Year Linear Power Warranty

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Comprehensive Products And System Certificates

IEC61215/IEC61730/UL1703/IEC61701/IEC62765
ISO 9001: Quality Management System
ISO 14001: Environmental Management System
ISO14064: Greenhouse gases Emissions Verification
OHSAS 18001: Occupation Health and Safety Management System

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Trina Solar

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I-V CURVES OF PV MODULE (280W)

Voltage (V)  
0 10 20 30 40 50

Current (A)  
1.0 2.0 3.0 4.0 5.0 6.0 7.0 8.0 9.0 10.0

1000W/m²
two.superior
800W/m²
two.superior
600W/m²
two.superior
400W/m²
two.superior
200W/m²
two.superior

FRAMED 60-CELL MODULE

P-V CURVES OF PV MODULE (280W)

Voltage (V)  
0 10 20 30 40 50

Power (W)  
50 100 150 200 250 300

1000W/m²
two.superior
800W/m²
two.superior
600W/m²
two.superior
400W/m²
two.superior
200W/m²
two.superior

TSM-PD05
TSM-PD05.08
TSM-PD05.05

PRODUCTS POWER RANGE

TSM-PD05 265-280W
TSM-PD05.08 265-280W
TSM-PD05.05 260-275W

MECHANICAL DATA

Solar Cells  
Multicrystalline 156.75 × 156.75 mm (6 inches)

Cell Orientation  
60 cells (6 × 10)

Module Dimensions  
1650 × 992 × 35 mm (65.0 × 39.1 × 1.38 inches)

Weight  
18.6 kg (41.0 lb)

Glass  
3.2 mm (0.13 inches), High Transmission, AR Coated Tempered Glass

Backsheet  
White (PD05, PD05.08); Black (PD05.05)

Frame  
Silver Anodized Aluminium Alloy (PD05); Black Anodized Aluminium Alloy (PD05.08, PD05.05)

J-Box  
IP 67 or IP 68 rated

Cables  
Photovoltaic Technology Cable 4.0mm² (0.006 inches²), 1000 mm (39.4 inches)

Connector  
MC4 Compatible*

* Please refer to regional datasheet for specified connector.

DIMENSIONS OF PV MODULE (mm)

MECHANICAL DATA (STC)

Peak Power Watts-Pmax (Wp)*  
260 265 270 275 280

Power Output Tolerance-Pmax (W)  
0 ~ +5

Maximum Power Voltage-Vmax (V)  
30.6 30.8 30.9 31.1 31.4

Maximum Power Current-Imp (A)  
8.50 8.61 8.73 8.84 8.92

Open Circuit Voltage-Voc (V)  
38.2 38.3 38.4 38.5 38.7

Short Circuit Current-Isc (A)  
9.00 9.10 9.18 9.25 9.34

Module Efficiency η (%)  
15.9 16.2 16.5 16.8 17.1

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

ELECTRICAL DATA (NOCT)

Maximum Power-Pmax (Wp)  
193 197 200 204 207

Maximum Power Voltage-Vmax (V)  
28.4 28.6 28.7 29.0 29.2

Maximum Power Current-Imp (A)  
6.81 6.89 6.97 7.03 7.10

Open Circuit Voltage-Voc (V)  
35.4 35.5 35.5 35.6 35.8

Short Circuit Current-Isc (A)  
7.27 7.35 7.41 7.47 7.55

NOCT: Irradiance at 800W/m², Ambient Temperature 20°C, Wind Speed 1m/s.

TEMPERATURE RATINGS

NOC(T)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  
1000V 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: 840 pieces

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