

THE Honey MODULE

TSM-PD05

60 CELL
MULTICRYSTALLINE MODULE

255–270W
POWER OUTPUT RANGE

16.5%
MAXIMUM EFFICIENCY

0/+5W
POSITIVE POWER TOLERANCE

TRINA SOLAR: A STRONG AND RELIABLE PARTNER

As a leading global manufacturer of next generation photovoltaic products, Trina Solar is committed to building mutually beneficial alliances with installers, developers, distributors and technological partners as the backbone of our shared goal to drive Smart Energy Together. Thanks to an extensive sales and service network with local expert teams throughout Europe, Trina Solar is perfectly positioned to support your needs. With Trina Solar as your strong, bankable partner you can rest assured knowing that you've made the right choice.

www.trinasolar.com



Excellent low light performance on cloudy days, mornings and evenings

- Advanced surface texturing
- Back surface field
- Selective emitter



Maximize Limited Space

- 60-cell module power output up to 270W
- Up to 165 W/m² power density



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
- 1000V UL/1000V IEC certified

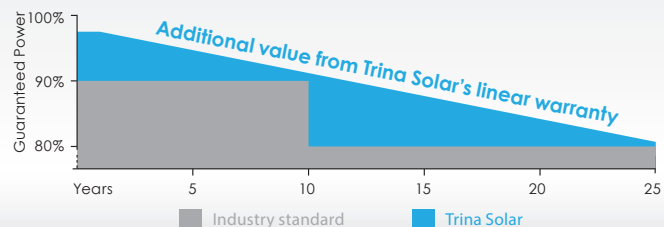


Certified to withstand challenging environmental conditions

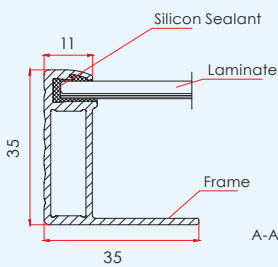
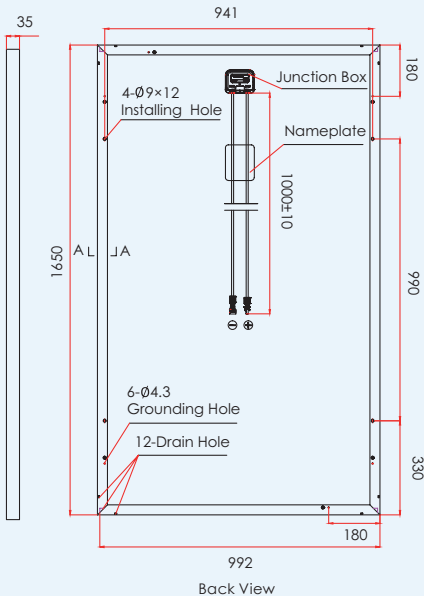
- 130 km/h wind load (2400 Pa)
- 900 kg snow load per module (5400 Pa)
- 35 mm hail stones at 97 km/h
- Ammonia resistance
- Salt mist resistance
- resistance to sand and dust abrasion

LINEAR PERFORMANCE WARRANTY

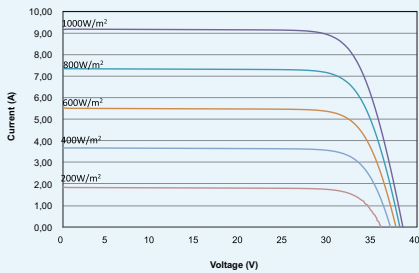
10 Year Product Warranty • 25 Year Linear Power Warranty



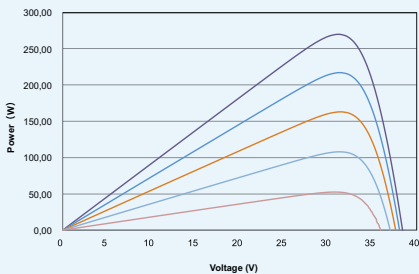
DIMENSIONS OF PV MODULE TSM-PD05
(unit:mm)



I-V CURVES OF PV MODULE (270W)



P-V CURVES OF PV MODULE (270W)



CERTIFICATION

IEC61215/EN61215
IEC61730/EN61730
IEC 627162 PFG 1917/05.11
IEC 61701
DIN EN 60068-2-68 LC2
MCS BRE PV0183

| ELECTRICAL DATA @ STC | TSM-255 PD05 | TSM-260 PD05 | TSM-265 PD05 | TSM-270 PD05 |
|---------------------------------------|--------------|--------------|--------------|--------------|
| Peak Power Watts- P_{MAX} (Wp)* | 255 | 260 | 265 | 270 |
| Power Output Tolerance- P_{MAX} (W) | 0/+5 | 0/+5 | 0/+5 | 0/+5 |
| Maximum Power Voltage- V_{MPP} (V) | 30.5 | 30.6 | 30.8 | 30.9 |
| Maximum Power Current- I_{MPP} (A) | 8.37 | 8.50 | 8.61 | 8.73 |
| Open Circuit Voltage- V_{OC} (V) | 38.1 | 38.2 | 38.3 | 38.4 |
| Short Circuit Current- I_{SC} (A) | 8.88 | 9.00 | 9.10 | 9.18 |
| Module Efficiency η_m (%) | 15.6 | 15.9 | 16.2 | 16.5 |

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

| ELECTRICAL DATA @ NOCT | TSM-255 PD05 | TSM-260 PD05 | TSM-265 PD05 | TSM-270 PD05 |
|--------------------------------------|--------------|--------------|--------------|--------------|
| Maximum Power- P_{MAX} (Wp) | 189 | 193 | 197 | 200 |
| Maximum Power Voltage- U_{MPP} (V) | 28.2 | 28.4 | 28.6 | 28.7 |
| Maximum Power Current- I_{MPP} (A) | 6.71 | 6.81 | 6.89 | 6.97 |
| Open Circuit Voltage- U_{OC} (V) | 35.3 | 35.4 | 35.5 | 35.5 |
| Short Circuit Current- I_{SC} (A) | 7.17 | 7.27 | 7.35 | 7.41 |

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

MECHANICAL DATA

| | |
|-------------------|--|
| Solar Cells | Multicrystalline 156 × 156 mm (6 inches) |
| Cell Orientation | 60 cells (6 x 10) |
| Module Dimensions | 1650 × 992 × 35 mm (65.0 × 39.1 × 1.38 inches) |
| Weight | 18.6 kg |
| Glass | High Transparency, Anti-Reflective, AR Coated and Heat Tempered Solar Glass - 3.2 mm (0.13 inches) |
| Backsheet | White |
| Frame | Silver Anodized Aluminium Alloy |
| J-Box | IP 67 rated or IP 68 rated |
| Cables | Photovoltaic Technology Cable 4.0mm ² (0.006 inches ²), 1000 mm (39.4 inches) |
| Connector | MC4 Compatible |

TEMPERATURE RATINGS

| | |
|---|------------|
| Nominal Operating Cell Temperature (NOCT) | 44°C (±2K) |
| Temperature Coefficient of P_{MAX} | -0.41%/K |
| Temperature Coefficient of V_{OC} | -0.32%/K |
| Temperature Coefficient of I_{SC} | 0.05%/K |

MAXIMUM RATINGS

| | |
|-------------------------|---------------------------------|
| Operational Temperature | -40 to +85°C |
| Maximum System Voltage | 1000V DC (IEC) 1000V DC (UL) |
| Max Series Fuse Rating | 15A |
| Mechanical Load | 5400 Pa |
| Wind Load | 2400 Pa |

WARRANTY

10 year Product Workmanship Warranty

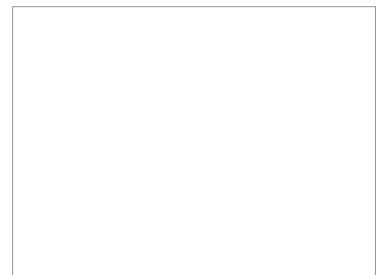
25 year Linear Performance Warranty

(Please refer to product warranty for details)

PACKAGING CONFIGURATION

Modules per box: 30 pieces

Modules per 40' container: 840 pieces



TSM_EN_2016_B