

# THE DUAL GLASS MODULE

## TSM-PDG5



**60 CELL**  
MULTICRYSTALLINE MODULE

**245–255W**  
POWER OUTPUT RANGE

**15.2%**  
MAXIMUM EFFICIENCY

**0 to +3%**  
POWER OUTPUT GUARANTEE

**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](http://www.trinasolar.com)



**More reliable frameless design**

- PID free
- Reduced soiling due to natural cleaning
- Cleaner aesthetics



**Enhanced safety**

- Fire class A certified by TUV Rheinland



**More durable**

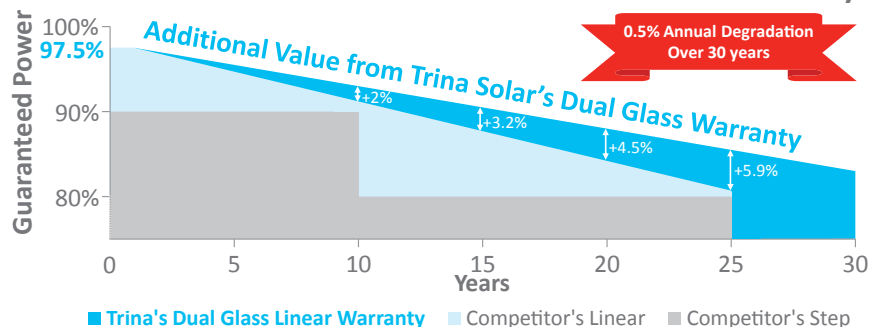
- Robust package protects cells during mechanical loading



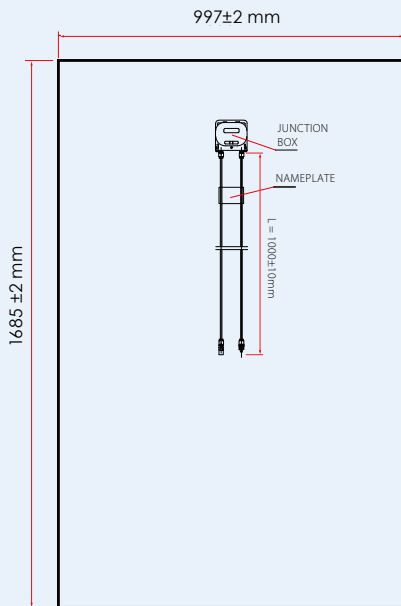
**Certified to withstand the most challenging environmental solutions**

- Module coating resistant to sand, acid, and alkali
- 3600 Pa wind load
- 5400 Pa snow load
- 25 mm hail stones at 82 km/hr

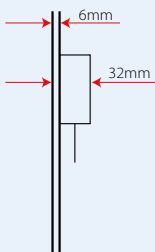
**Trina Solar's Dual Glass Linear Performance Warranty**



## DIMENSIONS OF PV MODULE TSM-PDG5

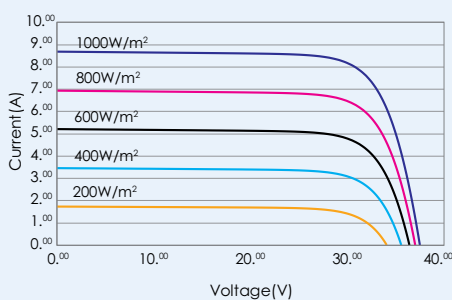


Back View



Side View

## I-V CURVES OF PV MODULE TSM-255 PDG5



## CERTIFICATION



ELECTRICAL DATA @ STC	TSM-245 PDG5	TSM-250 PDG5	TSM-255 PDG5
Peak Power Watts- $P_{MAX}$ (Wp)	245	250	255
Power Output Tolerance- $P_{MAX}$ (%)	0/+3	0/+3	0/+3
Maximum Power Voltage- $V_{MPP}$ (V)	30.1	30.3	30.4
Maximum Power Current- $I_{MPP}$ (A)	8.14	8.26	8.39
Open Circuit Voltage- $V_{OC}$ (V)	37.4	37.5	37.6
Short Circuit Current- $I_{sc}$ (A)	8.60	8.70	8.80
Module Efficiency $\eta_m$ (%)	14.6	14.9	15.2

STC: Irradiance 1000 W/m<sup>2</sup>, Cell Temperature 25°C, Air Mass AM1.5 according to EN 60904-3. Average efficiency reduction of 4.5% at 200 W/m<sup>2</sup> according to EN 60904-1.

ELECTRICAL DATA @ NOCT	TSM-245 PDG5	TSM-250 PDG5	TSM-255 PDG5
Maximum Power- $P_{MAX}$ (Wp)	178	181	185
Maximum Power Voltage- $V_{MP}$ (V)	27.0	27.0	27.1
Maximum Power Current- $I_{MPP}$ (A)	6.60	6.71	6.81
Open Circuit Voltage (V)- $V_{OC}$ (V)	34.2	34.2	34.3
Short Circuit Current (A)- $I_{sc}$ (A)	7.02	7.12	7.22

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

## MECHANICAL DATA

Solar cells	Multicrystalline 156 × 156 mm
Cell orientation	60 cells (6 × 10)
Module dimensions	1685 × 997 × 6 mm (1685 x 997 x 32 mm with junction box)
Weight	24.0 kg
Front Glass	High Transmission, Low Iron, Heat Strengthened Glass, 2.5 mm
Backsheet	White
Back Glass	Heat Strengthened Glass, 2.5 mm
Frame	Frameless
J-Box	IP65 or IP67 rated
Cables	Photovoltaic Technology cable 4.0 mm <sup>2</sup> , 1000 mm
Connector	MC4-EVO 3

## TEMPERATURE RATINGS

Nominal Operating Cell Temperature (NOCT)	45°C (±2K)
Temperature Coefficient of $P_{MAX}$	- 0.43% /K
Temperature Coefficient of $V_{OC}$	- 0.32% /K
Temperature Coefficient of $I_{sc}$	0.05% /K

## MAXIMUM RATINGS

Operational Temperature	-40~+85K
Maximum System Voltage	1000V DC (IEC)
Max Series Fuse Rating	15A

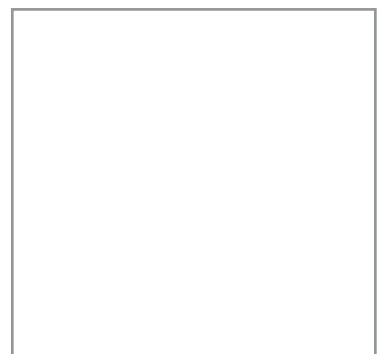
## WARRANTY

10 year Product Workmanship Warranty  
 30 year Linear Power Warranty  
 (Please refer to product warranty for details)

## PACKAGING CONFIGURATION

Modules per box: 30 pieces  
 Modules per 40' container: 780 pieces

\*The mechanical loading is dependent upon the mounting method used and only approved clamps should be used. For best results, install with the Trina clamp for dual glass modules



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