

THE DUOMAX

DUAL GLASS 40-CELL MODULE

40 CELL
MULTICRYSTALLINE MODULE

170-180W
POWER OUTPUT RANGE

10.9%
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



Highly reliable due to stringent quality control

- PID resistant and free of snail trails
- Increased module robustness to minimize micro-cracks
- 100% EL double inspection



Enhanced safety

- Fire class A certified by TUV Rheinland according to fire test IEC 61730-2/MST 23
- Certified for fire type13 (UL 1703)



Increased value

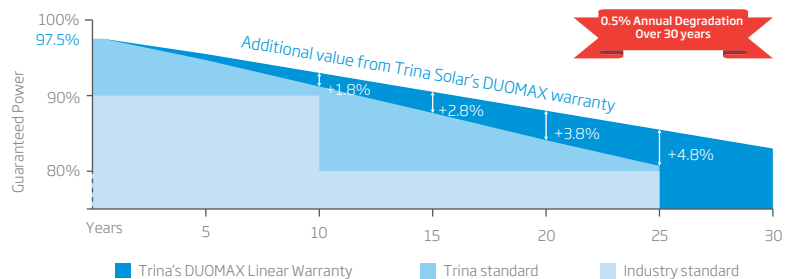
- Higher maximum system voltage reduces BOS costs
- 30 year linear warranty
- 0.5% annual degradation
- Low thermal coefficients for more energy production at higher temperatures



Certified to withstand the most challenging environmental conditions

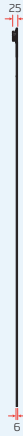
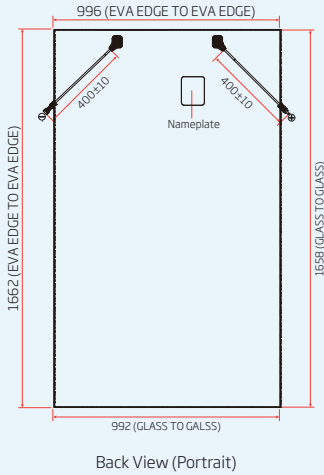
- Module coating resistant to sand, acid, and alkali
- 2400 Pa wind load
- 5400 Pa snow load
- 35 mm hail stones at 97 km/h

Trina Solar's DUOMAX Linear Performance Warranty

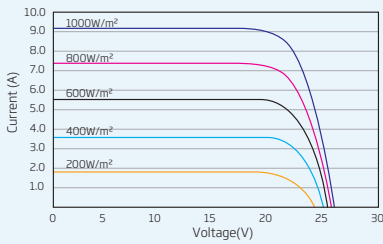


PRODUCTS | **POWER RANGE**
TSM-PEG40.07 | 170-180W

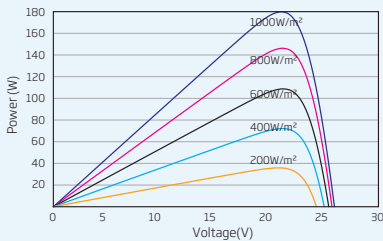
DIMENSIONS OF PV MODULE (mm)



I-V CURVES OF PV MODULE(180W)



P-V CURVES OF PV MODULE(180W)



ELECTRICAL DATA (STC)

Peak Power Watts- P_{MAX} (Wp)*	170	175	180
Power Output Tolerance- P_{MAX} (W)	0 ~ +5		
Maximum Power Voltage- V_{MPP} (V)	20.4	20.6	20.8
Maximum Power Current- I_{MPP} (A)	8.33	8.50	8.67
Open Circuit Voltage- V_{OC} (V)	25.3	25.4	26.0
Short Circuit Current- I_{SC} (A)	8.86	9.00	9.14
Module Efficiency η_m (%)	10.3	10.6	10.9

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

ELECTRICAL DATA (NOCT)

Maximum Power- P_{MAX} (Wp)	126	130	134
Maximum Power Voltage- V_{MPP} (V)	18.8	19.0	19.2
Maximum Power Current- I_{MPP} (A)	6.70	6.83	6.95
Open Circuit Voltage- V_{OC} (V)	23.5	23.6	23.8
Short Circuit Current- I_{SC} (A)	7.15	7.27	7.38

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

MECHANICAL DATA

Solar Cells	Multicrystalline 156.75 × 156.75 mm (6 inches)
Cell Orientation	40 cells (4 × 10)
Module Dimensions	1658 × 992 × 6 mm (65.3 × 39.1 × 0.236 inches) 1662 × 996 × 6 mm with edge banding (65.4 × 39.2 × 0.236 inches)
Weight	22.5 kg (49.6 lb)
Front Glass	2.5 mm (0.10 inches), High Transmission, AR Coated Heat Strengthened Glass
EVA	Transparent
Back Glass	2.5 mm (0.10 inches), Heat Strengthened Glass
Frame	Frameless
J-Box	IP 67 or IP 68 rated
Cables	Photovoltaic Technology Cable 4.0 mm ² (0.006 inches ²) Portrait: 400/400 mm (15.7/15.7 inches)
Connector	MC4 Compatible (1500V)*

*Please refer to regional datasheet for specified connector.

TEMPERATURE RATINGS

NOCT (Nominal Operating Cell Temperature)	44°C (±2°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) 1000V DC (UL)
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
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