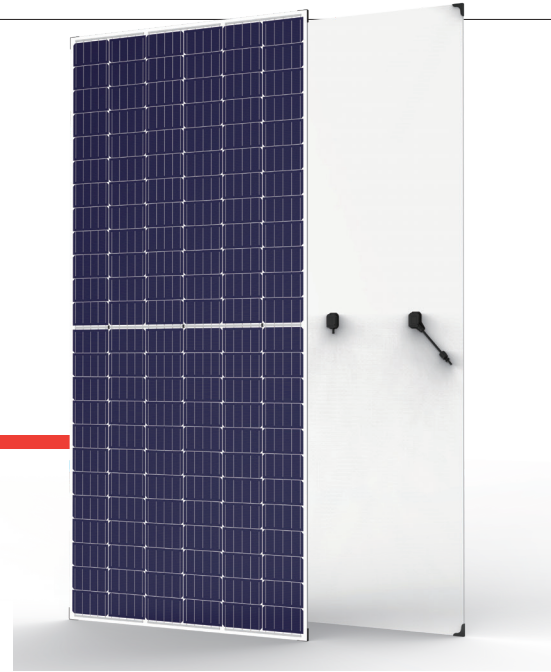


THE DUOMAX^M

HALF-CELL DUAL GLASS 72 LAYOUT MODULE



72 LAYOUT
MONOCRYSTALLINE MODULE

380-410W
POWER OUTPUT RANGE

20.2%
MAXIMUM EFFICIENCY

0~+5W
POSITIVE POWER TOLERANCE

PRODUCTS

TSM-DEG15H(II)

POWER RANGE

380-410W



Increased value

- Reduce BOS cost with higher power bin and 1500V system voltage
- 30 year linear warranty
- 0.5% annual degradation
- Low thermal coefficients for greater energy production at higher temperature



Half-cell design brings higher efficiency

- New cell string layout and split J-box location to reduce the energy loss caused by shading between modules
- LRF(Light Redirecting Film) integrated to gain more power, need avoid light sensitive case
- Lower cell connection power loss due to half-cell layout(144 monocrystalline)
- Passivated Emitter and Rear Cell (PERC Technology)



Highly reliable due to stringent quality control

- Over 30 in-house tests (UV, TC, HF etc)
- Increased module robustness to minimize micro-cracks
- PID resistant and free of snail trails
- 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

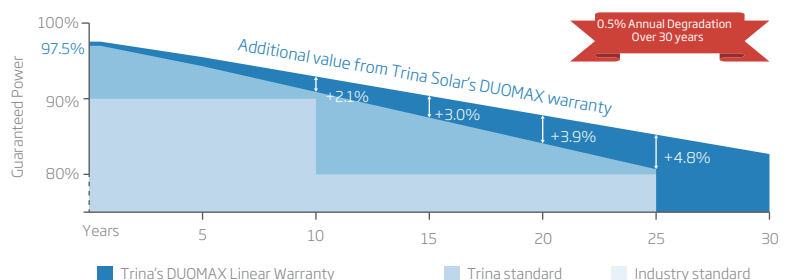
Founded in 1997, Trina Solar is the world's leading comprehensive solutions provider for solar energy. We believe close cooperation with our partners is critical to success. Trina Solar now distributes its PV products to over 60 countries all over the world. Trina is able to provide exceptional service 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

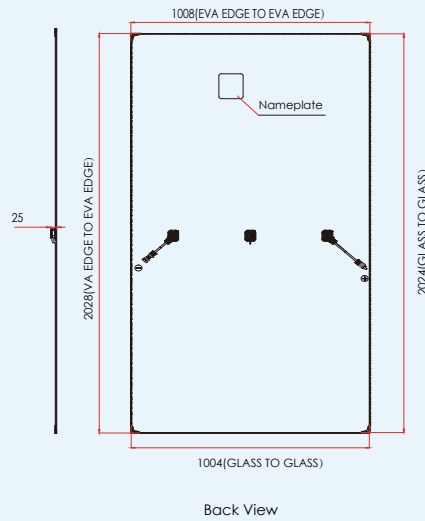
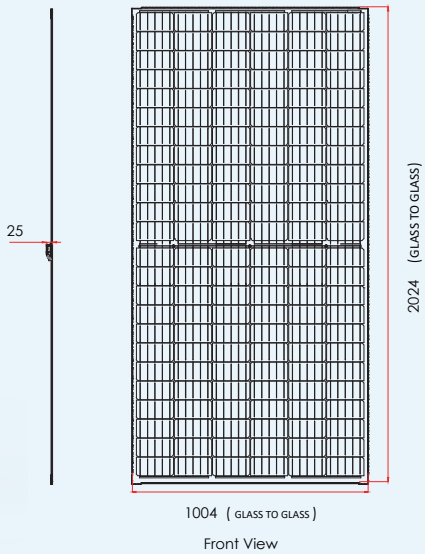
IEC61215/UL1703/IEC61730/IEC61701/IEC62716
 ISO 9001: Quality Management System
 ISO 14001: Environmental Management System
 ISO14064: Greenhouse gases Emissions Verification
 OHSAS 18001: Occupation Health and Safety Management System



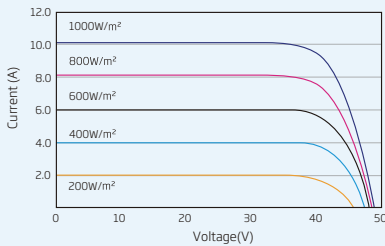
Trina Solar's DUOMAX Linear Performance Warranty



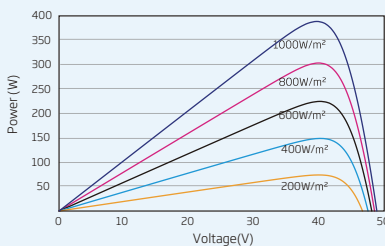
DIMENSIONS OF PV MODULE(mm)



I - V CURVES OF PV MODULE(390W)



P - V CURVES OF PV MODULE(390W)



ELECTRICAL DATA (STC)

Peak Power Watts- P_{MAX} (Wp)*	380	385	390	395	400	405	410
Power Output Tolerance- P_{MAX} (W)	0 ~ +5						
Maximum Power Voltage- V_{MPP} (V)	39.6	40.1	40.5	40.8	41.1	41.4	41.7
Maximum Power Current- I_{MPP} (A)	9.59	9.61	9.64	9.69	9.74	9.79	9.84
Open Circuit Voltage- V_{OC} (V)	48.1	48.5	49.7	50.1	50.4	50.8	51.2
Short Circuit Current- I_{SC} (A)	9.99	10.03	10.08	10.13	10.18	10.23	10.29
Module Efficiency η_m (%)	18.7	18.9	19.2	19.4	19.7	19.9	20.2

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

ELECTRICAL DATA (NMOT)

Maximum Power- P_{MAX} (Wp)	287	291	295	298	302	306	310
Maximum Power Voltage- V_{MPP} (V)	37.4	37.9	38.4	38.7	38.9	39.1	39.3
Maximum Power Current- I_{MPP} (A)	7.66	7.67	7.68	7.71	7.76	7.81	7.86
Open Circuit Voltage- V_{OC} (V)	44.4	45.6	46.8	47.2	47.4	47.6	47.8
Short Circuit Current- I_{SC} (A)	8.05	8.09	8.13	8.17	8.21	8.25	8.29

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

MECHANICAL DATA

Solar Cells	Monocrystalline
Cell Orientation	144 cells (6 × 24)
Module Dimensions	2024 × 1004 × 6 mm (79.69 × 39.53 × 0.24 inches) 2028 × 1008 × 6 mm with edgebanding (78.84 × 39.69 × 0.24 inches) 2030 × 1010 × 7.6 mm with corner (79.92 × 39.76 × 0.30 inches)
Weight	29.2 kg (64.4 lb)
Front Glass	2.5 mm (0.10 inches), High Transmission, AR Coated Heat Strengthened Glass
Encapsulant Material	EVA
Back Glass	2.5 mm (0.10 inches), Heat Strengthened Glass
Frame	Frameless
J-Box	IP 68 rated
Cables	Photovoltaic Technology Cable 4.0mm ² (0.006 inches ²), Portrait: N 140mm/P 285mm (5.51/11.22 inches) Landscape: N 1400 mm / P 1400 mm (55.12/55.12 inches)
Connector	MC4 EV02/TS4

TEMPERATURE RATINGS

NMOT (Nominal Module Operating Temperature)	41°C (± 3 °C)
Temperature Coefficient of P_{MAX}	-0.37%/°C
Temperature Coefficient of V_{OC}	-0.29%/°C
Temperature Coefficient of I_{SC}	0.05%/°C

(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)

MAXIMUM RATINGS

Operational Temperature	-40 ~ +85°C
Maximum System Voltage	1500V DC (IEC) 1000V DC (UL)
Max Series Fuse Rating	20A

PACKAGING CONFIGURATION

- Modules per box: 33 pieces
- Modules per 40' container: 726 pieces

