

THE

DUOMAX^M PLUS⁺

DUAL GLASS 60-CELL MODULE

60 CELL

MONOCRYSTALLINE MODULE

270-305W

POWER OUTPUT RANGE

18.5%

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

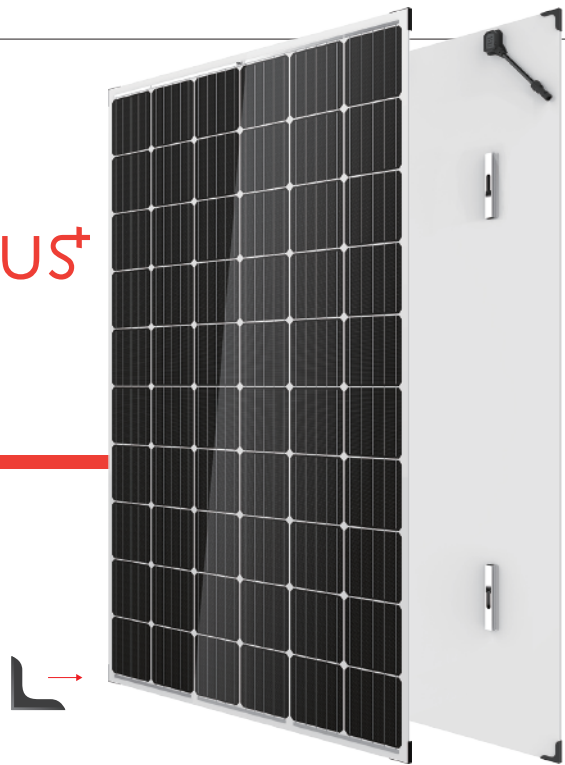
ISO 14001: Environmental Management System

ISO14064: Greenhouse gases Emissions Verification

OHSAS 18001: Occupation Health and Safety Management System



Trinasolar



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 type I3 (UL 1703)



Increased value

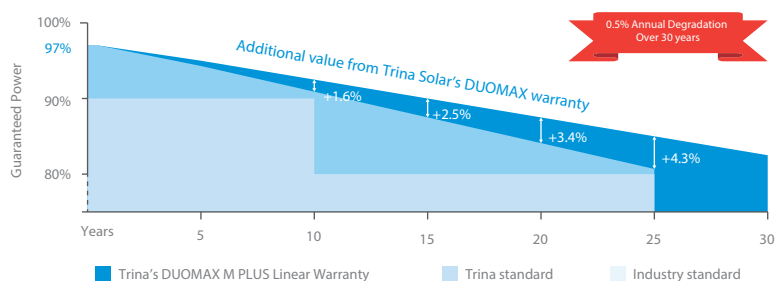
- Higher maximum system voltage reduces BOS costs
- 30 year linear warranty
- 0.5% annual degradation
- Low thermal coefficients for more energy production at higher temperatures



Certified to withstand the most challenging environmental conditions

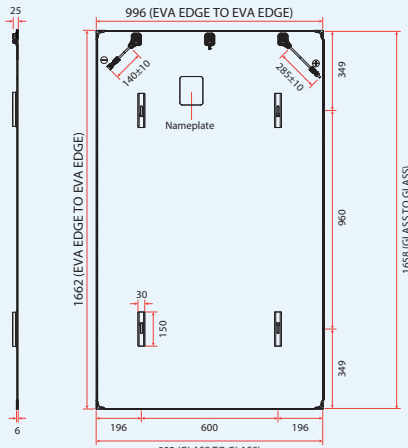
- Module coating resistant to sand, acid, and alkali
- 2400 Pa wind load
- 5400 Pa snow load
- 35 mm hail stones at 97 km/h

Trina Solar's DUOMAX M PLUS Linear Performance Warranty

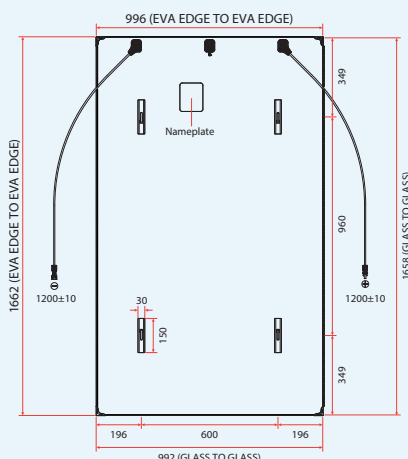


PRODUCTS	INSTALLATION METHODS	POWER RANGE
TSM-DEG5(II)	Clamp	280-305W
TSM-DEG5.40(II)	Gecko Grip	280-305W
TSM-DEG5.07(II)	Clamp	270-300W
TSM-DEG5.47(II)	Gecko Grip	270-300W

DIMENSIONS OF PV MODULE(mm)

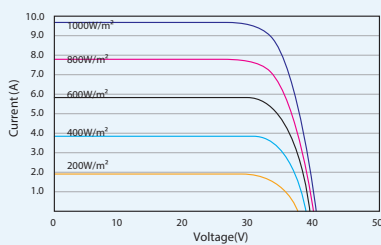


Back View (Portrait)

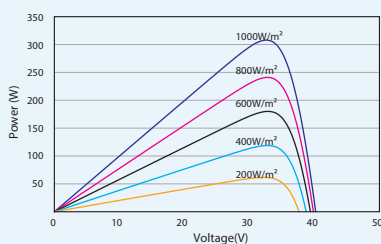


Back View (Landscape)

I-V CURVES OF PV MODULE(305W)



P-V CURVES OF PV MODULE(305W)



ELECTRICAL DATA (STC)

Peak Power Watts- P_{MAX} (Wp)*	270	275	280	285	290	295	300	305
Power Output Tolerance- P_{MAX} (W)	0 ~ +5							
Maximum Power Voltage- V_{MPP} (V)	31.2	31.4	31.7	31.8	32.2	32.5	32.7	32.9
Maximum Power Current- I_{MPP} (A)	8.66	8.76	8.84	8.97	9.01	9.08	9.18	9.26
Open Circuit Voltage- V_{OC} (V)	38.4	38.7	39.0	39.3	39.5	39.7	40.0	40.3
Short Circuit Current- I_{SC} (A)	9.18	9.26	9.35	9.45	9.50	9.55	9.66	9.74
Module Efficiency η (%)	16.4	16.7	17.0	17.3	17.6	17.9	18.2	18.5

STC: Irradiance 1000W/m², Cell Temperature 25°C, Air Mass AM1.5.

*Measuring tolerance: $\pm 3\%$.

ELECTRICAL DATA (NOCT)

Maximum Power- P_{MAX} (Wp)	201	205	209	212	216	220	224	227
Maximum Power Voltage- V_{MPP} (V)	28.9	29.2	29.4	29.6	29.9	30.2	30.4	30.7
Maximum Power Current- I_{MPP} (A)	6.96	7.02	7.10	7.17	7.23	7.28	7.34	7.41
Open Circuit Voltage- V_{OC} (V)	35.7	36.0	36.3	36.6	36.7	36.9	37.2	37.4
Short Circuit Current- I_{SC} (A)	7.41	7.48	7.55	7.63	7.67	7.71	7.79	7.86

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

MECHANICAL DATA

Solar Cells	Monocrystalline 156.75 × 156.75 mm (6 inches)
Cell Orientation	60 cells (6 × 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) 1664 × 998 × 7.6 mm with corner protector (65.5 × 39.3 × 0.299 inches) (Std)*
Weight	23.5 kg (51.8 lb)
Front Glass	2.5 mm (0.10 inches), High Transmission, AR Coated Heat Strengthened Glass
EVA	White [DEG5(II), DEG5.40(II)]; Transparent [DEG5.07(II), DEG5.47(II)]
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: 140/285 mm (5.5/11.2 inches) Landscape: 1200/1200 mm (47.2/47.2 inches)
Connector	QC4 / TS4 (1500V)

*Not apply to slide-in solution project.

TEMPERATURE RATINGS

NOCT (Nominal Operating Cell Temperature)	44°C ($\pm 2^\circ\text{C}$)
Temperature Coefficient of P_{MAX}	- 0.39%/°C
Temperature Coefficient of V_{OC}	- 0.29%/°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

MORE OPTIONS

More Options

- ☐ 2.0mm Glass: 19.7 kg (43.4 lb) [Only for DEG5.40(II)/DEG5.47(II)]
- ☐ Compact AR Coating
- ☐ POE (Polyolefin Elastomer) Adhesive