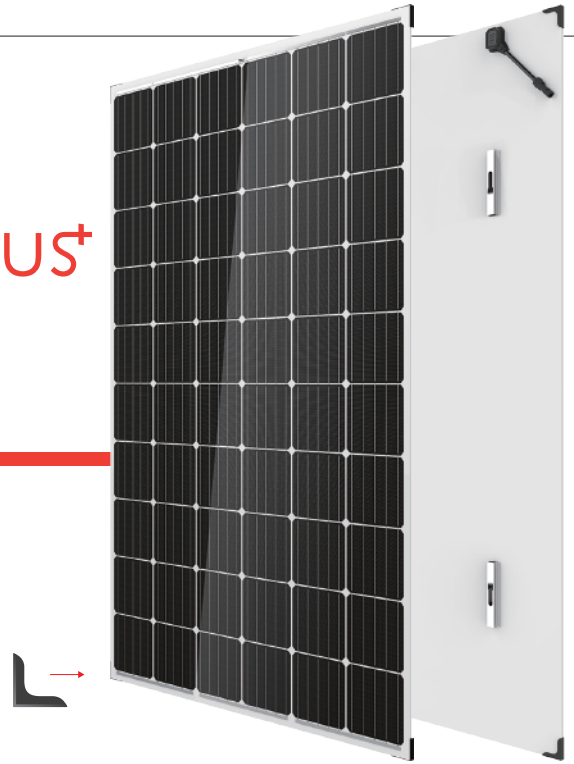


# THE DUOMAX<sup>M</sup> PLUS<sup>+</sup>

DUAL GLASS 60-CELL MODULE



**60 CELL**  
MONOCRYSTALLINE MODULE

**270-305W**  
POWER OUTPUT RANGE

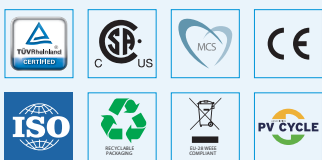
**18.5%**  
MAXIMUM EFFICIENCY

**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



### 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 13 (UL 1703)



### Increased value

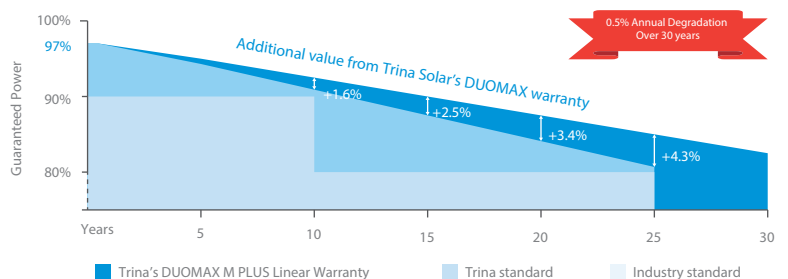
- Higher maximum system voltage reduces BOS costs
- 30 year linear warranty
- 0.5% annual degradation
- Low thermal coefficients for more energy production at higher temperatures



### Certified to withstand the most challenging environmental conditions

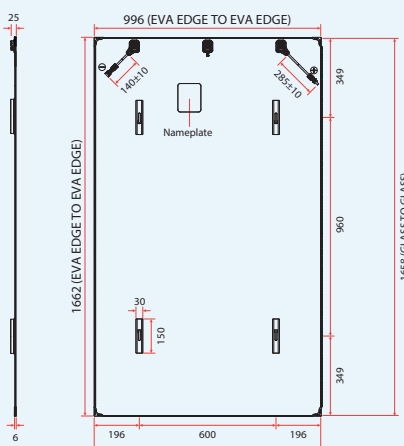
- Module coating resistant to sand, acid, and alkali
- 2400 Pa wind load
- 5400 Pa snow load
- 35 mm hail stones at 97 km/h

Trina Solar's DUOMAX M PLUS Linear Performance Warranty

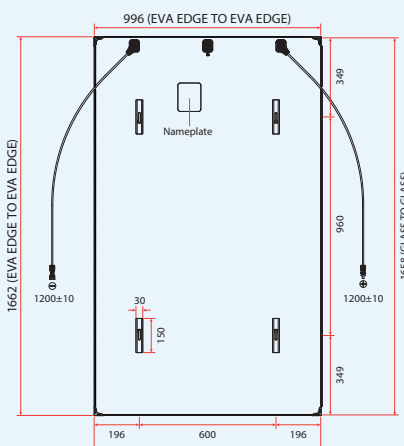


| PRODUCTS        | INSTALLATION METHODS | POWER RANGE |
|-----------------|----------------------|-------------|
| TSM-DEG5(II)    | Clamp                | 280-305W    |
| TSM-DEG5.40(II) | Gecko Grip           | 280-305W    |
| TSM-DEG5.07(II) | Clamp                | 270-300W    |
| TSM-DEG5.47(II)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

**DIMENSIONS OF PV MODULE(mm)**

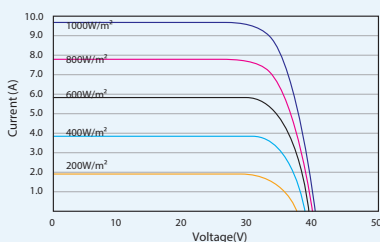


Back View (Portrait)

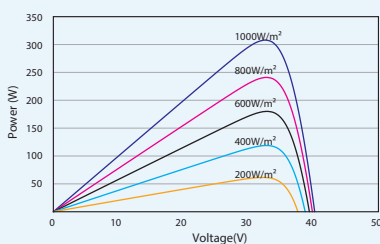


Back View (Landscape)

**I-V CURVES OF PV MODULE(305W)**



**P-V CURVES OF PV MODULE(305W)**



**ELECTRICAL DATA (STC)**

|                                       | 270    | 275  | 280  | 285  | 290  | 295  | 300  | 305  |
|---------------------------------------|--------|------|------|------|------|------|------|------|
| 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 $\eta$ (%)          | 16.4   | 16.7 | 17.0 | 17.3 | 17.6 | 17.9 | 18.2 | 18.5 |

STC: Irradiance 1000W/m<sup>2</sup>, Cell Temperature 25°C, Air Mass AM1.5.  
\*Measuring tolerance: ±3%.

**ELECTRICAL DATA (NOCT)**

|                                      | 201  | 205  | 209  | 212  | 216  | 220  | 224  | 227  |
|--------------------------------------|------|------|------|------|------|------|------|------|
| 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/m<sup>2</sup>, 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)<br>1662 × 996 × 6 mm with edge banding (65.4 × 39.2 × 0.236 inches)<br>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 <sup>2</sup> (0.006 inches <sup>2</sup> )<br>Portrait: 140/285 mm (5.5/11.2 inches)<br>Landscape: 1200/1200 mm (47.2/47.2 inches)                              |
| Connector         | MC4 (1500V)   |

\*Not apply to slide-in solution project.

**TEMPERATURE RATINGS**

|  |             |
|--|-------------|
| NOCT(Nominal Operating Cell Temperature) | 44°C (±2°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)<br>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 | <input type="checkbox"/> 2.0mm Glass: 19.7 kg (43.4 lb) [Only for DEG5.40(II)/DEG5.47(II)]<br><input type="checkbox"/> Compact AR Coating<br><input type="checkbox"/> POE (Polyolefin Elastomer) Adhesive |
|--------------|---|