Founded in 1997, Trina Solar is the world’s leading total solution provider for solar energy. With local presence around the globe, Trina Solar is able to provide exceptional service to each customer in each market and deliver our innovative, reliable products with the backing of Trina as a strong, bankable brand. Trina Solar now distributes its PV products to over 100 countries all over the world. We are committed to building strategic, mutually beneficial collaborations with installers, developers, distributors and other partners in driving smart energy together.

Comprehensive Products and System Certificates
IEC61215/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

**High power**
- Up to 430W front power and 20.5% module efficiency with half-cut and MBB (Multi Busbar) technology bringing more BOS savings
- Lower resistance of half-cut and good reflection effect of MBB ensure high power

**High reliability**
- LID is less than 1%, 1st year degradation less than 1.5%
- Ensured PID resistance through cell process and module material control
- Resistant to salt, acid and ammonia
- Proven to be reliable in high temperature and humidity areas
- Certified to fire class A
- Minimizes micro-crack and snail trails
- Certified to 5400 Pa positive load and 2400 Pa negative load

**High energy generation**
- Up to 30% additional power gain from back side depending on the albedo
- Excellent IAM and low light performance validated by 3rd party with cell process and module material optimization
- Lower temp coefficient (-0.35%) and NMOT bring more energy leading to lower LCOE
- Better anti-shading performance and lower operating temperature

**Easy to install**
- Frame design makes module compatible with all racking and installation methods
- Easy to handle and install as normal framed module during transportation

![Trina Solar’s DUOMAX Performance Warranty](image)

From the 2nd year to the 30th year, the average annual power decline will be no more than 0.5%.
WARRANTY
10 year Product Workmanship Warranty
30 year Power Warranty
(please refer to product warranty for details)

PACKAGING CONFIGURATION
Modules per box: 35 pieces
Modules per 40’ container: 770 pieces

MECHANICAL DATA

TEMPERATURE RATINGS

<table>
<thead>
<tr>
<th>NMOT (Nominal Module Operating Temperature)</th>
<th>41°C (±3°C)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Temperature Coefficient of Pmax (℃)</td>
<td>-0.35%/℃</td>
</tr>
<tr>
<td>Temperature Coefficient of Voc (℃)</td>
<td>-0.25%/℃</td>
</tr>
<tr>
<td>Temperature Coefficient of Isc (℃)</td>
<td>0.04%/℃</td>
</tr>
</tbody>
</table>

(Do not connect Fuse in Combiner Box with two or more strings in parallel connection)

MAXIMUM RATINGS

<table>
<thead>
<tr>
<th>Operational Temperature</th>
<th>-40°C to 85°C</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum System Voltage</td>
<td>1500V DC (IEC)</td>
</tr>
<tr>
<td>Max Series Fuse Rating</td>
<td>20A</td>
</tr>
</tbody>
</table>

ELECTRICAL DATA (STC)

Peak Power, Pmax (W):
410 415 420 425 430
Power Output Tolerance:
0 – 5%%
Maximum Power Voltage,
Vmp:
41.6 41.9 42.2 42.5 42.8
Maximum Power Current,
Impe:
9.86 9.91 9.96 10.0 10.05
Open Circuit Voltage,
Voc:
49.6 49.8 50.0 50.2 50.4
Short Circuit Current,
Isc:
10.42 10.46 10.50 10.54 10.58
Module Efficiency,
η (%):
19.5 19.8 20.0 20.2 20.5

Electrical characteristics with different rear side power gain (reference to 425 Wp front)

<table>
<thead>
<tr>
<th>Pmax gain</th>
<th>5%</th>
<th>10%</th>
<th>15%</th>
<th>20%</th>
<th>25%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Voltage</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Current</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Power</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Electrical DATA (NMOT)

<table>
<thead>
<tr>
<th>Maximum Power, Pmax (W)</th>
<th>304</th>
<th>307</th>
<th>311</th>
<th>315</th>
<th>319</th>
</tr>
</thead>
</table>
| Maximum Power Voltage,
Vmp                   |     |     |     |     |     |
| Maximum Power Current,
Impe                   |     |     |     |     |     |
| Open Circuit Voltage,
Voc                     |     |     |     |     |     |
| Short Circuit Current,
Isc                     |     |     |     |     |     |

CAUTION: READ SAFETY AND INSTALLATION INSTRUCTIONS BEFORE USING THE PRODUCT.

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