EAGLE 78TR G4b

455–475 WATT
TILING RIBBON BIFACIAL MONOCRYSTALLINE MODULE

Positive power tolerance of 0~+3%

- NYSE-listed since 2010, Bloomberg Tier 1 manufacturer
- Best-selling panel globally for last 4 years
- Top performance in the strictest 3rd party labs
- 99.9% on-time delivery
- Automated manufacturing utilizing artificial intelligence
- Vertically integrated, tight controls on quality
- Premium solar panel factories in USA and Malaysia

KEY FEATURES

TR Technology
TR technology eliminates cell gaps to increase module efficiency and power

Bifacial Power Gain
Bifacial cell architecture allows backside bonus and more lifetime power yield

Transparent Backsheet
Easier installation and lower balance of system cost than dual glass solution

Designed for Long Life
Uses the same DuPont protective film as the Space Station, Mars Lander, and jetliners. 30-year warranty

Shade Tolerant
Twin array design allows continued performance even with shading by trees or debris

Protected Against All Environments
Certified to withstand humidity, heat, rain, marine environments, wind, hailstorms, and packed snow

LINEAR PERFORMANCE WARRANTY

30-Year Performance Warranty

Nomenclature:
JKM475M-7RL3-TV

Type
Cell Size
Code
Certification

78TR
163.75mm
T
Transparent Backsheet

Certifications:
- ISO9001:2015 Quality Standards
- ISO14001:2015 Environmental Standards
- IEC61215, IEC61730 certified products
- ISO45001:2018 Occupational Health & Safety Standards
- UL61730 certified products
**ENGINEERING DRAWINGS**

Front  
Side  
Back

**ELECTRICAL PERFORMANCE & TEMPERATURE DEPENDENCE**

Current-Voltage & Power-Voltage Curves [475W]

Temperature Dependence of Isc, Voc, Pmax

**MECHANICAL CHARACTERISTICS**

- **Cells**: Bifacial Monocrystalline Cell
- **No. of Half Cells**: 156 (2x78)
- **Dimensions**: 2205x1032x40mm (86.81x40.63x1.57in)
- **Weight**: 26.5kg (58.42lbs)
- **Front Glass**: 3.2mm, Anti-Reflection Coating
  High Transmission, Low Iron, Tempered Glass
- **Frame**: Anodized Aluminum Alloy
- **Junction Box**: IP67 Rated
- **Output Cables**: 12 AWG, 1400mm (55.12in) or Customized Length
- **Fire Type**: Type 1
- **Pressure Rating**: 5400Pa (Snow) & 2400Pa (Wind)

**SPECIFICATIONS**

- **Short-circuit Current (Isc)**
- **Temperature coefficients of Pmax**
- **Open-circuit Voltage (Voc)**
- **Maximum Power Current (Imp)**
- **Lenght**: ±2mm
- **Width**: ±2mm
- **Height**: ±1mm
- **Row Pitch**: ±2mm

**ELECTRICAL CHARACTERISTICS**

<table>
<thead>
<tr>
<th>Module Type</th>
<th>JKM455M-7RL3-TV</th>
<th>JKM460M-7RL3-TV</th>
<th>JKM465M-7RL3-TV</th>
<th>JKM470M-7RL3-TV</th>
<th>JKM475M-7RL3-TV</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>STC</td>
<td>NOCT</td>
<td>STC</td>
<td>NOCT</td>
<td>STC</td>
</tr>
<tr>
<td>Maximum Power Voltage (Vmp)</td>
<td>43.25V</td>
<td>39.73V</td>
<td>43.32V</td>
<td>39.84V</td>
<td>43.38V</td>
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<tr>
<td>Maximum Power Current (Imp)</td>
<td>10.52A</td>
<td>8.52A</td>
<td>10.62V</td>
<td>8.59A</td>
<td>10.72A</td>
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<tr>
<td>Open-circuit Voltage (Voc)</td>
<td>51.80V</td>
<td>48.89V</td>
<td>51.90V</td>
<td>48.99V</td>
<td>52.00V</td>
</tr>
<tr>
<td>Module Efficiency STC [%]</td>
<td>20.00%</td>
<td>20.21%</td>
<td>20.43%</td>
<td>20.65%</td>
<td>20.87%</td>
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</tbody>
</table>

**STC**: Irradiance 1000W/m²  
**NOCT**: Irradiance 800W/m²  
**Cell Temperature**: 25°C  
**Ambient Temperature**: 20°C  
**AM = 1.5**  
**Wind Speed**: 1m/s  

**TYPICAL OPERATING PARAMETERS**

<table>
<thead>
<tr>
<th>Irradiance 1000W/m²</th>
<th>Irradiance 800W/m²</th>
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</thead>
<tbody>
<tr>
<td>9.09A</td>
<td>8.94A</td>
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<tr>
<td>523Wp</td>
<td>518Wp</td>
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<tr>
<td>43.38V</td>
<td>43.32V</td>
</tr>
<tr>
<td>11.26A</td>
<td>11.35A</td>
</tr>
<tr>
<td>20.00%</td>
<td>20.21%</td>
</tr>
</tbody>
</table>

**Temperature Characteristics**

- **Temperature Coefficients of Pmax**: -0.35%/°C
- **Temperature Coefficients of Voc**: -0.28%/°C
- **Temperature Coefficients of Isc**: 0.048%/°C
- **Nominal Operating Cell Temperature (NOCT)**: 45±2°C
- **Refer. Bifacial Factor**: 70±5%

**MAXIMUM RATINGS**

- **Operating Temperature (°C)**: -40°C to +85°C
- **Maximum System Voltage**: 1500VDC (UL and IEC)
- **Maximum Series Fuse Rating**: 25A

**PACKAGING CONFIGURATION**

- **(Two pallets = One stack)**
  - 27pcs/pallet, 54pcs/stack, 540pcs/40'HQ Container

**BIFACIAL OUTPUT-REAR SIDE POWER GAIN**

- **5% Maximum Power (Pmax)**: 478Wp
  - Module Efficiency (%): 20.99%  
  - 494Wp
- **15% Maximum Power (Pmax)**: 523Wp
  - Module Efficiency (%): 24.99%  
  - 541Wp
- **25% Maximum Power (Pmax)**: 569Wp
  - Module Efficiency (%): 28.22%  
  - 588Wp

**The company reserves the final right to explain any of the information presented. JKM455-475M-7RL3-TV-A2-US**