TWMND-78HD600-620W
N-type Half-cell Bifacial Module (78)

PRODUCT FEATURES

- High Power Output
- Low LCOE
- Maximum Power 620W+
- High Reliability
- Low LID

POWER WARRANTY

1st year <1%, 0.4% power degradation per year from 2 to 30 years

- 12-year Warranty for Materials
- 30-year Warranty for Linear Power Output

MANAGEMENT SYSTEM AND PRODUCT CERTIFICATION

ISO9001: 2015/Quality Management System
ISO14001: 2015/Environment Management System

Front

Rear
### Electrical Characteristics (STC)

**Module Type:** TW-MND-784X2000

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
<th>Value</th>
<th>Value</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum Power: Pmax [W]</td>
<td>600</td>
<td>605</td>
<td>610</td>
<td>615</td>
</tr>
<tr>
<td>Open Circuit Voltage: Voc [V]</td>
<td>54.8</td>
<td>55.2</td>
<td>55.4</td>
<td>55.6</td>
</tr>
<tr>
<td>Voltage at Maximum Power: Vmp [V]</td>
<td>45.6</td>
<td>45.78</td>
<td>45.98</td>
<td>46.18</td>
</tr>
<tr>
<td>Module Efficiency: η [%]</td>
<td>21.5</td>
<td>21.6</td>
<td>21.8</td>
<td>22.0</td>
</tr>
</tbody>
</table>

STC: Irradiance 1000W/m², Cell Temperature 25°C, Air Mass 1.5, Measuring Tolerance ±3%

### Temperature Ratings

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Temperature Coefficient (Pmax)</td>
<td>-0.30%/°C</td>
</tr>
<tr>
<td>Temperature Coefficient (Voc)</td>
<td>-0.25%/°C</td>
</tr>
<tr>
<td>Temperature Coefficient (Isoc)</td>
<td>0.04%/°C</td>
</tr>
<tr>
<td>NMOT</td>
<td>46×2°C</td>
</tr>
</tbody>
</table>

### Mechanical Parameters

- **Cells:** TNC
- **Cell Orientation:** 156(SX26)
- **Dimension:** 2465×12134×2(35)mm
- **Weight:** 34.6kg
- **Front Glass:** 2.0mm high transmittance, AR coated tempered glass
- **Rear Glass:** 2.0mm high transmittance, coated tempered glass
- **Frame:** Anodized aluminum alloy frame
- **Junction Box:** IP66, 3 diodes
- **Output Cable:** 4.0mm²
- **Cable Length:** 0~500mm, 0~200mm, length can be customized
- **Wind/Snow Load:** 2400Pa/5400Pa
- **Packaging:** 31pcs per pallet, 496pcs per 40’HC

### Operating Parameters

- **Operational Temperature:** -40°C to 85°C
- **Maximum System Voltage:** 1500VDC
- **Maximum Series Fuse Rating:** 30A
- **Power Output Tolerance:** 0~10W
- **Maximum Bifaciality:** 80%+5%

### Drawings (Unit: mm)