Premium Plus Module
290-300W

Features

More Power
Higher conversion efficiency, more power production per unit area

Lower System Cost
Higher conversion efficiency help to save transportation cost, installation cost and BOS cost

Better Low-light performance
Enhanced spectral response at longer wave length boosts low-light performance, which can produce more than 3% additional power compared with conventional module at system side

PID Anti-PID
Certified to withstand increased loads of up to 5400Pa

IP68 connectors enhance the reliability of the PV system

1500V Maximum System Voltage (optional)

10-year product warranty
25-year linear performance warranty

60 Cells

ABOUT PHONO SOLAR
Phono Solar Technology Co., Ltd, founded by SUMEC Group Corporation (SUMEC GROUP), a member of the China National Machinery Industry Corporation (SINOMACH), is one of the world’s leading renewable energy product manufacturers and a well trusted brand provider. The Phono Solar brand has become synonymous with high performing, top quality photovoltaic panels that are ideal for use in large scale power plants, commercial and residential installations since 2004.
**Premium Plus Module**

### Electrical Typical Values

<table>
<thead>
<tr>
<th>Model</th>
<th>PS290M-20/U</th>
<th>PS295M-20/U</th>
<th>PS300M-20/U</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type</td>
<td>Monocrystalline 6 inch x 6 inch square, 6 x 10 pieces in series</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rated Power (Pmpp)</td>
<td>290</td>
<td>295</td>
<td>300</td>
</tr>
<tr>
<td>Tolerance</td>
<td>0 to +5W</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rated Current (Impp)</td>
<td>9.10</td>
<td>9.20</td>
<td>9.32</td>
</tr>
<tr>
<td>Rated Voltage (Vmpp)</td>
<td>31.87</td>
<td>32.07</td>
<td>32.19</td>
</tr>
<tr>
<td>Short Circuit Current (Isc)</td>
<td>9.71</td>
<td>9.74</td>
<td>9.82</td>
</tr>
<tr>
<td>Open Circuit Voltage (Voc)</td>
<td>39.70</td>
<td>39.80</td>
<td>39.90</td>
</tr>
<tr>
<td>Module Efficiency (%)</td>
<td>17.83</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NOCT (Nominal Operation Cell Temperature)</td>
<td>45°C ± 2°C</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Voltage Temperature Coefficient</td>
<td>+0.288%/°C</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Current Temperature Coefficient</td>
<td>+0.047%/°C</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Power Temperature Coefficient</td>
<td>-0.398%/°C</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Mechanical Characteristics

- **Dimension (L x W x H)**: Length: 1640mm (64.57 inch)
- **Width**: 992mm (39.06 inch)
- **Height**: 40mm (1.57 inch)
- **Weight**: 19kg (41.9 lbs)
- **Front Glass**: 3.2mm toughened glass
- **Frame**: (Black) Anodized aluminium alloy
- **Cable**: 4mm² (IEC) / 12AWG (UL), 900mm
- **Module Efficiency**: 17.83%

### Weak Light Performance

- **Cell temp.=25°C**
- **Incident Irrad.**: 1000W/m², 800W/m², 600W/m², 400W/m², 200W/m²

### Absolute Maximum Rating

- **Operating Temperature**: From -40 to +85°C
- **Hail Diameter @ 80km/h**: Up to 25mm
- **Surface Maximum Load Capacity**: 5400Pa
- **IEC Application Class (IEC61730)**: Type A
- **Fire Rating (IEC61730)**: Type 1
- **Module Fire Performance (UL1703)**: DC 1000V (IEC), DC 600V (UL) / 1000V (ETL) / 1500V (ETL)

### Packing Configuration

1. In compliance with our warranty terms and conditions.
2. Measurement conditions under irradiance level of Standard Test Conditions (STC): 1000W/m², Air mass 1.5 Spectrum, cell temperature of 25°C.

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**Phono Solar Technology Co., Ltd**

Phono Solar Technology Co., Ltd reserves the right to adjust specifications without notice. Further information please refer to our website: www.phonosolar.com