Premium Plus Module
Mono/290-300W

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

Lower System Cost
Higher conversion efficiency help to save transport cost, installation cost, 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

Guaranteed Power
- Industry standard
- Phono Solar

10-year product warranty
25-year performance warranty

100%
97%
90%
70%
0 5 10 15 20 25 Year

60 Cells

Bloomberg Tier 1 TOP PERFORMER
# ELECTRICAL CHARACTERISTICS

## ELECTRICAL TYPICAL VALUES

<table>
<thead>
<tr>
<th>Model</th>
<th>Type</th>
<th>Rated Power (Pmpp)</th>
<th>Tolerance</th>
<th>Rated Current (Impp)</th>
<th>Rated Voltage (Vmpp)</th>
<th>Short Circuit Current (Isc)</th>
<th>Open Circuit Voltage (Voc)</th>
<th>Module Efficiency (%)</th>
<th>Voltage Temperature Coefficient</th>
<th>Current Temperature Coefficient</th>
<th>Power Temperature Coefficient</th>
<th>NOCT (Nominal Operation Cell Temperature)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PS290M-20/U</td>
<td>Monocrystalline 6 inch x 6 inch square, 6 x 10 pieces in series</td>
<td>290W</td>
<td>0–+5w</td>
<td>9.10</td>
<td>31.87</td>
<td>9.71</td>
<td>39.70</td>
<td>17.83</td>
<td>-0.288%/°C</td>
<td>+0.047%/°C</td>
<td>-0.398%/°C</td>
<td>45±2°C</td>
</tr>
<tr>
<td>PS300M-20/U</td>
<td></td>
<td>300W</td>
<td></td>
<td>9.32</td>
<td>32.19</td>
<td>9.82</td>
<td>39.90</td>
<td>18.44</td>
<td></td>
<td></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:** 18kg (39.68 lbs)
- **Front Glass:** 3.2mm toughened glass
- **Frame:** Anodized aluminium alloy
- **Cable:** 4mm² (IEC), 900mm
- **Junction Box:** IP 68 rated

## ABSOLUTE MAXIMUM RATING

- **Operating Temperature:** From -40 to +85°C
- **Hail Diameter @ 80km/h:** Up to 25mm
- **Surface Maximum Load Capacity:** Up to 5400Pa
- **Maximum Series Fuse Rating:** 20A
- **Application Class and Safety Class:** II
- **Fire Rating (IEC61730):** C
- **Module Fire Performance (UL 1703):** Type1
- **Maximum System Voltage:** DC 1000V/1500V (IEC/ETL)

## PACKING CONFIGURATION

- **Container:** 20’ GP, 40’ HQ
- **Pieces/Container:** 300, 840

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.

---

**Note:** This datasheet is not legally binding. Phono Solar Technology Co., Ltd. reserves the right to adjust specifications without notice. Further information please refer to our Website: www.phonosolar.com, E-mail: info@phonosolar.com