Sunmodule Plus
SW 285-300 MONO

TUV Power controlled:
Lowest measuring tolerance in industry

Every component is tested to meet
3 times IEC requirements

Designed to withstand heavy
accumulations of snow and ice

Sunmodule Plus:
Positive performance tolerance

25-year linear performance warranty
and 10-year product warranty

Glass with anti-reflective coating

World-class quality
Fully-automated production lines and seamless monitoring of the process and
material ensure the quality that the company sets as its benchmark for its sites
worldwide.

SolarWorld Plus-Sorting
Plus-Sorting guarantees highest system efficiency. SolarWorld only delivers modules
that have greater than or equal to the nameplate rated power.

25-year linear performance guarantee and extension of product warranty to 10 years
SolarWorld guarantees a maximum performance digression of 0.7% p.a. in the course
of 25 years, a significant added value compared to the two-phase warranties common
in the industry, along with our industry-first 10-year product warranty.**

* Solar cells manufactured in U.S.A. or Germany. Modules assembled in U.S.A.
** In accordance with the applicable SolarWorld Limited Warranty at purchase.
www.solarworld.com/warranty

solarworld.com
Sunmodule® Plus
SW 285-300 MONO

PERFORMANCE UNDER STANDARD TEST CONDITIONS (STC)*

<table>
<thead>
<tr>
<th></th>
<th>SW 285</th>
<th>SW 290</th>
<th>SW 295</th>
<th>SW 300</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Maximum power</strong></td>
<td>P_{max}</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>285 Wp</td>
<td>290 Wp</td>
<td>295 Wp</td>
<td>300 Wp</td>
</tr>
<tr>
<td><strong>Open circuit voltage</strong></td>
<td>V_{oc}</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>39.7 V</td>
<td>39.9 V</td>
<td>40.0 V</td>
<td>40.1 V</td>
</tr>
<tr>
<td><strong>Maximum power point voltage</strong></td>
<td>V_{mpp}</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>31.3 V</td>
<td>31.4 V</td>
<td>31.5 V</td>
<td>31.6 V</td>
</tr>
<tr>
<td><strong>Short circuit current</strong></td>
<td>I_{sc}</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>9.84 A</td>
<td>9.97 A</td>
<td>10.10 A</td>
<td>10.23 A</td>
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<tr>
<td><strong>Maximum power point current</strong></td>
<td>I_{mpp}</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>9.20 A</td>
<td>9.33 A</td>
<td>9.45 A</td>
<td>9.57 A</td>
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<tr>
<td><strong>Module efficiency</strong></td>
<td>n_{eff}</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>17.00 %</td>
<td>17.30 %</td>
<td>17.59 %</td>
<td>17.89 %</td>
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</table>

*STC: 1000 W/m², 25 °C, AM 1.5

PERFORMANCE AT 800 W/M², NOCT, AM 1.5

<table>
<thead>
<tr>
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<tbody>
<tr>
<td><strong>Maximum power</strong></td>
<td>P_{max}</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>213.1 Wp</td>
<td>217.1 Wp</td>
<td>220.5 Wp</td>
<td>224.1 Wp</td>
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<tr>
<td><strong>Open circuit voltage</strong></td>
<td>V_{oc}</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>36.4 V</td>
<td>36.6 V</td>
<td>36.7 V</td>
<td>36.9 V</td>
</tr>
<tr>
<td><strong>Maximum power point voltage</strong></td>
<td>V_{mpp}</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>28.7 V</td>
<td>28.8 V</td>
<td>28.9 V</td>
<td>31.1 V</td>
</tr>
<tr>
<td><strong>Short circuit current</strong></td>
<td>I_{sc}</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>7.96 A</td>
<td>8.06 A</td>
<td>8.17 A</td>
<td>8.27 A</td>
</tr>
<tr>
<td><strong>Maximum power point current</strong></td>
<td>I_{mpp}</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>7.43 A</td>
<td>7.54 A</td>
<td>7.64 A</td>
<td>7.75 A</td>
</tr>
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</table>

Minor reduction in efficiency under partial load conditions at 25 °C: at 200 W/m², 100% of the STC efficiency (1000 W/m²) is achieved.

COMPONENT MATERIALS

- **Cells per module**: 60
- **Cell type**: Monocrystalline 5-busbar
- **Cell dimensions**: 6.17 in x 6.17 in (156.75 x 156.75 mm)
- **Weight**: 39.7 lbs (18.0 kg)

THERMAL CHARACTERISTICS

- **NOCT**: 46 °C
- **TCI_{oc}**: 0.04 % / °C
- **TCV_{oc}**: -0.30 % / °C
- **TCP_{mpp}**: -0.41 % / °C
- **Operating temp**: -40 to +85 °C

ADDITIONAL DATA

- **Power sorting**: -0 Wp/+5 Wp
- **J-Box**: IP65
- **Connector**: PV wire per UL4703 with H4/UTX connectors
- **Module fire performance**: (UL 1703) Type 1

PARAMETERS FOR OPTIMAL SYSTEM INTEGRATION

- **Maximum system voltage SC II / NEC**: 1000 V
- **Maximum reverse current**: 25 A
- **Number of bypass diodes**: 3
- **Design loads**
  - Two rail system: 113 psf downward, 64 psf upward
  - Three rail system: 178 psf downward, 64 psf upward
  - Edge mounting: 178 psf downward, 41 psf upward

*Please refer to the Sunmodule installation instructions for the details associated with these load cases.

- **Front**: Low-iron tempered glass with ARC (EN 12150)
- **Frame**: Clear anodized aluminum
- **Weight**: 39.7 lbs (18.0 kg)

All units provided are imperial. SI units provided in parentheses. SolarWorld AG reserves the right to make specification changes without notice.