SoloPanel® SP3S is an innovative photovoltaic module based upon Copper, Indium, Gallium, Selenium (“CIGS”) semiconductor material electro-deposited on a flexible stainless steel substrate and encapsulated in a state-of-the-art moisture barrier laminate. It is designed for a wide range of applications.

SoloPanel® Model

**SP3S**

**LOW INSTALLED SYSTEM COST**
The flexible, lightweight form factor of the SP3S enables rapid and easy installation as well as low cost system integration with a wide variety of mounting solutions. The SP3S module is optimized for commercial and industrial building integration.

**HIGH ENERGY PERFORMANCE**
SoloPower® is the market leader in high efficiency flexible modules. Modules are designed for superior performance under all light conditions, including low sun angle, providing excellent energy yield throughout the year.

**PROVEN DURABILITY**
SoloPower® modules are built to meet or exceed UL 1703, IEC 61646 & IEC 61730 standards. Cells and modules are continually subjected to rigorous environmental and accelerated life cycle testing beyond industry standards.

**Innovated Integration**
SoloPower Systems Inc. is a US based manufacturer of high-efficiency thin-film photovoltaic modules based on Copper Indium Gallium di Selenide (CIGS). The unique manufacturing process utilizes a low cost, proprietary electro-deposition tool set. The company is headquartered in Portland, Oregon.

**KEY FEATURES**

+ One hundred fifty three (153) series connected, high efficiency, CIGS solar cells optimize panel performance
+ Low weight, non-penetrating mounting solutions take advantage of the lightweight module characteristics
+ Superior low-sun angle and low light performance provide excellent energy yield
+ Low profile bypass diodes allow for maximum performance under shade conditions
+ Weather resistant front sheet, sealed junction box and protective back sheet provide a long life, reliable and durable package
+ Modules are built to meet and/or exceed UL standard 1703, IEC 61646 & IEC 61730 standards
+ Manufactured in a highly automated state-of-the-art facility
+ 5-year limited warranty against defective materials and workmanship
+ 25-year warranty on power output
+ Designed and manufactured in the USA
+ For a complete listing of SoloPower products visit: www.solopower.com
**SOLOPOWER® SP3S SPECIFICATIONS**

**APPLICATIONS**
Segments: Commercial, Industrial Rooftop & Utility

**ELECTRICAL CHARACTERISTICS (STC)**

<table>
<thead>
<tr>
<th>Solopower SP3L</th>
<th>190</th>
<th>205</th>
<th>220</th>
<th>235</th>
<th>250</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rated Power (Pmax)</td>
<td>W</td>
<td>190</td>
<td>205</td>
<td>220</td>
<td>235</td>
</tr>
<tr>
<td>Voltage at Pmax (Vmp)</td>
<td>V</td>
<td>55.3</td>
<td>57.8</td>
<td>59.9</td>
<td>64.5</td>
</tr>
<tr>
<td>Current at Pmax (Imp)</td>
<td>A</td>
<td>3.4</td>
<td>3.5</td>
<td>3.7</td>
<td>3.6</td>
</tr>
<tr>
<td>Short-circuit current (Isc)</td>
<td>A</td>
<td>4.3</td>
<td>4.3</td>
<td>4.4</td>
<td>4.3</td>
</tr>
<tr>
<td>Open-circuit Voltage (Voc)</td>
<td>V</td>
<td>78.0</td>
<td>81.1</td>
<td>82.6</td>
<td>87.2</td>
</tr>
<tr>
<td>Efficiency</td>
<td>%</td>
<td>9.7</td>
<td>10.4</td>
<td>11.2</td>
<td>12.1</td>
</tr>
</tbody>
</table>

1. STC standard test conditions: 1000W/m² intensity, Air Mass 1.5, 25°C cell temperature. The power tolerance is -3% / +5% Wp, at STC. The electrical characteristics are within ±10% unless otherwise specified.

2. Stabilized Power.

3. Aperture Efficiency.

**IV CURVES**

Current (A) vs. Voltage (V) at various Irradiance levels

**MECHANICAL DRAWING**

**PHYSICAL CHARACTERISTICS**

<table>
<thead>
<tr>
<th>Solopower SP3L</th>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>Length</td>
<td>74.2 in / 1.886 m</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Width</td>
<td>45.1 in / 1.146 m</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Thickness</td>
<td>0.1 in / 2.0 mm</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Weight</td>
<td>11.4 lbs / 5.2kg</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Roof Load From Module</td>
<td>0.49 lbs/ft² / 2.4 kg/m²</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**QUALIFICATIONS**
Certified to Standards: UL 1703, IEC 61646, & IEC 61730.

**WARRANTY**
Limited Warranty
Materials and workmanship: 5 years
Power output: 25 years [90% of nominal rated power for years 1 to 10, 80% of nominal rated power for years 11 to 25]. Designed and manufactured in the USA

Contact sales@solopower.com for complete terms of the limited warranty.

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Product Specifications Sheet SoloPanel® Model SP3S