CIGS Thin Film Solar Module SOL100GGT09

20 years output warranty (80 %)
10 years output warranty (90 %)
2 years product warranty

Summary of Qualities

- general purpose solar module available in different transparencies
- innovative light transmitting Solarion-CIGS on Polyimide solar cells from roll-to-roll process
- high energy output, performs with excellent performance ratios
- no initial performance degradation
- safe, robust and durable glass-glass encapsulation
- aesthetically pleasing black appearance combines natural lighting and electricity generation
- easy to handle and to install, frameless design does not require module grounding
- compatible to cSi optimized inverters
- designed for building integrated photovoltaic glazing systems
- up to 3,500 Pa wind and snow load
- IEC 61646 and IEC 61730 qualification in preparation

Contact

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**Performance* 

**Performance at standard test conditions** (STC: 1000 W/m², 25 °C, spectrum AM 1.5 G) 

<table>
<thead>
<tr>
<th>Parameter</th>
<th>80</th>
<th>90</th>
<th>100</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nominal power Pmax [W]</td>
<td>80</td>
<td>90</td>
<td>100</td>
</tr>
<tr>
<td>Voltage at maximum power Vmp [V]</td>
<td>17.0</td>
<td>17.3</td>
<td>17.5</td>
</tr>
<tr>
<td>Current at maximum power Imp [A]</td>
<td>4.71</td>
<td>5.20</td>
<td>5.71</td>
</tr>
<tr>
<td>Open circuit voltage Voc [V]</td>
<td>23.4</td>
<td>23.8</td>
<td>24.1</td>
</tr>
<tr>
<td>Short circuit current Isc [A]</td>
<td>6.5</td>
<td>6.92</td>
<td>7.38</td>
</tr>
</tbody>
</table>

**Performance at nominal operating cell temperature** (NOCT: 800 W/m², 47 ± 2 °C, spectrum AM 1.5 G) 

<table>
<thead>
<tr>
<th>Parameter</th>
<th>57.3</th>
<th>64.5</th>
<th>71.7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nominal power Pmax [W]</td>
<td>57.3</td>
<td>64.5</td>
<td>71.7</td>
</tr>
<tr>
<td>Nominal voltage Vmp [V]</td>
<td>15.2</td>
<td>15.3</td>
<td>15.6</td>
</tr>
<tr>
<td>Current at maximum power Imp [A]</td>
<td>3.77</td>
<td>4.17</td>
<td>4.58</td>
</tr>
<tr>
<td>Open circuit voltage Voc [V]</td>
<td>21.6</td>
<td>22.0</td>
<td>22.2</td>
</tr>
<tr>
<td>Short circuit current Isc [A]</td>
<td>5.21</td>
<td>5.55</td>
<td>5.92</td>
</tr>
</tbody>
</table>

**Optical data** 

Visible light transmission VLT | 9 % **

**Temperature effects** 

<table>
<thead>
<tr>
<th>Parameter</th>
<th>0.45 %/K</th>
<th>0.35 %/K</th>
<th>0.01 %/K</th>
</tr>
</thead>
<tbody>
<tr>
<td>Temperature coefficient of Pmax</td>
<td></td>
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<tr>
<td>Temperature coefficient of Voc</td>
<td></td>
<td></td>
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<tr>
<td>Temperature coefficient of Isc</td>
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</tr>
</tbody>
</table>

**Temperature coefficient of Tmp**

- 0.45 %/K
- 0.35 %/K
- 0.01 %/K

**Operating limits** 

- Maximum system voltage: 1000 V
- Ambient temperature range: -40 °C to +45 °C
- Max. mechanical load: 3500 Pa
- Hail resistance: 25 mm at 83 km/h
- Max. reverse current: 1.5 x Imp

**Mechanical characteristics** 

- Module technology: glass – encapsulant & edge sealing – glass, frameless
- Number and type of solar cells: 270 pieces CIGS [Cu(In, Ga) Se₂] on polyimide
- Dimensions (L x W x D): 1320 mm x 800 mm x 7 mm (18 mm including junction box)
- Weight: 15.5 kg
- Junction box: 2 pcs, protection class IP 65
- Output terminals: connectors with 200 mm 2.5 mm² cable each

* Measuring tolerances: Nominal Power Pmax ± 5 %, other Electrical Parameters ± 10 %
** Other transparencies available upon request. Power output correlates to grade of transparency.

**Solar Module**

Note: This preliminary data sheet is provided to assist you in the evaluation of the product that is under development. Until Solarion releases this product for general sales, Solarion reserves the right to alter prices, specifications, features, capabilities, function, release dates, and even general availability of the product at any time.