SOMERA GRAND ULTIMA MAX SILVER

SUPERIOR PRICE PERFORMANCE
- of half-cell improves module output without adding much to the cost
- Half-cell generates only half the current, lowering heat production and LESS HOT SPOT, increasing module reliability
- Low interconnect resistance between the cells REDUCES POWER LOSS, increases overall power output
- Three separate junction boxes reduce internal resistance and IMPROVE HEAT DISSIPATION

QUALITY AND SAFETY
- 27 years of linear power output warranty **
- Rigorous quality control meeting the highest standards
- 100% EL tested to minimise micro crack
- Certified for salt mist corrosion resistance – severity VI^*
- Excellent anti-PID performance

APPLICATIONS
- On-grid large scale utility systems
- On-grid rooftop industrial and commercial systems
- Rooftop residential systems

UP TO 425W POWER OUTPUT
- up to 20.56% Efficiency
- 405-425 W Range
- 150 Mono PERC Solar Cells
THIS Datasheet is applicable for: SOMERA VSMH.75.AAA.05 (AAA=405-425)

**TECHNICAL DATA**

**SOMERA GRAND ULTIMA MAX**

**SILVER**

All (^) certifications under progress.

**Refer to Vikram Solar’s warranty document for terms and conditions.**

**CAUTION:**

READ SAFETY AND INSTALLATION MANUAL BEFORE USING THE PRODUCT.

Specifications included in this datasheet are subject to change without notice. Electrical data without guarantee. Please confirm your exact requirement with the company representative while placing your order.

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**Electrical Data**

<table>
<thead>
<tr>
<th>Peak Power $P_{max}$ (Wp)</th>
<th>405</th>
<th>410</th>
<th>415</th>
<th>420</th>
<th>425</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum Voltage $V_{mpp}$ (V)</td>
<td>42.4</td>
<td>42.4</td>
<td>42.6</td>
<td>42.7</td>
<td>42.7</td>
</tr>
<tr>
<td>Maximum Current $I_{mpp}$ (A)</td>
<td>9.56</td>
<td>9.67</td>
<td>9.74</td>
<td>9.84</td>
<td>9.96</td>
</tr>
<tr>
<td>Open Circuit Voltage $V_{oc}$ (V)</td>
<td>51.6</td>
<td>52.1</td>
<td>52.6</td>
<td>52.7</td>
<td>52.8</td>
</tr>
<tr>
<td>Short Circuit Current $I_{sc}$ (A)</td>
<td>9.94</td>
<td>9.96</td>
<td>9.97</td>
<td>9.99</td>
<td>10.17</td>
</tr>
<tr>
<td>Module Efficiency $\eta$ (%)</td>
<td>19.59</td>
<td>19.83</td>
<td>20.08</td>
<td>20.32</td>
<td>20.56</td>
</tr>
</tbody>
</table>

All data refers to STC (AM 1.5, 1000 W/m², 25°C)

Electrical Parameters at NOCT

<table>
<thead>
<tr>
<th>Power (W)</th>
<th>284.5</th>
<th>288.0</th>
<th>291.5</th>
<th>295.0</th>
<th>298.5</th>
</tr>
</thead>
<tbody>
<tr>
<td>$V_{mpp}$ (V)</td>
<td>37.8</td>
<td>37.9</td>
<td>38.1</td>
<td>38.1</td>
<td>38.1</td>
</tr>
<tr>
<td>$I_{mpp}$ (A)</td>
<td>7.52</td>
<td>7.60</td>
<td>7.66</td>
<td>7.74</td>
<td>7.83</td>
</tr>
<tr>
<td>$V_{oc}$ (V)</td>
<td>46.3</td>
<td>46.8</td>
<td>47.2</td>
<td>47.4</td>
<td>47.4</td>
</tr>
<tr>
<td>$I_{sc}$ (A)</td>
<td>7.78</td>
<td>7.80</td>
<td>7.81</td>
<td>7.82</td>
<td>7.97</td>
</tr>
</tbody>
</table>

NOCT irradiance 800 W/m², ambient temperature 20°C, wind speed 1 m/sec

**Mechanical Data**

- **Length × Width × Height:** 2065 × 1001 × 40 mm (81.29 × 39.40 × 1.57 inches)
- **Weight:** 22.6 kg (49.82 lbs)
- **Junction Box:** IP68/IP67, Split Junction Box with individual bypass diodes
- **Cable & Connectors:** 1200 mm (47.24 inches) length cables, MC4 compatible/MC4 connectors
- **Application Class:** Class A (Safety class II)
- **Superstrate:** 3.2 mm (0.13 inches) high transmission low iron tempered glass, AR coated
- **Cells:** 75 Mono PERC [150 half-cells], 5BB solar cells
- **Cell Encapsulant:** EVA [Ethylene Vinyl Acetate]
- **Back Sheet:** Composite film
- **Frame:** Anodized aluminium frame with twin wall profile
- **Mechanical Load Test:** 2400 Pa (Snow load), 2400 Pa (Wind load)
- **Maximum Series Fuse Rating:** 20 A

**Warranty and Certifications**

- **Product Warranty**: 10 years
- **Performance Warranty**: Linear Power Warranty for 27 years with 3% for 1st year degradation and 0.65% from year 2 to year 27
- **Approvals and Certificates**

**Packaging Information**

- **Quantity /Pallet:** 26
- **Pallets/Container [40’HC]:** 22
- **Quantity/Container [40’HC]:** 572

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* Average relative efficiency reduction of 5% at 200 W/m² according to EN 60904-1.