ALL NEW 72 CELLS MONO
SOMERA GRAND ULTIMA
SILVER 1500V SERIES

10% HIGHER POWER OUTPUT
compared to industry average poly
crystalline module

Extremely **NARROW POWER BINNING**
**TOLERANCE** of +2.5 Wp to reduce
current mismatch loss in single string

Engineered to provide **EXCELLENT**
**LOW LIGHT** and **LONGER**
**WAVELENGTH RESPONSE**

**EXTREMELY RELIABLE PRODUCT**
suiting harsh environment conditions
withstanding 2400Pa Wind load,
5400Pa Snow load

Using highly efficient **PASSIVATED**
**EMITTER REAR CONTACT**
**TECHNOLOGY** (PERC) cells

**QUALITY AND SAFETY**
- 27 years of linear power output warranty **
- Rigorous quality control meeting the highest
  international standards
- 100% EL tested to minimise micro crack
- Excellent anti-PID performance
- Certified for salt mist corrosion resistance – severity VI
- Certified for ammonia resistance
- 3rd Party validated PAN file
- Certified for sand and dust test

**APPLICATIONS**
- On-grid large scale utility systems
- On-grid rooftop residential and
  commercial systems
- Off-grid residential systems

VSL/ENG/SC/108-Rev 05  www.vikramssolar.com  Email: sales@vikramssolar.com
## Technical Data

### Somera Grand Ultima Silver 1500V Series

**This datasheet is applicable for:** Somera VSM.72.AAA.05 (AAA=340-370)

**Dimensions in mm**

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Length</td>
<td>1955</td>
</tr>
<tr>
<td>Width</td>
<td>991</td>
</tr>
<tr>
<td>Height</td>
<td>949</td>
</tr>
<tr>
<td>NOCT</td>
<td>45°C</td>
</tr>
</tbody>
</table>

**Electrical Data**

1. All data refers to STC

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>Peak Power Pmax (Wp)</td>
<td>340, 342.5, 345, 347.5, 350, 352.5, 355, 357.5, 360, 362.5, 365, 367.5, 370</td>
</tr>
<tr>
<td>Maximum Voltage Vmp (V)</td>
<td>38.1, 38.1, 38.1, 38.1, 38.1, 38.2, 38.2, 38.2, 38.3, 38.3, 38.4, 38.4, 38.4</td>
</tr>
<tr>
<td>Module Efficiency η (%)</td>
<td>17.55, 17.68, 17.81, 17.94, 18.07, 18.21, 18.32, 18.45, 18.58, 18.71, 18.84, 18.97, 19.10</td>
</tr>
</tbody>
</table>

**Electrical Parameters at NOCT**

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

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>Power (W)</td>
<td>251.8, 253.5, 256.0, 257.7, 259.6, 262.0, 263.7, 265.4, 267.7, 269.3, 272.1, 274.7, 276.2</td>
</tr>
<tr>
<td>VoPmp (V)</td>
<td>35.4, 35.4, 35.7, 35.7, 35.8, 35.9, 35.9, 36.0, 36.0, 36.1, 36.3, 36.5, 36.5</td>
</tr>
<tr>
<td>IpPmp (A)</td>
<td>7.12, 7.16, 7.18, 7.22, 7.26, 7.31, 7.34, 7.38, 7.43, 7.47, 7.51, 7.53, 7.57</td>
</tr>
<tr>
<td>Vmp (V)</td>
<td>43.3, 43.3, 43.6, 43.7, 43.8, 43.8, 43.9, 44.0, 44.1, 44.1, 44.2, 44.2, 44.3</td>
</tr>
<tr>
<td>Impp (A)</td>
<td>7.58, 7.62, 7.64, 7.69, 7.73, 7.77, 7.80, 7.86, 7.91, 7.94, 7.96, 7.97, 8.01</td>
</tr>
</tbody>
</table>

**Temperature Coefficients (Tc)**

<table>
<thead>
<tr>
<th>Coefficient</th>
<th>Formula</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tc of Open Circuit Voltage (β)</td>
<td>-0.28%/°C</td>
<td></td>
</tr>
<tr>
<td>Tc of Short Circuit Current (α)</td>
<td>0.057%/°C</td>
<td></td>
</tr>
<tr>
<td>Tc of Power (γ)</td>
<td>-0.39%/°C</td>
<td></td>
</tr>
</tbody>
</table>

**Mechanical Data**

- Length × Width × Height: 1955 × 991 × 40 mm (76.96 × 39.01 × 1.57 inches)
- Weight: 22 kg (48.50 lbs)
- Junction Box: IP68/IP67, 3 Bypass diodes
- Cable & Connectors: 1200 mm (47.24 inches) length cables, MC4 Compatible/MC4 Connectors/Amphenol
- Application Class: Class A (Safety class II)
- Superstrate#: 3.2 mm² (0.13 inches) high transmission low iron tempered glass, AR coated
- Cells: 72 Monocrystalline, 5BB solar cells
- Cell Encapsulant: EVA (Ethylene Vinyl Acetate)
- Back Sheet: Composite film
- Frame: Anodized aluminium frame with twin wall profile
- Mechanical Load Test: 5400 Pa (Snow load), 2400 Pa (Wind load)
- Maximum Series Fuse Rating: 20 A

**Performance Warranty**

- Linear Power Warranty for 27 years with 3% for 1st year degradation and 0.65% from year 2 to year 27

**Packaging Information**

- Quantity/Pallet: 25
- Pallets/Container (40’HC): 24
- Quantity/Container (40’HC): 600

**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: IEC 61215 Ed2, IS/IEC 61730, UL 1703, IEC 61701, IEC 62716, IEC 60068-2-68, IEC 62804, MCS, CE, CAN/CSA 61730, CEC(California), PX Cycle*, CEC (Australia)*, IS 14084

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**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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1. IEC 61215 Ed2, IS/IEC 61730, UL 1703, IEC 61701, IEC 62716, IEC 60068-2-68, IEC 62804, MCS, CE, CAN/CSA 61730, CEC(California), PX Cycle*, CEC (Australia)*, IS 14084

2. Power measurement uncertainty is within +/- 3%.

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

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

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**Typical I-V Curves**

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

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**Packaging Information**

<table>
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<th>Quantity/Pallet</th>
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<tr>
<td>Pallets/Container (40’HC)</td>
<td>24</td>
</tr>
<tr>
<td>Quantity/Container (40’HC)</td>
<td>600</td>
</tr>
</tbody>
</table>

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**Electrical Data**

1. STC: 1000 W/m² irradiance, 25°C cell temperature, AM1.5g spectrum according to EN 60904-3.

2. Power measurement uncertainty is within +/- 3%.

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**Technical Data**

SOMERA GRAND ULTIMA SILVER 1500V SERIES

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