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

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

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

SOMERA GRAND
### Technical Data

**Somera Grand**

**Dimensions** in mm

#### Electrical Data

**All data refers to STC**

<table>
<thead>
<tr>
<th>Peak Power P_{max} (Wp)</th>
<th>365</th>
<th>370</th>
<th>375</th>
<th>380</th>
<th>385</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum Voltage V_{max} (V)</td>
<td>39.8</td>
<td>40.0</td>
<td>40.1</td>
<td>40.2</td>
<td>40.3</td>
</tr>
<tr>
<td>Maximum Current I_{sc} (A)</td>
<td>9.17</td>
<td>9.26</td>
<td>9.36</td>
<td>9.46</td>
<td>9.56</td>
</tr>
<tr>
<td>Open Circuit Voltage V_{oc} (V)</td>
<td>48.3</td>
<td>48.5</td>
<td>48.7</td>
<td>48.8</td>
<td>48.9</td>
</tr>
<tr>
<td>Short Circuit Current I_{sc} (A)</td>
<td>9.73</td>
<td>9.84</td>
<td>9.94</td>
<td>10.04</td>
<td>10.14</td>
</tr>
<tr>
<td>Module Efficiency η (%)</td>
<td>18.81</td>
<td>19.07</td>
<td>19.33</td>
<td>19.58</td>
<td>19.84</td>
</tr>
</tbody>
</table>

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%.

#### Electrical Parameters at NOCT

| Power (W) | 270.2 | 273.9 | 277.6 | 281.2 | 284.9 |
| V@P_{max} (V) | 36.8 | 36.9 | 37.1 | 37.0 | 37.1 |
| I@P_{max} (A) | 44.7 | 44.9 | 45.0 | 44.9 | 45.0 |

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

#### Temperature Coefficients [Tc]

- Tc of Open Circuit Voltage (β): -0.28%/°C
- Tc of Short Circuit Current (α): 0.057%/°C
- Tc of Power (γ): -0.39%/°C

#### Mechanical Data

- Length × Width × Height: 1956 × 992 × 36 mm (77.01 × 39.06 × 1.42 inches)
- Weight: 20.7 kg (45.63 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 mm (0.13 inches) high transmission low iron tempered glass, AR coated
- Cells: 72 Mono PERC, 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: 15A (IEC)/ 20A (UL)

* Also available in anti-soil and anti-glare

#### 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, IEC 61730, UL 1703, IEC 61701, IEC 62716, IEC 60068-2-68, IEC 62884, MCS, CE, CAN/CSA 61730, CEC (California), P&V Cycle, IS 14286, IEC/IS 61730

#### Typical I-V Curves

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

#### Packaging Information

- Quantity/Pallet: 28
- Pallets/Container (40’HC): 24
- Quantity/Container (40’HC): 672

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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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VSL/ENG/SC/112-Rev 05