ALL NEW 60 CELLS MONO
SOMERA ULTIMA
ALL BLACK SERIES

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

10% HIGHER POWER OUTPUT
compared to industry average polycrystalline module

60 cells
MONOCRYSRALLINE
upto 19.05%
EFFICIENCY
290–310 W
RANGE

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

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

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

<table>
<thead>
<tr>
<th>Parameter</th>
<th>290</th>
<th>295</th>
<th>300</th>
<th>305</th>
<th>310</th>
</tr>
</thead>
<tbody>
<tr>
<td>Peak Power (Pmax) (W)</td>
<td>290</td>
<td>295</td>
<td>300</td>
<td>305</td>
<td>310</td>
</tr>
<tr>
<td>Maximum Voltage (Vmax) (V)</td>
<td>32.3</td>
<td>32.5</td>
<td>32.7</td>
<td>32.9</td>
<td>33.1</td>
</tr>
<tr>
<td>Maximum Current (Imax) (A)</td>
<td>8.97</td>
<td>9.08</td>
<td>9.18</td>
<td>9.27</td>
<td>9.37</td>
</tr>
<tr>
<td>Open Circuit Voltage (Voc) (V)</td>
<td>39.9</td>
<td>40.1</td>
<td>40.3</td>
<td>40.5</td>
<td>40.7</td>
</tr>
<tr>
<td>Short Circuit Current (Isc) (A)</td>
<td>9.46</td>
<td>9.58</td>
<td>9.68</td>
<td>9.8</td>
<td>9.91</td>
</tr>
<tr>
<td>Module Efficiency (η%)</td>
<td>17.83</td>
<td>18.13</td>
<td>18.44</td>
<td>18.75</td>
<td>19.05</td>
</tr>
</tbody>
</table>

### Performance Warranty

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

### Technical Data

- **SOMERA ULTIMA ALL BLACK SERIES**
- **VSL/ENG/SC/107-Rev 04**

### Packaging Information

| Quantity/Pallet | 25 |
| Pallets/Container (40'HC) | 28 |
| Quantity/Container (40'HC) | 700 |

### Warranty and Certifications

- **Product Warranty** 12 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, IEC 61701, IEC 62716, MCS, PV Cycle*, CEC(California)*, JET*, CE, IEC 62804

### Typical Electrical Curves

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

### Mechanical Data

- **Length × Width × Height**: 1640 × 992 × 40 mm (64.57 × 39.05 × 1.57 inches)
- **Weight**: 18.50 kg (40.79 lbs)
- **Junction Box**: IP67/IP68, 3 Bypass diodes
- **Cable & Connectors**: 1200 mm (47.24 inches) length cables, MC4 Compatible/MC4 Connectors/Ampolen
- **Application Class**: Class A (Safety class II)
- **Superstrate**: 3.2 mm (0.13 inches) high transmission low iron tempered glass, AR coated
- **Cells**: 60 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**: Snow load 5400 Pa, Wind load 2400 Pa
- **Maximum Series Fuse Rating**: 15A (IEC)/20A (UL)