ENGINEERING EXCELLENCE

- Built exclusively with Suniva’s premium ARTisun Select cells, providing one of the highest power outputs per square meter at an affordable price
- The leading US-born, US-operated crystalline silicon cell and module manufacturer, spun out of Georgia Tech’s University Center of Excellence in Photovoltaics; one of only two such research centers in the U.S.
- Suniva’s state-of-the-art manufacturing and module lab facilities feature the most advanced equipment and technology

QUALITY & RELIABILITY

- Suniva Optimus modules are manufactured and warranted to our specifications assuring consistent high performance and high quality.
- Rigorous in-house quality management tests beyond standard UL and IEC standards
- Performance longevity with advanced polymer backsheet
- UL1703 listed Type 2 PV module
- Passed the most stringent salt spray tests based on IEC 61701
- Passed enhanced stress tests1 based on IEC 61215 conducted at Fraunhofer ISE2
- PAN files are independently validated

SUNIVA OPTIMUS® SERIES
MONOCRYSTALLINE SOLAR MODULES

OPT SERIES: OPT 72 CELL MODULES (SILVER FRAME)

Optimus® modules are known for their superior quality and long-term reliability. These high-powered modules consist of Suniva’s premium ARTisun® cell technology, designed and manufactured in the U.S.A. using our pioneering manufacturing processes. Suniva’s high power-density Optimus modules provide excellent performance and value.

FEATURES

- Utilizes our premier American-made cell technology, ARTisun Select®
- Superior performance and reliability; enhanced stress tests conducted at Fraunhofer ISE
- Module families ranging from 325-340W
- Positive only power tolerance
- Marine grade aluminum frame with hard anodized coating
- Certified PID-free by PV Evolution Labs (PVEL)
- BAA and TAA compliant
- Qualifies for Ex-Im Financing
- 1000V UL
- 25 year linear power warranty; 10 year product warranty

CERTIFICATIONS

www.suniva.com
OPTIMUS SERIES: OPT 72 CELL MODULES

ELECTRICAL DATA (NOMINAL)
The rated power may only vary by -0/+10W and all other electrical parameters by ± 5%

<table>
<thead>
<tr>
<th>Module Type</th>
<th>OPT325-72-4-100</th>
<th>OPT330-72-4-100</th>
<th>OPT335-72-4-100</th>
<th>OPT350-72-4-100</th>
</tr>
</thead>
<tbody>
<tr>
<td>Power Classification (Pmax)</td>
<td>325 W</td>
<td>330 W</td>
<td>335 W</td>
<td>350 W</td>
</tr>
<tr>
<td>Module Efficiency (%)</td>
<td>16.66%</td>
<td>16.92%</td>
<td>17.18%</td>
<td>17.94%</td>
</tr>
<tr>
<td>Voltage at Max. Power Point (Vmp)</td>
<td>37.5 V</td>
<td>37.6 V</td>
<td>37.7 V</td>
<td>38 V</td>
</tr>
<tr>
<td>Current at Max. Power Point (Imp)</td>
<td>8.67 A</td>
<td>8.78 A</td>
<td>8.89 A</td>
<td>9.2 A</td>
</tr>
<tr>
<td>Open Circuit Voltage (Voc)</td>
<td>45.8 V</td>
<td>45.9 V</td>
<td>45.9 V</td>
<td>46.1 V</td>
</tr>
<tr>
<td>Short Circuit Current (Isc)</td>
<td>9.42 A</td>
<td>9.54 A</td>
<td>9.66 A</td>
<td>10.02 A</td>
</tr>
</tbody>
</table>

The electrical data apply to standard test conditions (STC): Irradiance of 1000 W/m² with AM 1.5 spectra at 25°C.

CHARACTERISTIC DATA

- Type of Solar Cell: High-efficiency ARTisun Select cells, 3 and 5 busbar options available
- Frame: Silver anodized aluminum alloy
- Glass: Tempered (low-iron), anti-reflective coating
- Junction Box: NEMA IP67 rated; 3 internal diodes
- Cable & Connectors: 12 AWG (4 mm²) PV Wire with multiple connector options available; cable length 1200 mm +/-10mm including connector

MECHANICALS

- Cells / Module: 72 (6 x 12)
- Module Dimensions: 1970 x 990 mm (77.6 x 39 in.)
- Module Thickness (Depth): 38 mm (1.5 in.)
- Approximate Weight: 23 kg (50.7 lbs.)

TEMPERATURE COEFFICIENTS

<table>
<thead>
<tr>
<th>Voltage</th>
<th>β, Voc (%/°C)</th>
<th>-0.335</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current</td>
<td>α, Isc (%/°C)</td>
<td>+0.047</td>
</tr>
<tr>
<td>Power</td>
<td>γ, Pmax (%/°C)</td>
<td>-0.420</td>
</tr>
<tr>
<td>NOCT Avg</td>
<td>(+/- 2 °C)</td>
<td>46.0</td>
</tr>
</tbody>
</table>

LIMITS

- Max. System Voltage: 1000 VDC for IEC, 1000 VDC for UL
- Max Series Fuse Rating: 15 Amps
- Operating Module Temperature: -40°C to +85°C (-40°F to +185°F)
- Storm Resistance/Static Load: Tested to IEC 61215 for 5400Pa positive and 2400Pa negative loads; hail and wind resistant

Suniva® reserves the right to change the data at any time. View manual at suniva.com.

1 UV 90 kWh, TC 400, DH 2000. 2 Tests were conducted on module type OPT 60 silver frame.

Please read installation manual before installing or working with module.

HEADQUARTERS
5765 peachtree industrial blvd., norcross, georgia 30092 USA
tel: +1 404 477 2700
www.suniva.com

P L E A S E  R E C Y C L E

September 9, 2016 (rev. 8) [SAmD_0051] © Suniva, Inc., 2016