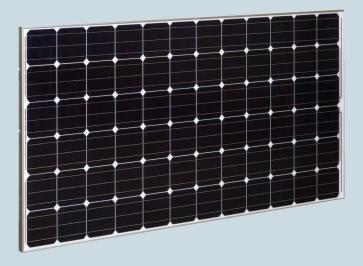


**High-quality and high-efficiency** PV yields sensible solar

# SUNIVA OPTIMUS® SERIES MONOCRYSTALLINE SOLAR MODULES



# **OPTXXX-72-4-100 (72 CELL MODULE)**

The Optimus® modules consist of Suniva's latest technology: ARTisun® Select. These superior monocrystalline cells are designed and manufactured in the U.S.A. using our proprietary low-cost processing techniques. Engineered with our pioneering ion implantation technology, high power-density Optimus modules provide excellent value, performance and reliability.

#### Certifications:









UL 1703 CEC IEC 61215 IEC 61730- 1/2

# **Engineering Excellence**

- Built exclusively with Suniva's highest-efficiency ARTisun Select cells, providing one of the highest power outputs per square meter at an affordable manufacturing cost
- Suniva's state-of-the art manufacturing facility features the most advanced equipment and technology
- Suniva is a U.S. -based company spun out from the Georgia Tech University Center of Excellence in Photovoltaics (one of only two such research centers in the U.S.)

## **Features**

- Contains the latest ARTisun Select cell technology - over 19%
- Positive only tolerance ensures predictable output
- Marine grade aluminum frame with hard anodized coating
- Industry leading linear warranty (10 year warranty on workmanship and materials; 25 year linear performance warranty delivering 80% power at STC)
- Buy America compliant upon request
- Qualifies for U.S. EXIM financing
- System and design services available

## **Quality & Reliability**

Suniva Optimus modules are manufactured and warranted to our specifications assuring consistent high performance and quality worldwide.

- Rigorous quality management
- Performance longevity with advanced polymer backsheet
- Produced in an ISO 9001: 2008 certified facility
- Passed the most stringent salt spray tests based on IEC 61701
- Passed enhanced stress tests¹ based on IEC 61215 conducted at Fraunhofer ISE2
- Certified PID free
- Ask about our validated PAN files

#### **OUR PRODUCTS:**

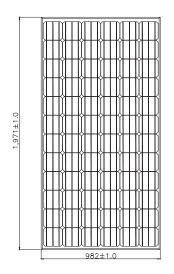
**Monocrystalline Modules OPTIMUS SERIES 60 cell OPTIMUS SERIES 72 cell** 

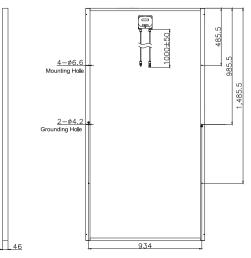
Multicrystalline Modules MV SERIES 60 cell MV SERIES 72 cell

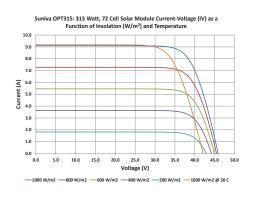
**Monocrystalline Cells** 19%+ efficiency

**Balance of Systems Solutions (BOSS)** Racking, Inverters, Batteries, Energy Storage Appliances and EV Chargers

# **OPTIMUS SERIES: OPT 72 CELL MODULES**







### **ELECTRICAL DATA (NOMINAL)**

The rated power may only vary by  $-0/\pm4.99$ Wp and all other electrical parameters by  $\pm 5\%$ 

The rated power may only vary by -0/+4.99Wp and all other electrical parameters by ± 5%					
Power Classification	Pmax (W)	300	305	310	315
Module Efficiency	%	15.50	15.76	16.02	16.27
Model Number	OPT	300-72-4-100	305-72-4-100	310-72-4-100	315-72-4-100
Voltage at Max. Power Point	Vmp (V)	36.00	36.10	36.20	36.50
Current at Max. Power Point	Imp (A)	8.34	8.45	8.56	8.62
Open Circuit Voltage	Voc (V)	45.50	45.60	45.70	45.90
Short Circuit Current	Isc (A)	8.90	9.00	9.06	9.10

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

### **DIMENSIONS AND WEIGHT**

Cells / Module	72 (6x12)
Module Dimensions	1971 x 982mm (77.6 x 38.7 in.)
Module Thickness (Depth)	46mm (1.80 in.)
Approximate Weight	23kg (50.70 lbs.)

# **CHARACTERISTIC DATA**

Type of Solar Cell	High-efficiency ARTisun Select cells of 156 x 156mm (6 in.)
Frame	Silver anodized aluminum alloy
Glass	Tempered (low-iron), anti-reflective coating
Junction Box	NEMA IP67 rated; 3 internal bypass diodes
Cable & Connectors	12 AWG (4 mm²) cable with Tyco or MC4 compatible (H4) connectors²; cable length 1000 mm (1200mm available upon request)
Hardware (Available Upon Request)	Grounding screws: (2) #10-32 12.7 mm (#10-32 x 0.5 in.) Stainless steel flat washers: (4) 5 x 10 x 1 mm (0.2 in. ID x 0.394 in. OD x 0.030 in.)

### **TEMPERATURE COEFFICIENTS**

Voltage	ß, Voc (%/°C)	-0.335
Current	α, Isc (%/°C)	+0.047
Power	γ, Pmax (%/°C)	-0.420
NOCT Avg	(+/- 2 °C)	46.0

## LIMITS

Max. System Voltage	1000 VDC for IEC (600 VDC for UL)
Operating Module Temperature	-40°C to +85°C
Storm Resistance/Static Load	Tested to IEC 61215 for loads of 2400 Pa; hail and wind resistant

Suniva® reserves the right to change the data at any time. View manual at suniva.com. ¹UV 90 kWh, TC 400, DH 2000. ²See sales rep. [SAMD\_0018]

#### Headquarters

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