

## SUNIVA OPTIMUS® SERIES MONOCRYSTALLINE SOLAR MODULES

### OPT SERIES: OPT 72 CELL MODULES (SILVER FRAME)

#### 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 tests<sup>1</sup> based on IEC 61215 conducted at Fraunhofer ISE<sup>2</sup>
- PAN files are independently validated

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



# 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%

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

The electrical data apply to standard test conditions (STC): Irradiance of 1000 W/m<sup>2</sup> 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 mm <sup>2</sup> ) 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

Voltage	$\beta$ , Voc (%/°C)	-0.335
Current	$\alpha$ , Isc (%/°C)	+0.047
Power	$\gamma$ , Pmax (%/°C)	-0.420
NOCT Avg	(+/- 2 °C)	46.0

## 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.

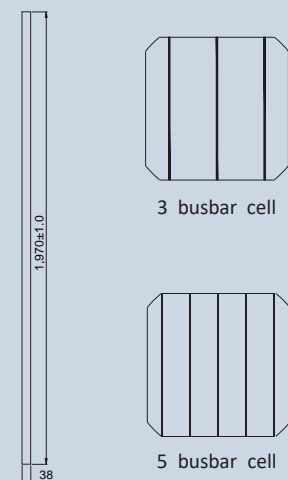
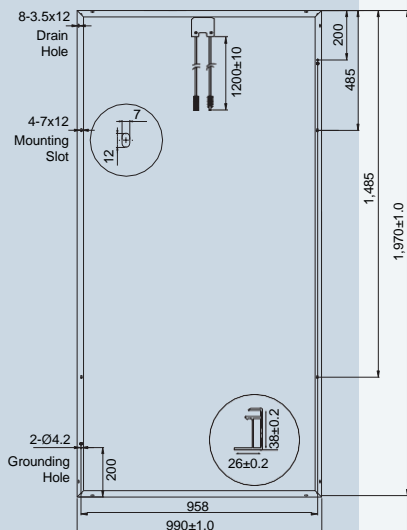
<sup>1</sup>UV 90 kWh, TC 400, DH 2000. <sup>2</sup>Tests were conducted on module type OPT 60 silver frame.

Please read installation manual before installing or working with module.

## HEADQUARTERS

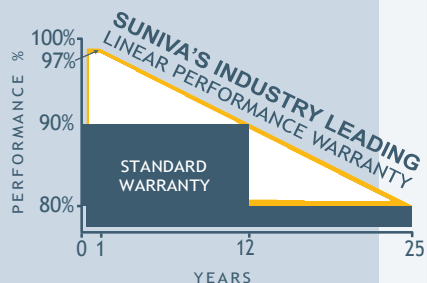
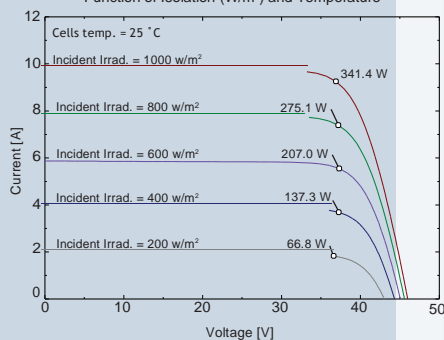
5765 peachtree Industrial blvd.,  
Norcross, Georgia 30092 USA  
tel: +1 404 477 2700

[www.suniva.com](http://www.suniva.com)



PV module: Suniva, OPT340-72-4-100

Current-Voltage (IV) as a  
Function of Isolation (W/m<sup>2</sup>) and Temperature



PLEASE RECYCLE

September 9, 2016 (reV. 8) [SAM\_D\_0051]

© Suniva, Inc., 2016

Product	Modules per pallet:	Modules per full 53 ft. truck load, double stacked
OPT - 72 cell	22	660