

## 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 in Norcross, Georgia and Saginaw, Michigan 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
- PAN files are independently validated



# SUNIVA OPTIMUS® SERIES MONOCRYSTALLINE SOLAR MODULES

## OPT SERIES: OPT 60 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® Select 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®
- Module families ranging from 275-290W
- Positive only power tolerance
- Hard anodized marine grade aluminum frame
- Certified PID-free by PV Evolution Labs (PVEL)
- BAA and TAA compliant
- Qualifies for Ex-Im Financing
- 1000VDC UL
- 25 year linear power warranty;  
10 year product warranty



## CERTIFICATIONS



# OPTIMUS SERIES: OPT 60 CELL MODULES

## ELECTRICAL DATA (NOMINAL)

The rated power may only vary by -0/+4.99W and all other electrical parameters by  $\pm 5\%$

Model Number	OPT275-60-4-100	OPT280-60-4-100	OPT285-60-4-100	OPT290-60-4-100
Power Classification (Pmax)	275 W	280 W	285 W	290 W
Module Efficiency (%)	16.73%	17.04%	17.34%	17.65%
Voltage at Max. Power Point (Vmp)	31.5 V	31.8 V	32.3 V	32.4 V
Current at Max. Power Point (Imp)	8.74 A	8.81 A	8.82 A	8.95 A
Open Circuit Voltage (Voc)	38.6 V	38.8 V	39.4 V	39.6 V
Short Circuit Current (Isc)	9.25 A	9.57 A	9.59 A	9.73 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 monocrystalline cells
Frame	Anodized aluminum alloy
Glass	Tempered (low-iron), anti-reflective coating
Junction Box	IP67 rated; 3 internal bypass diodes
Cable & Connectors	12 AWG (4 mm <sup>2</sup> ) PV Wire with multiple connector options available; cable length 1000 mm

## MECHANICALS

Cells / Module	60 (6 x 10)
Module Dimensions	1660 x 990 mm (65.35 x 38.98 in.)
Module Thickness (Depth)	35 mm (1.37 in.)
Approximate Weight	17.9 +/- 0.25 kg. (39.5 +/- 0.5 lb.)

## TEMPERATURE COEFFICIENTS

Voltage	$\beta$ , Voc (%/°C)	-0.335
Current	$\alpha$ , Isc (%/°C)	+0.047
Power	$\gamma$ , Pmax (%/°C)	-0.42
NOCT Avg	(+/- 2 °C)	46.0

## LIMITS

Max. System Voltage	1000VDC
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 loads of 5400 Pa (113 psf); hail and wind resistant

Suniva® reserves the right to change the data at any time. View manual at [suniva.com](http://suniva.com).

<sup>1</sup>UV 90 kWh, TC 400, DH 2000.

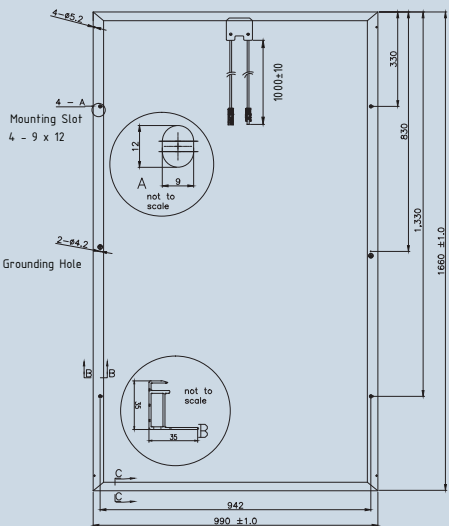
Please read installation manual before installing or working with module.

Product	Modules per pallet	Pallets per 53' truck	Total modules
OPT - 60 cell (silver and black)	25	36	900

### HEADQUARTERS

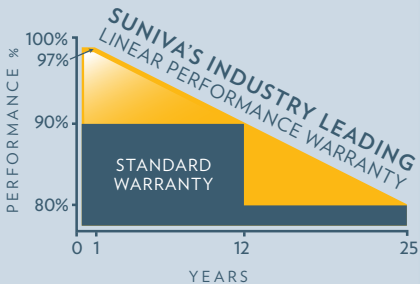
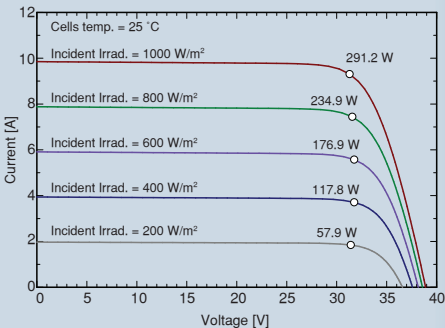
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### PV module: Suniva, OPT290-60-4-100

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



PLEASE RECYCLE

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