SILVANTIS® R-SERIES: 330 W TO 355 W

72-Cell High Wattage Modules

SunEdison introduces the next generation of high performance solar modules based on innovative Continuous Cz (CCz) monocrystalline cells with PERC technology. Best-in-class efficiency coupled with durability and superior design elements provide products with maximum longterm investment performance. At the same time the R-series minimizes cost incurred throughout the products lifecycle, such as installation expense and overall operation and maintenance.

SunEdison is a leader in utility-scale solar systems with over two and a half-million Silvantis modules deployed in some of the world's harshest climates and most remote locations. This experience, coupled with over 50 years of expertise in silicon technology and innovation enables SunEdison to design and produce highly advanced solar solutions.





SILVANTIS ADVANTAGE

- Industry leading 18.2% panel efficiency with positive power tolerance
- PID-free: multi-MPPT transformerless inverter compatible
- Based on SunEdison's proprietary CCz technology
- Higher return on investment with more watts-per-module
- Utility-grade manufacturing: ISO 14001, ISO 9001 and 100% EL inspection

QUALITY & SAFETY

- Industry leading PID test conditions:
 - » 96 hours, 85 C, 85% relative humidity, -1 kV
- IEC certified by TÜV SÜD:
 - » 61215 long-term operation in a variety of climates including snow loading up to 5400 Pa and hail testing
 - » 61730 to ensure electrical safety
 - » 61701 Level 1 salt mist corrosion resistant for marine regions (pending)
 - » 62716 ammonia testing for agricultural environments (pending)
- 1000 V UL 1703 listed by CSA for US and Canada
- MCS certified for BABT for the UK
- Automotive grade TS 16949 & AQL Level II–0.4 manufacturing quality



ROBUST DESIGN

- Reliability tested beyond international standards
- Proven field performance in harsh environments

SUNEDISON WARRANTY

- 10-year limited warranty for materials and workmanship
- 25-year linear power warranty at STC:
- » Year 1: \leq 3.5% of rated power
- » After year 1: \leq 0.7% rated power degradation per year



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PHYSICAL PARAMETERS

| Module Dimensions | 1,976 mm x 990 mm x 50 mm |
|--|--|
| Module Weight | 22 kg |
| Cell-Type | PERC on CCz monocrystalline |
| Number of Cells | 72 |
| Frame Material | Anodized aluminum alloy frame |
| Tempered ARC Glass Thickness | 3.2 mm |
| Connector Types (indicated in model #) | Amphenol H4 (-39); Bizlink S418 (–35) |

TEMPERATURE COEFFICIENTS AND PARAMETERS¹

| Nominal Operating Cell Temperature (NOCT) | 46 ± 2 C |
|---|---|
| Temperature Coefficient of Pmax | -0.44 %/C |
| Temperature Coefficient of Voc | -0.30 %/C |
| Temperature Coefficient of Isc | +0.04 %/C |
| Operating Temperature | -40 C to +85 C |
| Maximum System Voltage | 1000 V (UL & IEC) |
| Limiting Reverse Current | 9.10 A |
| Maximum Series Fuse Rating | 15 A |
| Power Selection (Test v. Nameplate) | -0% to +3% |
| Junction Box Rating | IP67 |
| Application Class | Class A |
| Packaging Specifications | 20 modules per pallet 440 modules per 40' high-cube container |
| Wind and Snow Front Load | Up to 5,400 Pa |
| Wind Back Load | 2,400 Pa |
| Reduction of STC efficiency from 1000 W/m ² to 200 W/m ² (Relative) | < 4% |

STC ELECTRICAL CHARACTERISTICS²

| Model # ³ | R330BzC | R335BzC | R340BzC | R345BzC | R350BzC | R355BzC |
|---|---------|---------|---------|---------|---------|---------|
| Rated Maximum Power Pmax (W) | 330 | 335 | 340 | 345 | 350 | 355 |
| Open-Circuit Voltage Voc (V) | 46.2 | 46.4 | 46.5 | 46.6 | 46.7 | 46.8 |
| Short-Circuit Current Isc (A) | 9.28 | 9.29 | 9.40 | 9.48 | 9.56 | 9.64 |
| Module Efficiency (%) | 16.9 | 17.1 | 17.4 | 17.7 | 17.9 | 18.2 |
| Maximum Power Point Voltage Vmpp (V) | 37.7 | 37.9 | 38.0 | 38.1 | 38.2 | 38.3 |
| Maximum Power Point Current Impp (A) | 8.77 | 8.85 | 8.95 | 9.06 | 9.16 | 9.27 |

NOCT ELECTRICAL CHARACTERISTICS⁴

| Model #3 | R330BzC | R335BzC | R340BzC | R345BzC | R350BzC | R355BzC |
|---|---------|---------|---------|---------|---------|---------|
| Rated Maximum Power Pmax (W) | 235.0 | 238.0 | 242.0 | 245.6 | 249.0 | 252.6 |
| Open-Circuit Voltage Voc (V) | 42.7 | 42.8 | 42.9 | 43.0 | 43.1 | 43.2 |
| Short-Circuit Current Isc (A) | 7.60 | 7.65 | 7.70 | 7.75 | 7.80 | 7.85 |
| Maximum Power Point Voltage Vmpp (V) | 33.4 | 33.6 | 33.8 | 34.0 | 34.2 | 34.4 |
| Maximum Power Point Current Impp (A) | 7.04 | 7.08 | 7.16 | 7.22 | 7.28 | 7.34 |

Listed specifications are subject to change without prior notice.

¹Temperature coefficients may vary by ±10%

²All electrical data at standard test conditions (STC): 1000 W/m², 25 C module temperature, AM 1.5. Electrical characteristics may vary by \pm 5% and power by -0% to +3%.

³z indicates manufacturing location: M = Malaysia, C = Canada, X = Mexico, P = China, T = Taiwan

⁴Electrical characteristics measured under normal operating conditions of cells: 800/m², 20 C ambient temperature, AM 1.5, wind speed 1 m/s

For more information about SunEdison's Silvantis modules, please visit www.sunedison.com

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D - 30 [1.2]



E - 22 [0.9]

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Module Dimensions B – 1,976 [77.8] - 990 [39.0] **Mounting Hole Spacing** G - 1,188 [46.8]

F – 950 [37.4]

Cable Length *H – 1.300 [51.2]

Junction Box Dimensions 101.5 × 60.0 × 25.5 [3.99 × 2.36 × 1.0]

* H – Other options available upon request; please contact your local sales representative for more information.

C - 50 [2.0]

IV CURVES AT MULTIPLE IRRADIANCES [25 C]





