



SunPower® E-Series Commercial Solar Panels | E20-435-COM

More than 20% Efficiency

Captures more sunlight and generates more power than Conventional Panels.

High Performance

Delivers excellent performance in real world conditions, such as high temperatures, clouds and low light.^{1,2,4}

Utility grade

Optimized to maximize returns, the E-Series panel is a bankable solution for large-scale power plants.



Maxeon® Solar Cells: Fundamentally better.
Engineered for performance, designed for reliability.

Engineered for Peace of Mind

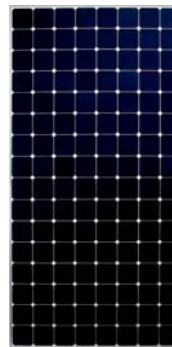
Designed to deliver consistent, trouble-free energy over a very long lifetime.^{3,4}

Designed for Reliability

The SunPower Maxeon Solar Cell is the only cell built on a solid copper foundation. Virtually impervious to the corrosion and cracking that degrade Conventional Panels.³

#1 Rank in Fraunhofer durability test.⁹
100% power maintained in Atlas 25+ comprehensive Durability test.¹⁰

High Performance & Excellent Reliability



SPR-E20-435-COM



High Efficiency⁵

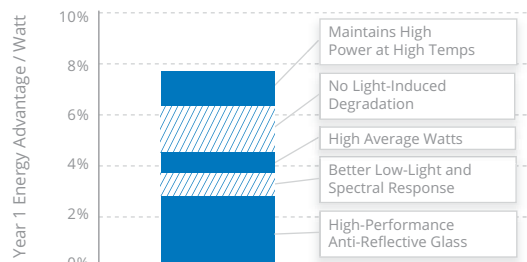
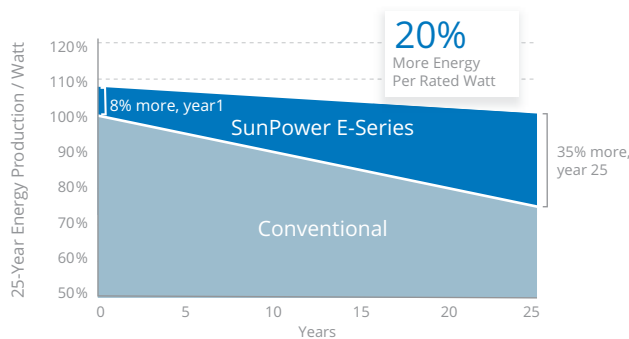
Generate more energy per square foot

E-Series commercial panels convert more sunlight to electricity producing 31% more power per panel,¹ and 60% more energy per square foot over 25 years.^{1,2,3}

High Energy Production⁶

Produce more energy per rated watt

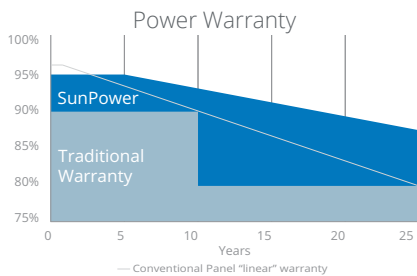
More energy to power your operations. High year one performance delivers 7-9% more energy per rated watt.² This advantage increases over time, producing 20% more energy over the first 25 years to meet your needs.³



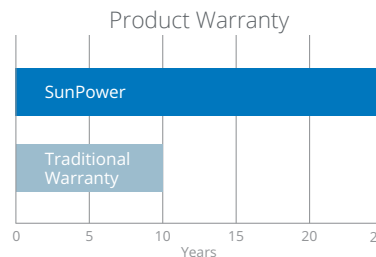


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Sunpower Offers The Best Combined Power And Product Warranty



More guaranteed power: 95% for first 5 years, -0.4%/yr. to year 25.⁷



Combined Power and Product defect 25 year coverage that includes panel replacement costs.⁸

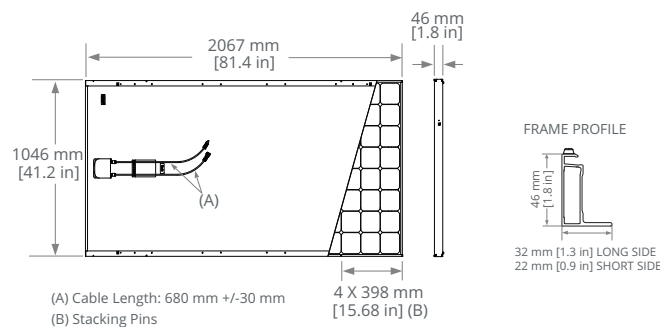
| Electrical Data | SPR-E20-435-COM | SPR-E19-410-COM |
|--|---|-----------------|
| | Nominal Power (P _{nom}) ¹¹ | 435 W |
| Power Tolerance | +/- 5% | +/- 5% |
| Avg. Panel Efficiency ¹² | 20.3% | 19.1% |
| Rated Voltage (V _{mpp}) | 72.9 V | 72.9 V |
| Rated Current (I _{mpp}) | 5.97 A | 5.62 A |
| Open-Circuit Voltage (V _{oc}) | 85.6 V | 85.3 V |
| Short-Circuit Current (I _{sc}) | 6.43 A | 6.01 A |
| Max. System Voltage | 1000 V UL & 1000 V IEC | |
| Maximum Series Fuse | 15 A | |
| Power Temp Coef. | -0.38% / °C | |
| Voltage Temp Coef. | -235.5 mV / °C | |
| Current Temp Coef. | 3.5 mA / °C | |

| Tests And Certifications | |
|------------------------------|---|
| Standard tests ¹³ | UL1703 (Type 2 Fire Rating), IEC 61215, IEC 61730 |
| Quality Certs | ISO 9001:2008, ISO 14001:2004 |
| EHS Compliance | RoHS, OHSAS 18001:2007, lead free, REACH SVHC-155, PV Cycle |
| Sustainability | Cradle to Cradle (eligible for LEED points) ¹⁴ |
| Ammonia test | IEC 62716 |
| Desert test | 10.1109/PVSC.2013.6744437 |
| Salt Spray test | IEC 61701 (maximum severity) |
| PID test | Potential-Induced Degradation free: 1000V ⁹ |
| Available listings | UL, CEC, CSA, TUV, FSEC |

| Operating Condition And Mechanical Data | |
|---|---|
| Temperature | - 40°F to +185°F (- 40°C to +85°C) |
| Impact resistance | 1 inch (25mm) diameter hail at 52 mph (23 m/s) |
| Appearance | Class B |
| Solar Cells | 128 Monocrystalline Moxeon Gen II |
| Tempered Glass | High transmission tempered Anti-Reflective |
| Junction Box | IP-65, 680mm cables / MC4 Compatible |
| Weight | 56 lbs (25.4 kg) |
| Max load | Wind: 2400 Pa, 50 psf front & back Snow: 2400 Pa, 50 psf front |
| Frame | Class 2 silver anodized; stacking pins |

REFERENCES:

- All comparisons are SPR-E20-327 vs. a representative conventional panel: 250W, approx. 1.6 m², 15.3% efficiency.
- Typically 7-9% more energy per watt, BEW/DNV Engineering "SunPower Yield Report," Jan 2013.
- SunPower 0.25%/yr degradation vs. 1.0%/yr conv. panel. Campeau, Z. et al. "SunPower Module Degradation Rate," SunPower white paper, Feb 2013; Jordan, Dirk "SunPower Test Report," NREL, Q1-2015.
- "SunPower Module 40-Year Useful Life" SunPower white paper, May 2015. Useful life is 99 out of 100 panels operating at more than 70% of rated power.
- Second highest, after SunPower X-Series, of over 3,200 silicon solar panels, Photon Module Survey, Feb 2014.
- 8% more energy than the average of the top 10 panel companies tested in 2012 (151 panels, 102 companies), Photon International, Feb 2013.
- Compared with the top 15 manufacturers. SunPower Warranty Review, May 2015.
- Some restrictions and exclusions may apply. See warranty for details.
- 5 of top 8 panel manufacturers tested in 2013 report, 3 additional panels in 2014. Ferrara, C., et al. "Fraunhofer PV Durability Initiative for Solar Modules: Part 2". Photovoltaics International, 2014.
- Compared with the non-stress-tested control panel. Atlas 25+ Durability test report, Feb 2013.
- Standard Test Conditions (1000 W/m² irradiance, AM 1.5, 25° C). NREL calibration Standard: SOMS current, LACCS FF and Voltage.
- Based on average of measured power values during production.
- Type 2 fire rating per UL1703:2013, Class C fire rating per UL1703:2002.
- See sales person for details.



Please read the safety and installation guide.

See <http://www.sunpower.com/facts> for more reference information.
For more details, see extended datasheet: www.sunpower.com/datasheets.

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