

# SunPower® E-Series Commercial Solar Panels | E20-327-COM

### More than 20% Efficiency

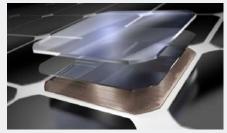
Captures more sunlight and generates more power than conventional panels.

### High Performance

Delivers excellent performance in real-world conditions, such as high temperatures, clouds and low light.<sup>1,2,4</sup>

#### Commercial Grade

Optimized to maximize returns and energy production, the E-Series panel is a bankable solution for commercial solar applications.



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. <sup>3,4</sup>

# 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. <sup>3</sup>

#1 Rank in Fraunhofer durability test.<sup>9</sup> 100% power maintained in Atlas 25+ comprehensive durability test.<sup>10</sup>

### High Performance & Excellent Reliability





SPR-E20-327-COM

## High Efficiency⁵

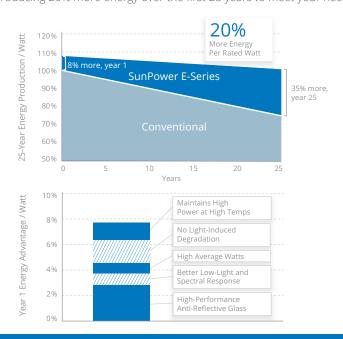
#### Generate more energy per square foot

E-Series commercial panels convert more sunlight to electricity by producing 31% more power per panel<sup>1</sup> and 60% more energy per square foot over 25 years.<sup>1,2,3</sup>

## High Energy Production<sup>6</sup>

#### Produce more energy per rated watt

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







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#### SunPower Offers The Best Combined Power And Product Warranty

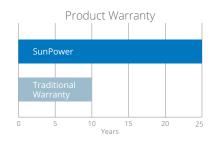


More guaranteed power: 95% for first 5 years, -0.4%/yr. to year 25  $^7$ 

Electrical Data		
	SPR-E20-327-COM	SPR-E19-310-COM
Nominal Power (Pnom) <sup>11</sup>	327 W	310 W
Power Tolerance	+5/-3%	+5/-3%
Avg. Panel Efficiency <sup>12</sup>	20.3%	19.3%
Rated Voltage (Vmpp)	54.7 V	54.7 V
Rated Current (Impp)	5.98 A	5.67 A
Open-Circuit Voltage (Voc)	64.9 V	64.4 V
Short-Circuit Current (Isc)	6.46 A	6.05 A
Max. System Voltage	1000 V UL & 1000 V IEC	
Maximum Series Fuse	15 A	
Power Temp Coef.	-0.38% / ° C	
Voltage Temp Coef.	−176.6 mV / ° C	
Current Temp Coef.	3.5 mA / ° C	

#### REFERENCES:

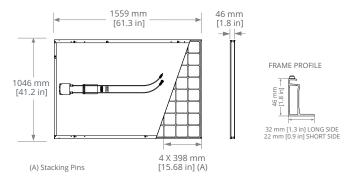
- $1\,$  All comparisons are SPR-E20-327 vs. a representative conventional panel: 250 W, approx. 1.6 m², 15.3% efficiency.
- 2 Typically 7–9% more energy per watt, BEW/DNV Engineering "SunPower Yield Report," Jan 2013.
- 3 SunPower 0.25%/yr degradation vs. 1.0%/yr conv. panel. Campeau, Z. et al. "SunPower Module Degradation Rate," SunPower white paper, Feb 2013; Jordan, Dirk "SunPower Test Report," NREL, Q1-2015.
- $\hat{\textbf{4}}$  "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.
- 5 Second highest, after SunPower X-Series, of over 3,200 silicon solar panels, Photon Module Survey, Feb 2014.
- $6\,8\%$  more energy than the average of the top 10 panel companies tested in 2012 (151 panels, 102 companies), Photon International, Feb 2013.
- $7\ Compared\ with\ the\ top\ 15\ manufacturers.\ SunPower\ Warranty\ Review,\ May\ 2015.$
- $8\,\mbox{Some}$  restrictions and exclusions may apply. See warranty for details.
- 9 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.
- 10 Compared with the non-stress-tested control panel. Atlas 25+ Durability test report, Feb 2013.
- 11 Standard Test Conditions (1000 W/m $^2$  irradiance, AM 1.5, 25 $^\circ$  C). NREL calibration Standard: SOMS current, LACCS FF and Voltage.
- 12 Based on average of measured power values during production.
- 13 Type 2 fire rating per UL1703:2013, Class C fire rating per UL1703:2002.
- 14 See salesperson for details.



Combined Power and Product defect 25-year coverage that includes panel replacement costs <sup>8</sup>

	Tests And Certifications
Standard Tests <sup>13</sup>	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-163, PV Cycle
Sustainability	Cradle to Cradle (eligible for LEED points) <sup>14</sup>
Ammonia Test	IEC 62716
Desert Test	10.1109/PVSC.2013.6744437
Salt Spray Test	IEC 61701 (maximum severity)
PID Test	Potential-Induced Degradation free: 1000 V <sup>9</sup>
Available Listings	UL, TUV, JET, MCS, CSA, FSEC, CEC

Operating Condition And Mechanical Data		
Temperature	-40° F to +185° F (-40° C to +85° C)	
Impact Resistance	1 inch (25 mm) diameter hail at 52 mph (23 m/s)	
Appearance	Class B	
Solar Cells	96 Monocrystalline Maxeon Gen II	
Tempered Glass	High-transmission tempered anti-reflective	
Junction Box	IP-65, MC4 compatible	
Weight	41 lbs (18.6 kg)	
Max. Load	Wind: 50 psf, 2400 Pa, 244 kg/m² front & back	
	Snow: 112 psf, 5400 Pa, 550 kg/m² front	
Frame	Class 2 silver anodized; stacking pins	



Please read the safety and installation guide.

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

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