more energy. For life."



#### • 20.1% efficiency

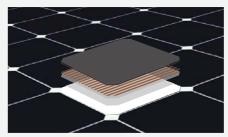
Ideal for roofs where space is at a premium or where future expansion might be needed.

# • High performance

Delivers excellent performance in real world conditions, such as high temperatures, clouds and low light. 1,2,3

### • Proven value

Designed for residential rooftops, E-Series panels deliver the features, value and performance for any home.



Maxeon™ Solar Cells: Fundamentally better.

Engineered for performance, designed for durability.

## Engineered for peace of mind

Designed to deliver consistent, trouble-free energy over a very long lifetime.<sup>4,5</sup>

## Designed for durability

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>4,5</sup>

**#1 Ranked** in Fraunhofer durability test.<sup>10</sup> **100% power** maintained in Atlas 25<sup>+</sup> comprehensive PVDI Durability test.<sup>11</sup>

### HIGH PERFORMANCE & EXCELLENT DURABILITY





E20 - 245 PANEL

# HIGH EFFICIENCY 6

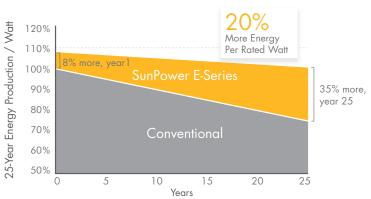
## Generate more energy per square meter

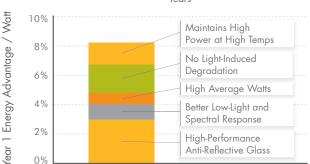
E-Series residential panels convert more sunlight to electricity producing 36% more power per panel, <sup>1</sup> and 60% more energy per square meter over 25 years.<sup>3,4</sup>

## HIGH ENERGY PRODUCTION<sup>7</sup>

### Produce more energy per rated watt

High year one performance delivers 7-9% more energy per rated watt.<sup>3</sup> This advantage increases over time, producing 20% more energy over the first 25 years to meet your needs.<sup>4</sup>

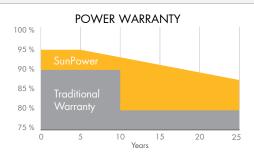






#### More energy. For life."

#### SUNPOWER OFFERS THE BEST COMBINED POWER AND PRODUCT WARRANTY



More guaranteed power: 95% for first 5 years, -0.4%/yr. to year 25.8

ELECTRICAL DATA			
	E20-245	E19-235	
Nominal Power <sup>12</sup> (Pnom)	245 W	235 W	
Power Tolerance	+5/-0%	+5/-0%	
Avg. Panel Efficiency <sup>13</sup>	20.1%	19.3%	
Rated Voltage (Vmpp)	40.5 V	40.5 V	
Rated Current (Impp)	6.05 A	5.80 A	
Open-Circuit Voltage (Voc)	48.8 V	48.4 V	
Short-Circuit Current (Isc)	6.43 A	6.18 A	
Max. System Voltage	1000 V IEC	1000 V IEC & 600 V UL	
Maximum Series Fuse	20 A		
Power Temp Coef.	-0.38% / °C		
Voltage Temp Coef.	−132.5 mV / °C		
Current Temp Coef.	3.5 mA / °C		

#### REFERENCES:

- 1 All comparisons are SPR-E20-327 vs. a representative conventional panel: 240W, approx. 1.6 m², 15% efficiency.
- 2 PVEvolution Labs "SunPower Shading Study," Feb 2013.
- 3 Typically 7-9% more energy per watt, BEW/DNV Engineering "SunPower Yield Report," Jan 2013.
- 4 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, Oct 2012.
- 5 "SunPower Module 40-Year Useful Life" SunPower white paper, Feb 2013. Useful life is 99 out of 100 panels operating at more than 70% of rated power.
- 6 Out of all 2600 panels listed in Photon International, Feb 2012.
- 7 8% more energy than the average of the top 10 panel companies tested in 2012 (151 panels, 102 companies), Photon International, March 2013. 8 Compared with the top 15 manufacturers. SunPower Warranty Review, Feb 2013.
- 9 Some exclusions apply. See warranty for details.
- 10 5 of top 8 panel manufacturers were tested by Fraunhofer ISE, "PV Module Durability Initiative Public Report," Feb 2013.
- 11 Compared with the non-stress-tested control panel. Atlas 25+ Durability test report, Feb 2013.
- 12 Standard Test Conditions (1000 W/m<sup>2</sup> irradiance, AM 1.5, 25° C).
- 13 Based on average of measured power values during production



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

OPERATING	CONDITION AND MECHANICAL DATA
Temperature	– 40°C to +85°C
Max load	Wind: 2400 Pa, 245 kg/m² front & back
	Snow: 5400 Pa, 550 kg/m² front
Impact resistance	25mm diameter hail at 23 m/s
Appearance	Class A
Solar Cells	72 Monocrystalline Maxeon Gen II
Tempered Glass	High transmission tempered Anti-Reflective
Junction Box	IP-65 Rated
Connectors	Yukita (YS-254/YS-255)
Frame	Class 1 black anodized (highest AAMA rating)
Weight	15 kg

	tests and certifications
Standard tests	IEC 61215, IEC 61730, UL1703
Quality tests	ISO 9001:2008, ISO 14001:2004
EHS Compliance	RoHS, OHSAS 18001:2007, lead free, PV Cycle
Ammonia test	IEC 62716
Salt Spray test	IEC 61701 (passed maximum severity)
PID test	Potential-Induced Degradation free: 1000V <sup>10</sup>
Available listings	TUV, MCS, UL, JET, KEMCO, CSA, CEC, FSEC

