SunPower® X-Series Residential Solar Panels | X21-345

More than 21% Efficiency

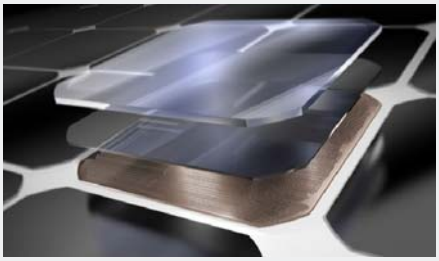
Ideal for roofs where space is at a premium or where future expansion might be needed.

Maximum Performance

Designed to deliver the most energy in demanding real-world conditions, in partial shade and hot rooftop temperatures.[1,2,4]

Premier Technology

Engineered with the newest and most powerful Maxeon technology, X-Series brings unmatched power and performance to your 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.[3,4]

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.[3]

Same excellent durability as E-Series panels.
#1 Rank in Fraunhofer durability test.[9]
100% power maintained in Atlas 25+ comprehensive durability test.[10]

High Performance & Excellent Durability

SPR-X21-345

X21 SERIES

Highest Efficiency[5]

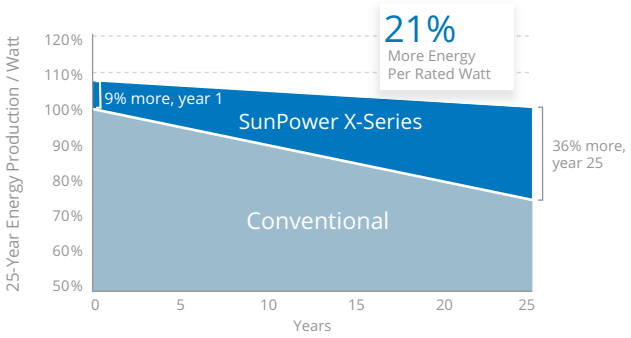
Generate more energy per square meter

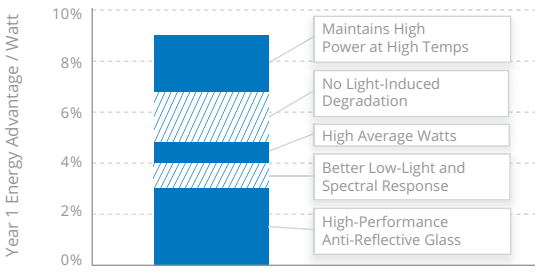
X-Series residential panels convert more sunlight to electricity by producing 38% more power per panel[1] and 70% more energy per square meter over 25 years.[1,2,3]

Highest Energy Production[6]

Produce more energy per rated watt

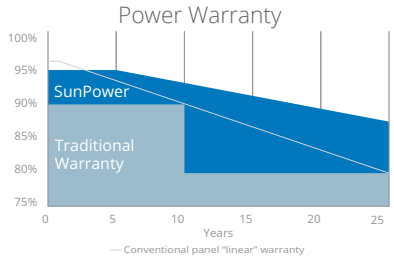
High year-one performance delivers 8–10% more energy per rated watt.[2] This advantage increases over time, producing 21% more energy over the first 25 years to meet your needs.[3]



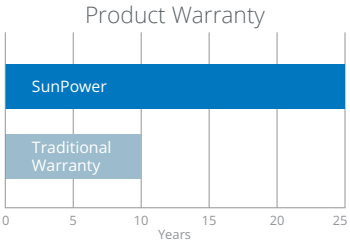


SunPower® X-Series Residential Solar Panels | X21-345

SunPower Offers The Best Combined Power And Product Warranty



More guaranteed power: 95% for first 5 years, –0.4%/yr. to year 25 [7]

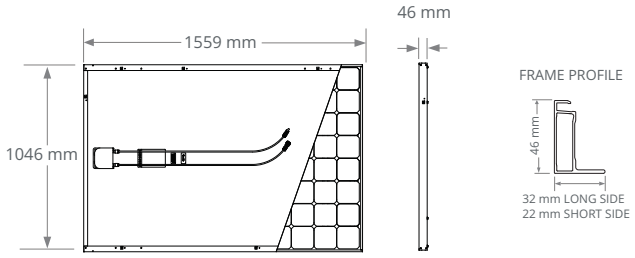


Combined Power and Product defect 25-year coverage that includes panel replacement costs [8]

Electrical Data		
	SPR-X21-345	SPR-X21-335
Nominal Power (Pnom) [11]	345 W	335 W
Power Tolerance	+5/–0%	+5/–0%
Avg. Panel Efficiency [12]	21.5%	21.0%
Rated Voltage (Vmpp)	57.3 V	57.3 V
Rated Current (Impp)	6.02 A	5.85 A
Open-Circuit Voltage (Voc)	68.2 V	67.9 V
Short-Circuit Current (Isc)	6.39 A	6.23 A
Max. System Voltage	1000 V IEC & 600 V UL	
Maximum Series Fuse	15 A	
Power Temp Coef.	–0.30% / ° C	
Voltage Temp Coef.	–167.4 mV / ° C	
Current Temp Coef.	3.5 mA / ° C	

Tests And Certifications	
Standard Tests [13]	IEC 61215, IEC 61730, UL1703 (Type 2 Fire Rating)
Quality Certs	ISO 9001:2008, ISO 14001:2004
EHS Compliance	RoHS, OHSAS 18001:2007, lead free, PV Cycle, REACH SVHC-163
Sustainability	Cradle to Cradle
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 [9]
Available Listings	TUV, UL, JET, MCS, CSA, FSEC, CEC

Operating Condition And Mechanical Data	
Temperature	–40° C to +85° C
Impact Resistance	25 mm diameter hail at 23 m/s
Appearance	Class A+
Solar Cells	96 Monocrystalline Maxeon Gen III
Tempered Glass	High-transmission tempered anti-reflective
Junction Box	IP-65 Rated, MC4
Weight	18,6 kg
Max. Load	Wind: 2400 Pa, 244 kg/m² front & back Snow: 5400 Pa, 550 kg/m² front
Frame	Class 1 black anodised (highest AAMA rating)



Please read the safety and installation guide.

REFERENCES:
1 All comparisons are SPR-X21-345 vs. a representative conventional panel: 250 W, approx. 1.6 m², 15.3% efficiency.
2 Typically 8–10% 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.
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 Highest of over 3,200 silicon solar panels, Photon Module Survey, Feb 2014.
6 1% more energy than E-Series panels, 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 Some restrictions and exclusions may apply. See warranty for details..
9 X-Series same as E-Series, 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. X-Series same as E-Series, tested in Atlas 25+ Durability test report, Feb 2013.
11 Standard Test Conditions (1000 W/m² irradiance, AM 1.5, 25° 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.

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

Document # 517379 REV C /A4_UK_AUS

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