

## 390–420 W Residential A-Series Panels

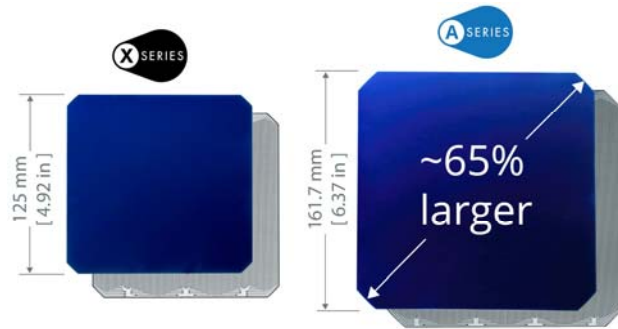
### SunPower® Maxeon® Technology

SunPower® Maxeon® cell-based panels maximize energy production and savings by combining industry-leading power, efficiency, and durability with the most comprehensive power, product, and service warranty in the industry.<sup>1,2</sup>



#### Highest Power Density Available

SunPower's new Maxeon Gen 5 cell is 65% larger than prior generations, delivering the most powerful cell and highest efficiency panel in residential solar.<sup>2</sup> The result is more power per square meter than any commercially available solar.<sup>1</sup>



### SunPower Maxeon Solar Cell Technology



Fundamentally Different. And Better.

- Cell efficiencies of over 25%
- Delivers leading reliability<sup>3</sup>
- Patented solid metal foundation prevents breakage and corrosion

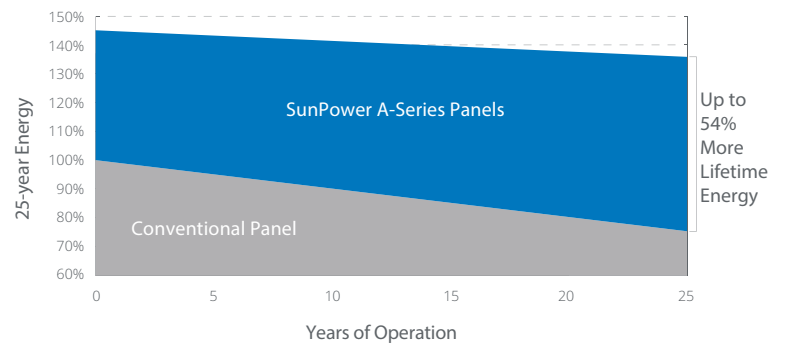
As sustainable as the energy it produces.

- Achieved the #1 ranking on the Silicon Valley Toxics Coalition's Solar Scorecard for 3 years running
- SunPower modules can contribute to your business's LEED certification<sup>4</sup>



#### Maximum Lifetime Energy and Savings

Designed to deliver up to 54% more energy from the same space over the first 25 years in real-world conditions like partial shade and high temperatures.<sup>1</sup>



#### Best Reliability, Best Warranty

SunPower technology is proven to last and we stand behind our panels with the industry's most comprehensive 25-year Combined Power, Product and Service Warranty.

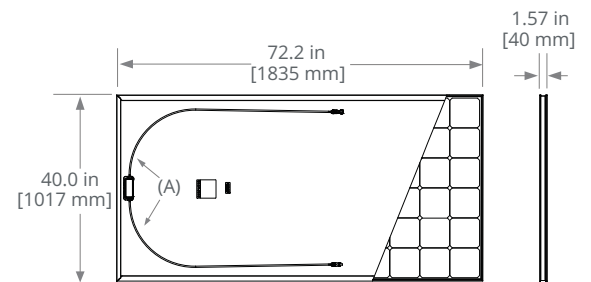


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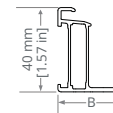
Electrical Data					
	SPR-A420	SPR-A415	SPR-A410	SPR-A400	SPR-A390
Nominal Power (P <sub>nom</sub> ) <sup>5</sup>	420 W	415 W	410 W	400 W	390 W
Power Tolerance	+5/0%	+5/0%	+5/0%	+5/0%	+5/0%
Panel Efficiency	22.5%	22.2%	22.0%	21.4%	20.9%
Rated Voltage (V <sub>mpp</sub> )	40.5 V	40.3 V	40.0 V	39.5 V	39.0 V
Rated Current (I <sub>mp</sub> )	10.4 A	10.3 A	10.2 A	10.1 A	9.99 A
Open-Circuit Voltage (V <sub>oc</sub> )	48.2 V	48.2 V	48.2 V	48.1 V	48.0 V
Short-Circuit Current (I <sub>sc</sub> )	10.9 A	10.9 A	10.9 A	10.9 A	10.8 A
Max. System Voltage	1000 V UL				
Maximum Series Fuse	20 A				
Power Temp Coef.	-0.29% / °C				
Voltage Temp Coef.	-136 mV / °C				
Current Temp Coef.	4.1 mA / °C				

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 A+
Solar Cells	66 Monocrystalline Moxeon Gen 5
Tempered Glass	High-transmission tempered anti-reflective
Junction Box	IP-68, TE (PV4S)
Weight	44 lbs (20 kg)
Max. Test Load <sup>6</sup>	Wind: 125 psf, 6000 Pa, 611 kg/m <sup>2</sup> back Snow: 187 psf, 9000 Pa, 917 kg/m <sup>2</sup> front
Design Load	Wind: 75 psf, 3600 Pa, 367 kg/m <sup>2</sup> back Snow: 125 psf, 6000 Pa, 611 kg/m <sup>2</sup> front
Frame	Class 1 black anodized (highest AAMA rating)

Tests And Certifications	
Standard Tests	UL1703
Quality Management Certs	ISO 9001:2015, ISO 14001:2015
EHS Compliance	RoHS, OHSAS 18001:2007, lead free, Recycle Scheme, REACH SVHC-163
Available Listings	UL



FRAME PROFILE



- (A) Cable Length: 52 in +/-0.4 in [1320 mm +/-10 mm]  
 (B) Long Side: 1.3 in [32 mm]  
 Short Side: 0.9 in [24 mm]

1 SunPower 420 W, 22.5% efficient, compared to a Conventional Panel on same-sized arrays (280 W p-multi, 17% efficient, approx. 1.64 m<sup>2</sup>), 8% more energy per watt (based on PVSyst pan files for avg US climate), 0.5%/yr slower degradation rate (Jordan, et. al. "Robust PV Degradation Methodology and Application." PVSC 2018).

2 Based on search of datasheet values from websites of top 20 manufacturers per IHS, as of December 2019.

3 Jordan, et. al. Robust PV Degradation Methodology and Application. PVSC 2018.

4 Moxeon panels can contribute to LEED Materials and Resources credit categories.

5 Standard Test Conditions (1000 W/m<sup>2</sup> irradiance, AM 1.5, 25° C). NREL calibration Standard: SOMS current, LACCS FF and Voltage.

6 Please read the safety and installation guide for more information regarding load ratings and mounting configurations.

See [www.sunpower.com/company](http://www.sunpower.com/company) for more reference information.

For more details, see extended datasheet: [www.sunpower.com/solar-resources](http://www.sunpower.com/solar-resources). Specifications included in this datasheet are subject to change without notice.

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