## SUNPOWER®

### PERFORMANCE



## PERFORMANCE 3 | 335

## 335 W

## **Residential Solar Panel**

SunPower Performance Panels wrap front contact cells with 30+ years of SunPower materials and manufacturing expertise. The weakest points of Conventional Panel design are eliminated to deliver superior power, reliability, value and savings.<sup>1</sup>



#### High Power

Enhanced active area and monocrystalline cells increase power and savings while designing out fragile ribbons and solder bonds on the cells.



#### **High Performance**

Up to 26% more energy in the same space over 25 years.<sup>2</sup> Outperforms Conventional Panels in partial shade thanks to unique parallel circuitry. Proprietary bussing design limits power loss, maximizing production during morning and evening shading or soiling.



#### **Premium Aesthetics**

SunPower<sup>®</sup> Performance Panels with their black frame and black backsheets blend harmoniously into your roof and add elegance to your home.

#### **High Reliability**

SunPower Performance Panels are the most deployed shingled solar panel in the world.<sup>3</sup> Innovative cell shingling mitigates the leading reliability challenges associated with conventional front contact panels by designing out fragile ribbons and solder bonds on the cells. SunPower stands behind its panels with its industry-leading Complete Confidence Warranty. SunPower's Performance Panels are warranted to produce more than 97.5% power in the first year, then declining by 0.5% per year, ending at 85.5% power after 25 years.

25 Year Combined Warranty



#### Engineered for Performance



- Robust and flexible cell connection technology. Outstanding reliability.
- Conductive adhesive, proven in the aerospace industry.
- Redundant cell to cell connections.
- Reduced panel temperature due to unique electrical bussing.

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SunPower Performance Panels Conventional Panels 0 5 10 15 20 25

#### PERFORMANCE 3 | 335 W Residential Solar Panel

Electrical Data						
Model	SPR-P3-335-BLK	SPR-P3-330-BLK	SPR-P3-325-BLK	SPR-P3-320-BLK	SPR-P3-315-BLK	
Nominal Power (Pnom) <sup>4</sup>	335 W	330 W	325 W	320 W	315 W	
Power Tolerance	+5/-0%	+5/-0%	+5/-0%	+5/-0%	+5/-0%	
Efficiency	19.9%	19.6%	19.3%	19.0%	18.7%	
Rated Voltage (Vmpp)	36.8 V	36.4 V	35.9 V	35.4 V	34.9 V	
Rated Current (Impp)	9.11 A	9.07 A	9.05 A	9.04 A	9.03 A	
Open-Circuit Voltage (Voc)	44.2 V	43.9 V	43.6 V	43.1 V	42.5 V	
Short-Circuit Current (lsc)	9.76 A	9.72 A	9.69 A	9.68 A	9.66 A	
Maximum System Voltage			1000 V IEC			
Maximum Series Fuse			18 A			
Power Temp. Coef.			−0.36% / °C			
Voltage Temp. Coef.			−0.29% / °C			
Current Temp. Coef.			0.05% / °C			

Tests And Certifications (Pending)				
Standard Tests <sup>5</sup>	IEC 61215, IEC 61730			
Quality Certs	ISO 9001:2008, ISO 14001:2004			
EHS Compliance	OHSAS 18001:2007, Recycling Scheme			
Ammonia Test	IEC 62716			
Desert Test	MIL-STD-810G			
Salt Spray Test	IEC 61701 (maximum severity)			
LeTID Test <sup>6</sup>	IEC 61215 (MQT 23.1 LeTID detection) draft standard			
PID Test	Potential-Induced Degradation free: 1000 V			
Available Listings	TUV			

Operating Condition And Mechanical Data				
Temperature	-40°C to +85°C			
Impact Resistance	25 mm diameter hail at 23 m/s			
Solar Cells	Monocrystalline PERC			
Tempered Glass	High-transmission tempered anti-reflective			
Junction Box	IP-67, Stäubli (MC4), 3 bypass diodes			
Weight	18.1 kg			
Max Load	Wind: 2400 Pa, 245 kg/m² front & back			
IVIAX. LUAU	Snow: 5400 Pa, 550 kg/m² front			
Frame	Class 1 black anodized (highest AAMA rating)			



FRAME PROFILE



(A) Cable Length: 1200 mm +/-15 mm (B) Long Side: 32 mm

Short Side: 24 mm

Read safety and installation instructions before using this product.



PERFORMANCE

534816 REV A / A4\_AU Publication Date: December 2019

1 Independent Shade Study by CFV Laboratory. 2016.

2 SunPower 335 W, 19.9% efficient, compared to a Conventional Panel on same-sized arrays (280 W p-multi, 17% efficient, approx. 1.64 m<sup>2</sup>), 3% more energy per watt (based on PVSim runs for avg US climate), 0.25%/yr slower degradation rate (Jordan, et. al. Robust PV Degradation Methodology and Application. PVSC 2018).

3 Osborne. "SunPower supplying P-Series modules to a 125 MW NextEra project." PV-Tech.org. March 2017."

4 Measured at Standard Test Conditions (STC): irradiance of 1000 W/m², AM 1.5, and cell temperature 25° C.

5 Class C fire rating per IEC 61730.

6 Fraunhofer CSP LID Sensitivity according to IEC 61215 (MQT 23.1 LeTID detection), <1% power loss.

Designed in USA, assembled in China.

See www.sunpower.com for more reference information. Specifications included in this datasheet are subject to change without notice.

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