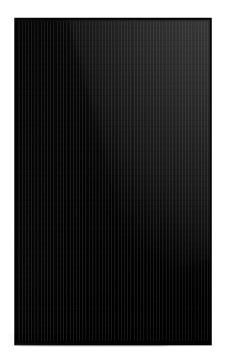
# SUNPOWER | performance

Making the conventional, exceptional

Shingled Cell

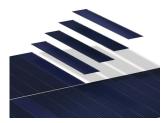
Residentia

PRELIMINARY DATASHEET



### Engineered for Performance

- Smaller cells stay cooler when shaded, extending panel life<sup>3</sup>
- Advanced encapsulant minimizes degradation from environmental exposure
- Conductive adhesive defends against daily temperature swings
- Redundant cell connections create flexible paths for continuous electricity flow



## PERFORMANCE 6 BLK | 395-415

#### POWER RANGE: 395 – 415 W

With a sleek black design that elegantly blends into any roof, the SunPower Performance 6 BLK panel utilises high efficiency 210mm solar cells with current-collecting wires on the cell face to deliver more lifetime energy over standard solar panels.

Backed by an industry-leading warranty and an estimated 35-year useful life,<sup>1</sup> SunPower Performance panels wrap conventional front contact cells with 35 years of materials, engineering and manufacturing expertise to mitigate the reliability challenges of Conventional Panel design.

#### **Durability that Translates to More Energy**

Engineered to stand up to environmental stresses such as shading, daily temperature swings and high humidity, the SunPower Performance 6 panel delivers more energy in the same space over 25 years compared to Conventional mono PERC Panels.

#### A Track Record of Innovation Leadership

SunPower Performance panels represent the most deployed shingled cell panel in the industry-innovation protected by a growing portfolio of patents worldwide.<sup>2</sup>



6+ GW Deployed



60 +Countries

90+ Patents

#### A Better Product. A Better Warranty.

Each SunPower Performance panel is manufactured with the confidence to deliver more energy and reliability over time—and backed for 25 years by the SunPower Complete Confidence Panel Warranty.

- Year 1 Minimum Warranted Power Output 98.0%
- 0.45% Maximum Annual Degradation
- Year 25 Minimum Warranted Power Output 87.2%

#### PERFORMANCE 6 BLK POWER: 395 - 415 W

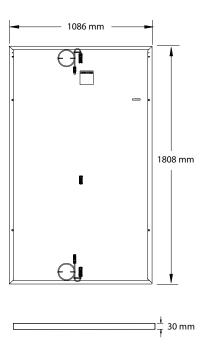
#### PRELIMINARY DATASHEET

Electrical Data					
Model	SPR-P6-415-BLK	SPR-P6-410-BLK	SPR-P6-405-BLK	SPR-P6-400-BLK	SPR-P6-395-BLK
Nominal Power (Pnom) <sup>4</sup>	415 W	410 W	405 W	400 W	395 W
Power Tolerance	+3/0%	+3/0%	+3/0%	+3/0%	+3/0%
Efficiency	21.1%	20.9%	20.6%	20.4%	20.1%
Rated Voltage (Vmpp)	30.2 V	29.9 V	29.6 V	29.3 V	29.0 V
Rated Current (Impp)	13.76 A	13.73 A	13.70 A	13.67 A	13.64 A
Open-Circuit Voltage (Voc) (+/-3%)	36.1 V	35.9 V	35.7 V	35.5 V	35.3 V
Short-Circuit Current (Isc) (+/-3%)	14.66 A	14.63 A	14.60 A	14.57 A	14.55 A

Mechanical Data			
Impact Resistance	25 mm diameter hail at 23 m/s		
Solar Cells	Monocrystalline PERC		
Glass	3.2 mm, Heat Strengthened Glass		
Junction Box	IP-68, 3 bypass diodes		
Connector	Stäubli MC4		
Weight	21.0 kg		
Max. Load	Wind: 2400 Pa, 245 kg/m² front & back		
	Snow: 5400 Pa, 550 kg/m² front		
Frame	Anodized Aluminum Alloy		

	Electrical Data
Maximum System Voltage	1000 V IEC
Temperature	-40°C to +85°C
Maximum Series Fuse	25 A
Power Temp. Coef.	–0.34% / ° C
Voltage Temp. Coef.	–0.27% / ° C
Current Temp. Coef.	0.04% / ° C

Tests And Certifications (Pending)			
Standard Tests	IEC 61215, IEC 61730		
Fire Rating	Class C (IEC 61730)		
Quality Certs	ISO 9001:2015, ISO 14001:2015		
EHS Compliance	ISO 45001-2018, Recycling Scheme		
Ammonia Test	IEC 62716		
Dust and Sand	IEC 60068-2-68		
Salt Spray Test	IEC 61701 (maximum severity)		
PID Test	IEC 62804		





(A) Cable Length:1200 mm +/-15 mm(B) Long Side: 33 mmShort Side: 24 mm

1 Performance panels expected useful life of 35 years. Source: "SunPower P-Series Technology Technical Review," Leidos Independent

Engineer Report. 2016. 2 Osborne. "SunPower supplying P-Series modules to a 125MW NextEra

project." PV-Tech.org. March 2017. 3 SunPower Performance Series – Thermal Performance, Z.Campeau 2016.

4 Measured at Standard Test Conditions (STC): irradiance of 1000 W/m<sup>2</sup>, AM 1.5, and cell temperature 25° C.

Designed in U.S.A Assembled in China

Specifications included in this datasheet are subject to change without notice.

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