PRELIMINARY DATASHEET

# SunPower Performance 7

# Home Solar Panel

## 495-510 W | SPR-P7-XXX-BLK-P

One-third cut, shingled-cell design



Bifacial energy generation

Hail: 40 mm (27.5 m/s)



#### **High lifetime energy production**

The shingled-cell design helps to manage shade and keep cell temperatures low to produce more power over time.

#### Made for real weather

It's strong frame and cell connection design helps to protect the panels against weather challenges like temperature swings, snow loads, and hail.

### No sacrifices for curb appeal

Smaller metallic wires help to achieve a sleek black appearance to seamlessly integrate into your roof.

#### Sustainable at its core

As one of the top 50 most sustainable companies,<sup>1</sup> Maxeon designs panels with sustainability in mind – from materials and manufacturing to conflict tracing and zero tolerance of labour rights violations.

Corporate **Rnights** 



#### A better product, a better warranty

SunPower Performance 7 panels are covered by a 30-year warranty.<sup>2</sup> Manufactured for long-term durability—covering defects related to workmanship and materials for a full 30 years.

Product and power coverage Year 1 minimum warranted output Maximum annual degradation 30 Years 99.0% 0.4%



Learn more about SunPower Performance panels **sunpower.maxeon.com** 



#### Performance 7 POWER: 495–510 W | EFFICIENCY: Up to 22.4% PRELIMINARY DATASHEET

Electrical Data, Front STC Characteristics <sup>3</sup>				
	SPR-P7-510-BLK-P	SPR-P7-505-BLK-P	SPR-P7-500-BLK-P	SPR-P7-495-BLK-P
Nominal Power (Pnom) <sup>4</sup>	510 W	505 W	500 W	495 W
Power Tolerance	+3/0%	+3/0%	+3/0%	+3/0%
Panel Efficiency	22.5%	22.3%	22.1%	21.9%
Rated Voltage (Vmpp)	39.45 V	39.17 V	38.89 V	38.61 V
Rated Current (Impp)	12.95 A	12.91 A	12.87 A	12.83 A
Open-Circuit Voltage (Voc) <sup>4</sup>	47.04 V	46.91 V	46.78 V	46.66 V
Short-Circuit Current (Isc) <sup>4</sup>	13.57 A	13.54 A	13.51 A	13.48 A

Bifacial Gain⁵				
Pmax with 5% Bifacial Gain	536 W	530 W	525 W	520 W
Isc with 5% Bifacial Gain	14.25 A	14.22 A	14.19 A	14.15 A
Pmax with 10% Bifacial Gain	561 W	556 W	550 W	545 W
Isc with 10% Bifacial Gain	14.93 A	14.89 A	14.86 A	14.83 A
Pmax with 20% Bifacial Gain	612 W	606 W	600 W	594 W
Isc with 20% Bifacial Gain	16.28 A	16.25 A	16.21 A	16.18 A

Solar Cells

Junction Box

Connector

Max. Load<sup>7</sup>

Impact Resistance

Weiaht

Frame

Glass

Electrical Data		
Bifaciality (φPmax)	80% +/-10%	
Maximum System Voltage	1500 V IEC	
Temperature	-40°C to +85°C	
Maximum Series Fuse	25 A	
Power Temp. Coef.	–0.29% / °C	
Voltage Temp. Coef.	–0.25% / °C	
Current Temp. Coef.	0.045% / °C	

Packaging Cor	figuration	
Number of modules per pallet	36	
Number of pallets per 40ft HQ container	22	
Number of modules per container	792	

Tests And C	ertifications (Pending)
Standard Tests	IEC 61215, IEC 61730
Fire Rating	Class A (IEC 61730-2 / UL 790)
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 (Severity 8)
LeTID Test	IEC TS 63342
PID Test	IEC 62804
Cradle to Cradle Certified™ Bronze	Panel line certified for material health, water stewardship, material reutilization, renewable energy & carbon management, and social fairness. <sup>6</sup>



**Mechanical Data** 

2.0 mm + 2.0 mm, high transmission heat

Wind: 2400 Pa, 245 kg/m² front & back

Snow: 5400 Pa, 550 kg/m² front

40 mm diameter hail at 27.5 m/s

Black anodized aluminum allov

strengthened glass, AR coating on front glass

N-type TOPCon

IP-68, 3 bypass diodes

Stäubli MC4-EVO2

27.5 kg



(A) Cable Length:

1350 mm +/-15 mm



1 Corporate Knights Global 100 Ranking 2024:

https://www.corporateknights.com/rankings/global-100-rankings/2024-global-100rankings/the-20th-annual-global-100/

2 The SPR-P7-BLK-P solar panels are backed by a 30-year warranty. Subject to terms and conditions. Not available in all countries. 30-year warranty requires registration, otherwise our 25-year warranty applies. Not available for earlier generation Performance panels, where a 25-year warranty applies.

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

4 Measurements tolerance +/-3%.

5 The additional gain from the back side of the panel compared to the power of the front side of the panel at the standard test conditions. It depends on mounting (structure, height, tilt angle etc.) and albedo of the underlying surface.

6 Performance DC panels are Cradle to Cradle Certified™ Bronze

www.c2ccertified.org/certified-products/maxeon-performance-solar-panels.Cradle to Cradle Certified<sup>™</sup> is a certification mark licensed by the Cradle to Cradle Products Innovation Institute.

7 As per IEC 61215 tested and certified. See Safety and Installation Guideline for details.

#### Designed in U.S.A.

Assembled in China

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Please read the safety and installation instructions. Visit www.maxeon.com/PVInstallGuide. Paper version can be requested through techsupport.ROW@maxeon.com.



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