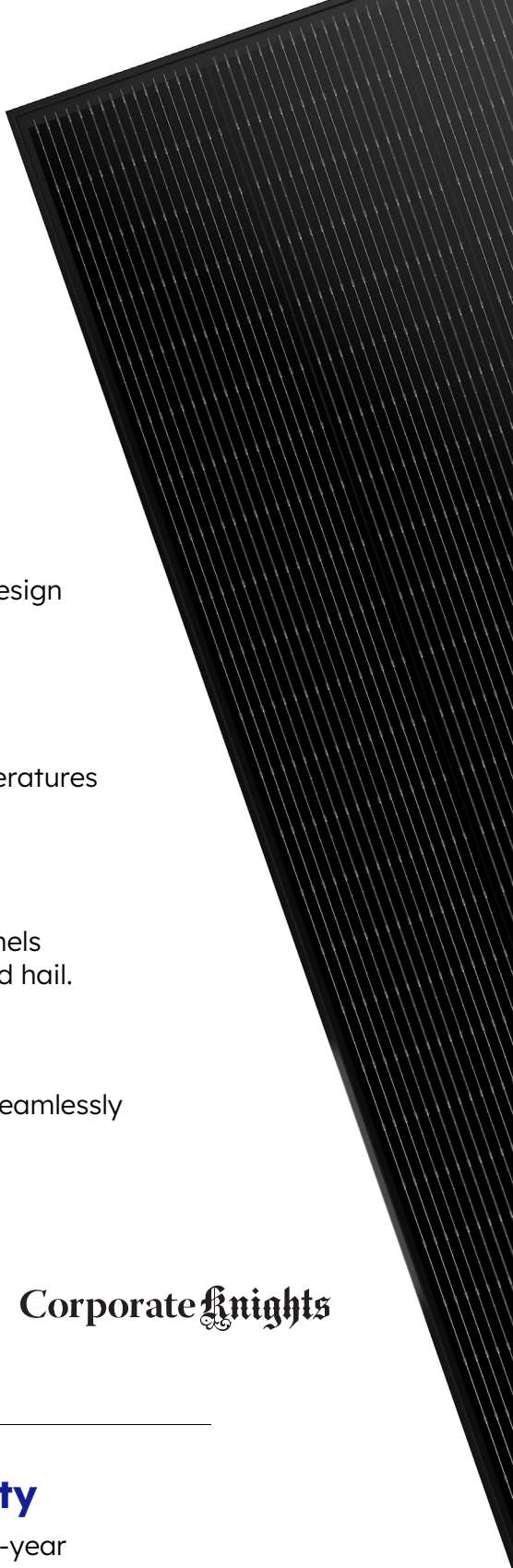
SunPower Performance 7

Home Solar Panel

440–455 W | SPR-P7-XXX-BLK



- Bifacial energy generation
- Framed glass-glass
- One-third cut, shingled-cell design

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,[1] Maxeon designs panels with sustainability in mind – from materials and manufacturing to conflict tracing and zero tolerance of labour rights violations.

Corporate Knights

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30 YEAR WARRANTY
Power | Product | Service

A better product, a better warranty

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

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

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Learn more about SunPower Performance panels
sunpower.maxeon.com

Performance 7 POWER: 440–455 W | EFFICIENCY: Up to 22.4%

Electrical Data, Front STC Characteristics[3]				
	SPR-P7-455-BLK SPR-P7-455-BLK-1500	SPR-P7-450-BLK SPR-P7-450-BLK-1500	SPR-P7-445-BLK SPR-P7-445-BLK-1500	SPR-P7-440-BLK SPR-P7-440-BLK-1500
Nominal Power (Pnom)	455 W	450 W	445 W	440 W
Power Tolerance	+3/0%	+3/0%	+3/0%	+3/0%
Panel Efficiency	22.4%	22.2%	21.9%	21.7%
Rated Voltage (Vmpp)	35.70 V	35.45 V	35.20 V	34.95 V
Rated Current (Impp)	12.75 A	12.70 A	12.65 A	12.60 A
Open-Circuit Voltage (Voc) (+/–3%)	42.13 V	41.95 V	41.77 V	41.59 V
Short-Circuit Current (Isc) (+/–4%)	13.45 A	13.38 A	13.32 A	13.29 A

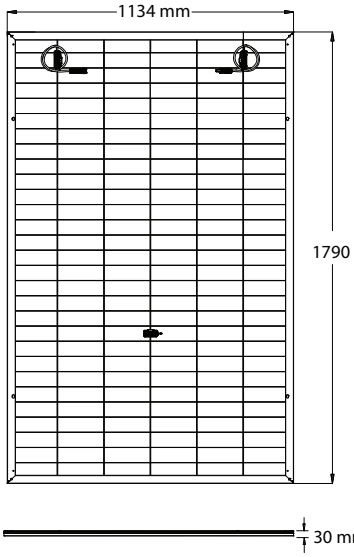
Bifacial Gain[4]				
Pmax with 5% Bifacial Gain	478 W	473 W	467 W	462 W
Isc with 5% Bifacial Gain	14.12 A	14.05 A	13.99 A	13.95 A
Pmax with 10% Bifacial Gain	501 W	495 W	490 W	484 W
Isc with 10% Bifacial Gain	14.80 A	14.72 A	14.65 A	14.62 A
Pmax with 20% Bifacial Gain	546 W	540 W	534 W	528 W
Isc with 20% Bifacial Gain	16.14 A	16.06 A	15.98 A	15.95 A

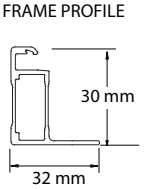
Electrical Data	
Bifaciality (φPmax)	80% +/–10%
Maximum System Voltage	1000 V & 1500 V IEC
Temperature	–40°C to +85°C
Maximum Series Fuse	25 A
Power Temp. Coef.	–0.29% / °C
Voltage Temp. Coef.	–0.25% / °C
Current Temp. Coef.	0.045% / °C

Packaging Configuration	
Number of modules per pallet	36
Number of pallets per 40ft HQ container	24
Number of modules per container	864

Tests And Certifications	
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	TUV 2fg 2689/04.19 (LeTID Detection)
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.[5]

Mechanical Data	
Solar Cells	N-type TOPCon
Glass	2.0 mm + 2.0 mm, high transmission heat strengthened glass, AR coating on front glass
Junction Box	IP-68, 3 bypass diodes
Connector	Stäubli MC4 or EVO2
Weight	24.8 kg
Max. Load[6]	Wind: 2400 Pa, 244 kg/m² front & back Snow: 5400 Pa, 550kg/m² front
Impact Resistance	40 mm diameter hail at 27.5 m/s
Frame	Black anodized aluminum alloy





(A) Cable Length:
1200 mm +/-15 mm

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

1 Corporate Knights Global 100 Ranking 2024: https://www.corporateknights.com/rankings/global-100-rankings/2024-global-100-rankings/the-20th-annual-global-100/
2 Performance 7 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/m² irradiance, AM 1.5, 25° C). NREL calibration Standard: SOMS current, LACCS FF and Voltage.
4 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.
5 Performance DC panels are Cradle to Cradle Certified™ Bronze - www. c2ccertified.org/certified-products/maxeon-performance-solar-panels. Cradle to Cradle Certified™ is a certification mark licensed by the Cradle to Cradle Products Innovation Institute.
6 As per IEC 61215-2016 tested and certified. See Safety and Installation Guideline for details.

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Designed in U.S.A.
Assembled in China
Specifications included in this datasheet are subject to change without notice.

View warranty, patent and trademark information at maxeon.com/legal.

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