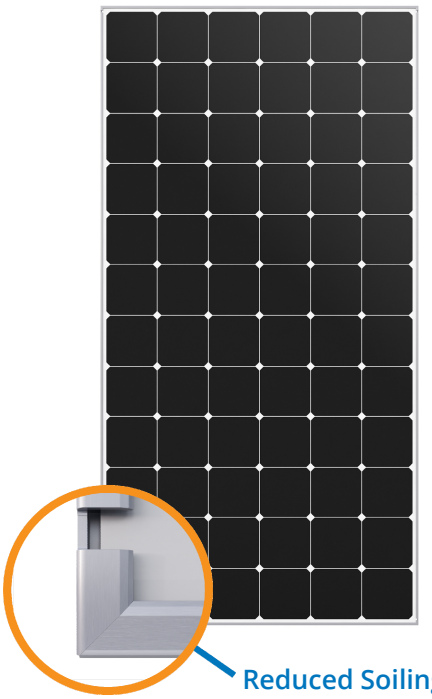
SUNPOWER

MAXEON

MAXEON 5 | 450 W

Commercial Solar Panel

SunPower Maxeon panels maximise energy production and savings by combining industry-leading efficiency, and reliability with the best power, product, and service warranty in the industry.[1,2,3]



Reduced Soiling
NEW drainage notch improves performance

Highest Power Density Available

SunPower's new Maxeon Gen 5 cell is 65% larger than prior generations, delivering the highest efficiency panel in commercial solar.[1] The result is more power per square meter than any commercially available solar.[1]

Maximum Lifetime Energy and Savings

Designed to deliver up to 25% more energy in the same space over 25 years in real-world conditions like partial shade and high temperatures. [4,5,6]

Unmatched Reliability, Best Warranty

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

SunPower's Maxeon Line is warranted to produce more than 98% power in the first year, then declining by 0.25% per year, ending at 92% power after 25 years.

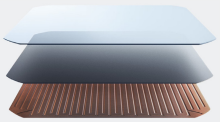
As Sustainable as the Energy it Produces

SunPower is recognized as a leader in sustainable manufacturing, with numerous industry firsts. In late 2019, SunPower's work around Maxeon 5 earned pv magazine's first Sustainability Award.[7]

SunPower modules can contribute to LEED and BREEM certification.[8]

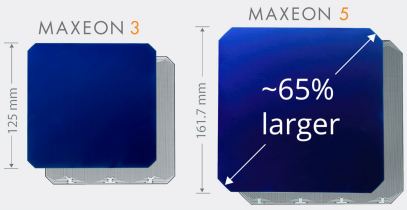
All SunPower Maxeon panels have earned the Cradle to Cradle Certified™ Bronze distinction and are the first and only solar panels with Declare certification for ingredient transparency.[9]

SUNPOWER MAXEON SOLAR CELL TECHNOLOGY



Fundamentally Different.
And Better.

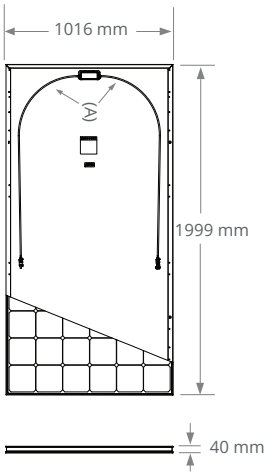
- Cell efficiencies of over 25%
- Delivers leading reliability[2]
- Patented solid metal foundation prevents breakage and corrosion



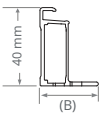
Electrical Data			
	SPR-MAX5-450-COM	SPR-MAX5-440-COM	SPR-MAX5-430-COM
Nominal Power (Pnom)[10]	450 W	440 W	430 W
Power Tolerance	+5/0%	+5/0%	+5/0%
Panel Efficiency	22.2%	21.7%	21.2%
Rated Voltage (Vmpp)	44.0 V	43.4 V	42.7 V
Rated Current (Impp)	10.2 A	10.2 A	10.1 A
Open-Circuit Voltage (Voc) (+/−3%)	51.9 V	51.6 V	51.2 V
Short-Circuit Current (Isc) (+/−3%)	11.0 A	10.9 A	10.9 A
Max. System Voltage	1000 V IEC		
Maximum Series Fuse	20 A		
Power Temp Coef.	−0.29% / ° C		
Voltage Temp Coef.	−136 mV / ° C		
Current Temp Coef.	5.7 mA / ° C		

Tests And Certifications - Pending	
Standard Tests[11]	IEC 61215, IEC 61730
Quality Management Certs	ISO 9001:2015, ISO 14001:2015
EHS Compliance	RoHS, OHSAS 18001:2007, lead free, REACH SVHC-163
Ammonia Test	IEC 62716
Desert Test	10.1109/PVSC.2013.6744437
Salt Spray Test	IEC 61701 (maximum severity)
PID Test	1500 V: IEC 62804
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	72 Monocrystalline Maxeon Gen 5
Glass	High-transmission tempered anti-reflective
Junction Box	IP-68, Stäubli (MC4), 3 bypass diodes
Weight	21.6 kg
Max. Load	Wind: 2400 Pa, 244 kg/m² front & back Snow: 5400 Pa, 550 kg/m² front
Frame	Class 2 silver anodized



FRAME PROFILE



(A) Cable Length: 1320 mm +/-10 mm
(B) Long Side: 32 mm
Short Side: 24 mm

Please read the safety and installation guide.

1 Based on datasheet review of websites of top 20 manufacturers per IHS, as of Jan, 2020.
2 Jordan, et. al. Robust PV Degradation Methodology and Application. PVSC 2018.
3 Based on Oct. 2019 review of warranties on manufacturer websites for top 20 manufacturers per IHS 2018.
4 SunPower 450 W, 22.2% efficient, compared to a Conventional Panel on same-sized arrays (370 W mono PERC, 19% efficient, approx. 2 m²).
5 PV Evolution Labs "SunPower Shading Study," 2013. Compared to a conventional front contact panel.
6 Based on temperature coefficients provided in manufacturer datasheets 2019.
7 PV Magazine Awards - https://www.pv-magazine.com/press-releases/sunpower-wins-solarindustry-sustainability-award.
8 Maxeon panels can contribute to LEED Materials and Resources categories and BREEAM Construction Materials' and 'Responsible Sourcing' categories.
9 SunPower Maxeon DC panels are Cradle to Cradle Certified™ Bronze - www.c2ccertified.org/products/scorecard/e-series_x-series_solar_panels_-_sunpower_corporation. Cradle to Cradle Certified™ Bronze. Cradle to Cradle Certified™ is a certification mark licensed by the Cradle to Cradle Products Innovation Institute.
10 Standard Test Conditions (1000 W/m² irradiance, AM 1.5, 25° C). NREL calibration Standard: SOMS current, LACCS FF and Voltage.
11 Class C fire rating per IEC 61730.

Designed in USA
Made in Malaysia (Cells)
Assembled in Mexico (Module)

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

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