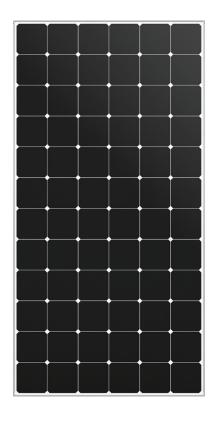
# SUNPOWER | MAXEON

### Fundamentally different, and better









# MAXEON 5 COM

POWER RANGE: 430-450 W | EFFICIENCY: Up to 22.2%

Hundreds of patents, decades of design and five cell generations have led to the new Maxeon 5 solar panel. Part of the recordsetting SunPower Maxeon product line, Maxeon 5 pushes the boundaries of solar innovation, reliability and sustainability.

SunPower Maxeon panels are world-renowned for their energy production and savings advantages that combine unmatched efficiency and reliability with an industry-leading warranty and an estimated 40-year useful life. 1,2,3,4

## Sunpower Maxeon Solar Cell Technology

- Proven technology across
  3.5 billion cells shipped
- Most efficient cell in commercial solar<sup>1</sup>
- Only solar cell with a solidmetal foundation, providing patented protection from breakage and corrosion



#### **Maximum Lifetime Energy and Savings**

The SunPower Maxeon 5 solar panel is designed to deliver 35% more energy in the same space over 25 years in real-world conditions such as partial shade and high temperatures.<sup>5,6,7</sup>

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

The 25-year SunPower Complete Confidence Panel Warranty is backed by testing and field data from more than 30 million SunPower Maxeon panels deployed—and a demonstrated warranty return rate of .005%.8



• Year 1 Minimum Warranted Power Output 98.0%

• Maximum Annual Degradation 0.25%

Year 25 Minimum Warranted Power Output
 92.0%

#### Leadership in Sustainable Manufacturing

SunPower Maxeon panels—and the facilities in which they are produced—raise the bar for environmental and social responsibility. Included below are highlights of the certifications and recognition received by some of our products and manufacturing sites.







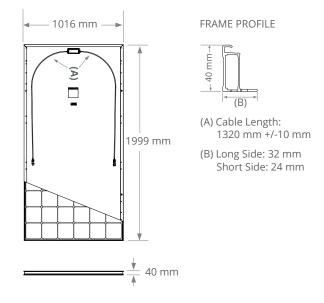


Electrical Data			
	SPR-MAX5-450-COM	SPR-MAX5-440-COM	SPR-MAX5-430-COM
Nominal Power (Pnom) <sup>10</sup>	450 W	440 W	430 W
Power Tolerance	+5/0%	+5/0%	+5/0%
Panel Efficiency	22.2%	21.7%	21.2%
Rated Voltage (Vmpp)	44.0 V	43.4 V	42.7 V
Rated Current (Impp)	10.2 A	10.2 A	10.1 A
Open-Circut Voltage (Voc) (+/-3%)	51.9 V	51.69 V	51.2 V
Short-Circuit Current (lsc) (+/-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		
Standard Tests <sup>11</sup>	IEC 61215, IEC 61730	
Quality Management Certs	ISO 9001:2015, ISO 14001:2015	
Ammonia Test	IEC 62716	
Desert Test	IEC 60068-2-68, MIL-STD-810G	
Salt Spray Test	IEC 61701 (maximum severity)	
PID Test	1500 V: IEC 62804	
Available Listing	TUV	

Sustainability Tests and Certifications		
IFLI Declare Label	First solar panel labeled for ingredient transparency and LBC-compliance. <sup>11</sup>	
Cradle to Cradle Certified™ Bronze	First solar panel line certified for material health, water stewardship, material reutilization, renewable energy & carbon management, and social fairness. <sup>12</sup>	
Green Building Certification Contribution	Panels can contribute additional points toward LEED and BREEAM certifications. <sup>13</sup>	
EHS Compliance	RoHS, OHSAS 18001:2007, REACH SVHC-201	

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 antireflective Junction Box IP-68, Stäubli (MC4), 3 bypass diodes Weight 21.6 kg Max. Load Wind: 2400 Pa. 244 kg/m<sup>2</sup> front & back Snow: 5400 Pa, 550 kg/m<sup>2</sup> front Frame Class 2 silver anodized



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 Module 40-Year Useful Life," Useful life is 99 out of 100 panels operating at more than 70% of rated power.
- 5 SunPower 450 W, 22.2% efficient, compared to a Conventional Panel on same-sized arrays (370 W mono PERC,
- 19% efficient, approx. 2 m²).
- 6 PV Evolution Labs "SunPower Shading Study," 2013. Compared to a conventional front contact panel.
- 7 Based on temperature coefficients provided in manufacturer datasheets 2019.
- 8 SunPower panels are less than 50 dppm, or 0.005%, on over 15 million panels shipped Source: SunPower White Paper, 2019.
- 9 Standard Test Conditions (1000 W/ $m^2$  irradiance, AM 1.5, 25° C). NREL calibration Standard: SOMS current, LACCS FF and Voltage.
- 10 Class C fire rating per IEC 61730.
- 11 SunPower Maxeon (DC) panels first received the International Living Future Institute Declare Label in 2016.
- 12 SunPower Maxeon (DC) panels are Cradle to Cradle Certified™ Bronze www.c2ccertified.org/products/score-card/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.
- 13 Maxeon panels can contribute to LEED Materials and Resources categories and BREEAM certification.

Designed in U.S.A. by SunPower Corporation

Made in Malaysia (Cells)

Assembled in Mexico (Modules)

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

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

