



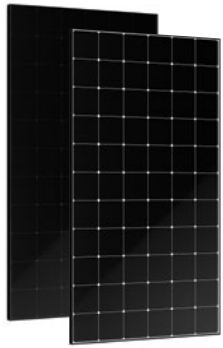
SunPower Maxeon Solar Panels

**Powerful. Reliable.
Sustainable.**

SUNPOWER

MAXEON

A SAFER INVESTMENT FOR YOUR HOME



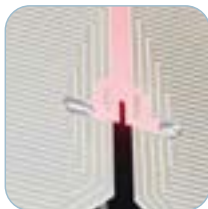
SUNPOWER
MAXEON

Choosing a solar panel can be a once-in-a-lifetime decision, but only if you invest in a technology built and tested for the long term.

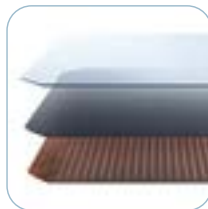
The problem?

Standard solar panels are produced and tested in ideal lab conditions—equivalent to noon on a clear summer day. Your panels will need to power through all types of weather conditions to provide the energy you need.

Maxeon panels are designed for ultimate durability



Uninterrupted energy flow from redundant cell connections that protect against temperature swings and moisture-induced corrosion



Reinforced cell protection from encapsulant layer designed to absorb stresses and prevent dead zones from forming



Extreme crack resistance from solid metal foundation



Optional factory-integrated microinverter operates independently for added safety

With SunPower Maxeon panels, you are protected from the most common failure points in standard solar

In addition to their durability, they are proven to perform better in shade from passing clouds or soiling built up over time. This protects your panels from developing hot-spots—an electrical failure that occurs when standard cells heat up and shade blocks their ability to create energy.

Invest with confidence, knowing that the reliability of your SunPower Maxeon panel is third-party verified as a Top Performer and backed by the industry's leading warranty.



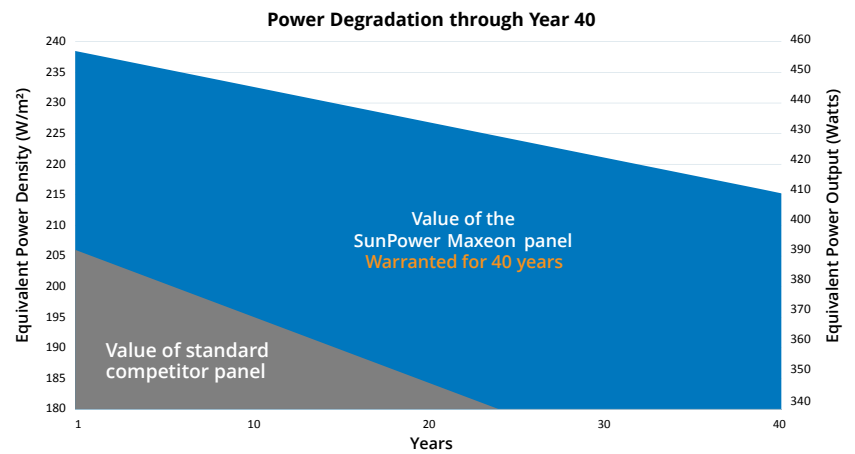
MORE ENERGY FOR YOUR MONEY

SunPower Maxeon panels begin creating more energy than standard solar panels on their very first day.

Each panel is designed to maximise power conversion from sunlight to electricity for your home by:

- **Operating at a lower temperature** to increase power production in hot, sunny conditions.
- **Capturing more sun in low light**² to ensure your panels are creating power earlier in the morning, later in the evening, and on cloudy days.

When coupled with an industry-leading 40-year warranty, SunPower Maxeon panels multiply in value and provide a better return on your solar investment.



SunPower Maxeon panels are warranted to maintain their efficiency and power output advantage for longer than standard panels.



AND A BETTER TOMORROW FOR ALL

SunPower Maxeon panels are lead-free and made with recyclable materials in our resource efficient facilities. Each panel benefits from third-party certifications so you do not have to sacrifice premium performance to make a good choice for the planet.



SunPower Maxeon solar panels.
The most sustainable choice in solar.

SUNPOWER



POWER

Highest warranted power output protection in the solar industry: 88.3% in year 40.



PRODUCT

Coverage for defects related to workmanship and materials for 40 years, versus the typical 12- to 25-year warranty of standard panels.



SERVICE

Repair, replacement or refund for any defective panel for 40 years, hassle free, with removal, shipping and installation included in applicable countries.

BACKED BY THE MOST COMPREHENSIVE WARRANTY³

The SunPower Maxeon 40 Year Warranty provides industry-leading power, product and service coverage. Each SunPower Maxeon panel is manufactured with the absolute confidence to deliver more energy,¹ reliability and savings³ over time—backed by extensive third-party testing and field data from more than 33 million panels deployed worldwide.



	SUNPOWER MAXEON	Standard panel warranties
	With Site Owner Registration ⁴	
Product Defects		
Panel	40 Years	12 to 25 Years
Power		
Year 1	98.0%	~97.5%
Annual Decline	0.25%	~0.4 to 0.7%
Year 25	92.0%	~87.9 to 80.7%
Year 40	88.3%	Not Covered
Service⁵		
Removal – Old Panel	Yes	Maybe
Shipping – Old Panel	Yes	Maybe
Shipping – New Panel	Yes	Maybe
Installation – New Panel	Yes	Maybe



Learn more about our warranty.

1. 5% more energy on average from the same rated watts compared to standard mono PERC panels (Based on PVSYSY simulations in typical climates; PAN files are third-party verified; compared to leading mono PERC panel).
2. National Renewable Energy Lab spectral response measurements.
3. SunPower Maxeon solar panels are backed up by a 40-year warranty. Subject to terms and conditions. Not available in all countries. Jordan, D. et. al. "Robust PV Degradation Methodology and Application." PVSC 2019.
4. 40-year warranty is not available in all countries and requires registration, otherwise our 25-year warranty applies.
5. Service availability varies by country and installation provider.

© 2022 Maxeon Solar Technologies, Ltd. SUNPOWER and MAXEON are registered trademarks in certain countries. View warranty, patent and trademark information at maxeon.com/legal.



**40 YEARS OF
LASTING ENERGY.**

SUSTAINABLE INNOVATION. IT'S WHAT WE DO.



Technology with Purpose

Now you can have the most sustainable solar panels on the market without sacrificing performance. SunPower Maxeon solar panels are lead-free and sustainably produced. No wonder our panels have multiple third-party certifications for sustainable manufacturing. And with an incredible 40-year warranty, they won't need to be replaced for decades, greatly reducing waste.

Maxeon Solar Technologies

We are the global leader in solar innovation. With 35 years of boundary-pushing DNA, we design, manufacture and sell world-renowned SunPower solar panels in more than 100 countries. Every day, innovators, pioneers, homeowners and businesses put their trust in our advanced solar technology.

Powering Positive Change

Together, we can combat climate change. That's why our solar panels are specially designed to give you the power to make a positive impact. Our unique, industry-leading solar technology makes it easy for everyone to switch to solar, and start on the path to a zero-carbon world.

Trusted Partner Network

We strongly believe in the collective power of communities. Our vast global network of more than 1,200 sales and installation partners will design your system to your unique needs and ensure it meets the highest quality standards. Without them, we're just scientists and engineers, designers and dreamers. With them, we are a catalyst for positive change as they bring our solar products to life.

SUNPOWER
FROM MAXEON SOLAR TECHNOLOGIES

sunpower.maxeon.com

MAXEON 6 AC SOLAR PANEL

410-425 W | Up to 22.0% Efficient

 Factory-integrated
AC microinverter



Black backsheet,
black frame

More Lifetime Energy

Designed to maximise energy generation through leading efficiency, enhanced performance in high temperatures, and higher energy conversion in low-light conditions like mornings, evenings and cloudy days.

Uncompromising Reliability

Engineered to power through all types of weather conditions with crack-resistant cells and reinforced connections that protect against fatigue and corrosion. Each panel's microinverter enables independent panel operation to mitigate the impact of shade while improving system performance.



Superior Sustainability

Clean ingredients, responsible manufacturing, and lasting energy production for 40 years make SunPower Maxeon panels the most sustainable choice in solar.

SUNPOWER



The Industry's Longest Warranty

SunPower Maxeon panels are covered by a 40-year warranty¹ backed by extensive third-party testing and field data from more than 33 million panels deployed worldwide.

Product and power coverage	40 Years
Year 1 minimum warranted output	98.0%
Maximum annual degradation	0.25%
Microinverter limited product warranty covered by Enphase	25 Years



Learn more about the SPR-MAX6-XXX-BLK-E3-AC
sunpower.maxeon.com

MAXEON 6 AC POWER: 410-425 W | EFFICIENCY: Up to 22.0%

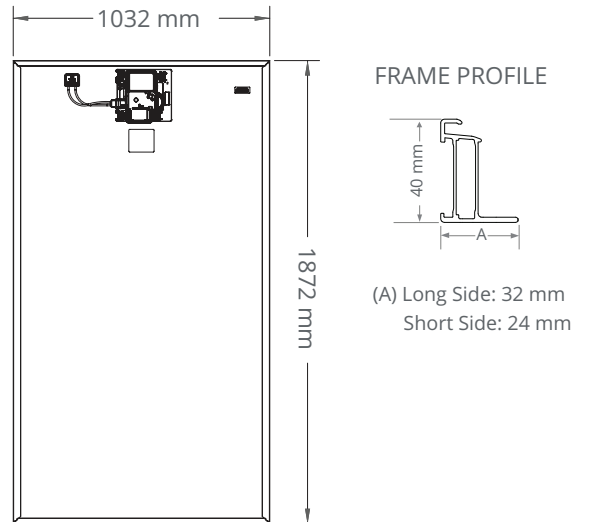
AC Electrical Data	
Inverter Model: IQ 7A	@230 VAC
Peak Output Power	366 VA
Max. Continuous Output Power	349 VA
Nom. (L-N) Voltage/Range	219 – 264 V
Max. Continuous Output Current	1.52 A
Max. Units per 20 A (L-N) Branch Circuit	10
Weighted Efficiency ²	96.5%
Nom. Frequency	50 Hz
Extended Frequency Range	45-55 Hz
AC Short Circuit Fault Current Over 3 Cycles	5.8 A rms
Overvoltage Class AC Port	III
AC Port Backfeed Current	18 mA
Power Factor Setting	1.0
Power Factor (adjustable)	0.8 lead. / 0.8 lag.

DC Power Data			
	SPR-MAX6-425- BLK-E3-AC	SPR-MAX6-415- BLK-E3-AC	SPR-MAX6-410- BLK-E3-AC
Nom. Power ³ (Pnom)	425 W	415 W	410 W
Power Tol.	+5/0%	+5/0%	+5/0%
Module Efficiency	22.0%	21.5%	21.2%
Temp. Coef. (Power)	-0.29%/°C		
Shade Tol.	Integrated module-level max. power point tracking		

Mechanical Data	
Solar Cells	66 Maxeon 6 Cells
Tempered Glass	High-transmission tempered anti-reflective
Environmental Rating	Microinverter Outdoor rated - IP67 (UL: NEMA type 6)
Frame	Class 1 black anodized
Weight	21.8 kg

Tested Operating Conditions	
Operating Temp.	-40°C to +60°C
Max. Ambient Temp.	50°C
Relative Humidity	4% to 100% (Condensing)
Max. Altitude	2000 m
Design Load ⁴	Wind: 3600 Pa, 367 kg/m ² back Snow: 5400 Pa, 551 kg/m ² front
Impact Resistance	25 mm diameter hail at 23 m/s
Microinverter enclosure	Class II double-insulated, corrosion resistant polymeric enclosure

Warranties, Certifications (Pending) and Compliance	
Panel Warranties ¹	<ul style="list-style-type: none"> 40-year limited power warranty 40-year limited product warranty
Microinverter Warranty	<ul style="list-style-type: none"> 25-year limited product warranty covered by Enphase warranty⁵
Certifications and Compliance	<ul style="list-style-type: none"> IEC 61215, 617306 IEC 62109-1, 62109-2 IEC 61000-6-3 AS4777.2, RCM IEC/ EN 50549-1:2019, G98/G99 VDE-AR-N-4105
Quality Management Certs	ISO 9001:2015, ISO 14001:2015
PID Test	1000 V: IEC 62804
LeTID Test	Draft version IEC 61215 ⁷
Available listing	TUV ⁶ , EnTest
Green Building Certification contribution	Panels can contribute additional points towards LEED and BREEAM certifications
EHS Compliance	RoHS, OHSAS 18001:2007, REACH SVHC-201



1 40-year warranty is not available in all countries or all installations and requires registration, otherwise our 25-year warranty applies. Service availability varies by country and installation provider.
 2 Tested per EN 50530 (EU).
 3 Standard Test Conditions (1000 W/m² irradiance, AM 1.5, 25°C). NREL calibration standard: SOMS current, LACCS FF and voltage. All DC voltage is fully contained within the module.
 4 Safety factor 1.5 included.
 5 AC modules shall be connected to Enphase Monitoring hardware (ENVOY) to enable Enphase product warranty.
 6 Refer to the DC module, Class C fire rating per IEC 61730.
 7 Panels degraded 0% in extended LeTID testing conducted by PVEL. Test report R10124977G-1,2020.



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

Made in Malaysia (Cells)
 Assembled in Malaysia (Module)
 Specifications included in this datasheet are subject to change without notice.
 ©2022 Maxeon Solar Technologies. All Rights Reserved.
 View warranty, patent and trademark information at maxeon.com/legal.

SUNPOWER
 FROM MAXEON SOLAR TECHNOLOGIES

544444 REV A / A4_EN
 Publication Date: January 2022

MAXEON 6 AC SOLAR PANEL

420-440 W | Up to 22.8% Efficient

 Factory-integrated
AC microinverter



White backsheet,
black frame

More Lifetime Energy

Designed to maximise energy generation through leading efficiency, enhanced performance in high temperatures, and higher energy conversion in low-light conditions like mornings, evenings and cloudy days.

Uncompromising Reliability

Engineered to power through all types of weather conditions with crack-resistant cells and reinforced connections that protect against fatigue and corrosion. Each panel's microinverter enables independent panel operation to mitigate the impact of shade while improving system performance.



Superior Sustainability

Clean ingredients, responsible manufacturing, and lasting energy production for 40 years make SunPower Maxeon panels the most sustainable choice in solar.

SUNPOWER



The Industry's Longest Warranty

SunPower Maxeon panels are covered by a 40-year warranty¹ backed by extensive third-party testing and field data from more than 33 million panels deployed worldwide.

Product and power coverage	40 Years
Year 1 minimum warranted output	98.0%
Maximum annual degradation	0.25%
Microinverter limited product warranty covered by Enphase	25 Years



Learn more about the SPR-MAX6-XXX-E3-AC
sunpower.maxeon.com



MAXEON 6 AC POWER: 420-440 W | EFFICIENCY: Up to 22.8%

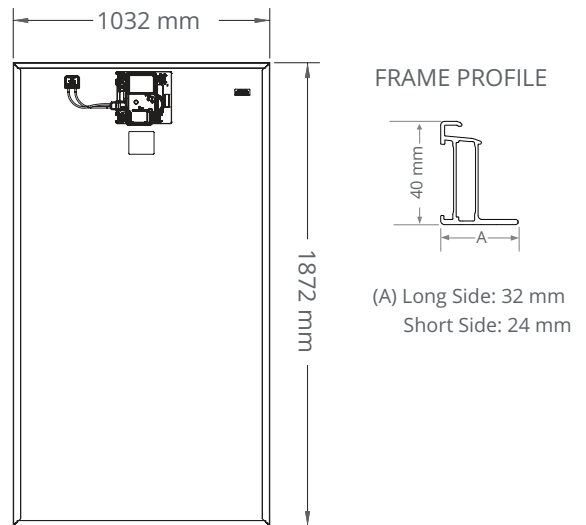
AC Electrical Data	
Inverter Model: IQ 7A	@230 VAC
Peak Output Power	366 VA
Max. Continuous Output Power	349 VA
Nom. (L-N) Voltage/Range	219 – 264 V
Max. Continuous Output Current	1.52 A
Max. Units per 20 A (L-N) Branch Circuit	10
Weighted Efficiency ²	96.5%
Nom. Frequency	50 Hz
Extended Frequency Range	45-55 Hz
AC Short Circuit Fault Current Over 3 Cycles	5.8 A rms
Overvoltage Class AC Port	III
AC Port Backfeed Current	18 mA
Power Factor Setting	1.0
Power Factor (adjustable)	0.8 lead. / 0.8 lag.

DC Power Data				
	SPR-MAX6-440-E3-AC	SPR-MAX6-435-E3-AC	SPR-MAX6-425-E3-AC	SPR-MAX6-420-E3-AC
Nom. Power ³ (Pnom)	440 W	435 W	425 W	420 W
Power Tol.	+5/0%	+5/0%	+5/0%	+5/0%
Module Efficiency	22.8%	22.5%	22.0%	21.7%
Temp. Coef. (Power)	-0.29%/°C			
Shade Tol.	Integrated module-level max. power point tracking			

Mechanical Data	
Solar Cells	66 Maxeon 6 Cells
Tempered Glass	High-transmission tempered anti-reflective
Environmental Rating	Microinverter Outdoor rated - IP67 (UL: NEMA type 6)
Frame	Class 1 black anodized
Weight	21.8 kg

Tested Operating Conditions	
Operating Temp.	-40°C to +60°C
Max. Ambient Temp.	50°C
Relative Humidity	4% to 100% (Condensing)
Max. Altitude	2000 m
Design Load ⁴	Wind: 3600 Pa, 367 kg/m ² back Snow: 5400 Pa, 551 kg/m ² front
Impact Resistance	25 mm diameter hail at 23 m/s
Microinverter enclosure	Class II double-insulated, corrosion resistant polymeric enclosure

Warranties, Certifications (Pending) and Compliance	
Panel Warranties ¹	<ul style="list-style-type: none"> 40-year limited power warranty 40-year limited product warranty
Microinverter Warranty	<ul style="list-style-type: none"> 25-year limited product warranty covered by Enphase warranty⁵
Certifications and Compliance	<ul style="list-style-type: none"> IEC 61215, 61730⁶ IEC 62109-1, 62109-2 IEC 61000-6-3 AS4777.2, RCM IEC/ EN 50549-1:2019, G98/G99 VDE-AR-N-4105
Quality Management Certs	ISO 9001:2015, ISO 14001:2015
PID Test	1000 V: IEC 62804
LeTID Test	Draft version IEC 61215 ⁷
Available listing	TUV ⁶ , EnTest
Green Building Certification contribution	Panels can contribute additional points towards LEED and BREEAM certifications
EHS Compliance	RoHS, OHSAS 18001:2007, REACH SVHC-201



1 40-year warranty is not available in all countries or all installations and requires registration, otherwise our 25-year warranty applies. Service availability varies by country and installation provider.
 2 Tested per EN 50530 (EU).
 3 Standard Test Conditions (1000 W/m² irradiance, AM 1.5, 25°C). NREL calibration standard: SOMS current, LACCS FF and voltage. All DC voltage is fully contained within the module.
 4 Safety factor 1.5 included.
 5 AC modules shall be connected to Enphase Monitoring hardware (ENVOY) to enable Enphase product warranty.
 6 Refer to the DC module, Class C fire rating per IEC 61730.
 7 Panels degraded 0% in extended LeTID testing conducted by PVEL. Test report R10124977G-1,2020.



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

Made in Malaysia (Cells)
 Assembled in Malaysia (Module)
 Specifications included in this datasheet are subject to change without notice.
 ©2022 Maxeon Solar Technologies. All Rights Reserved.
 View warranty, patent and trademark information at maxeon.com/legal.

SUNPOWER
 FROM MAXEON SOLAR TECHNOLOGIES

544435 REV A / A4_EN
 Publication Date: January 2022