

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

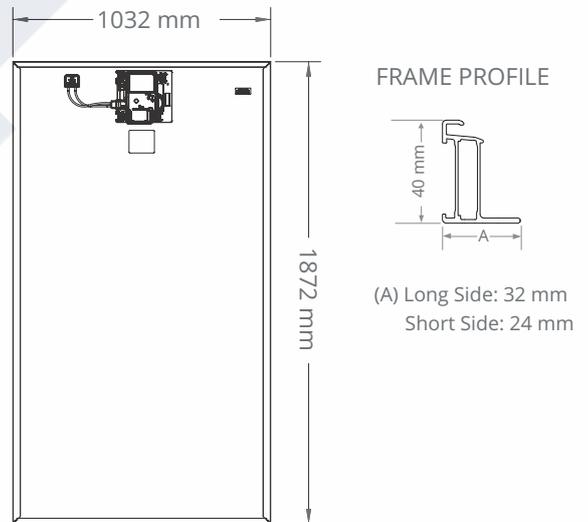
Tested Operating Conditions	
Operating Temp.	-40°C to +60°C
Max. Ambient Temp.	50°C
Relative Humidity	4% to 100% (Condensing)
Max. Altitude	2000 m
Design Load ⁴	Wind: 3600 Pa, 367 kg/m ² back Snow: 5400 Pa, 551 kg/m ² front
Impact Resistance	25 mm diameter hail at 23 m/s
Microinverter enclosure	Class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

Warranties, Certifications 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.

Made in Malaysia (Cells)
 Assembled in Malaysia (Module)
 Specifications included in this datasheet are subject to change without notice.
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Please read the safety and installation instructions.
 Visit www.sunpower.maxeon.com/int/InstallGuideACModules
 Paper version can be requested through techsupport.ROW@maxeon.com



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