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 crackresistant 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.



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 25 Years covered by Enphase



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.		

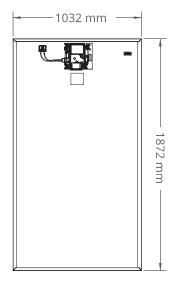
DC Power Data			
	SPR-MAX6-425-	SPR-MAX6-415-	SPR-MAX6-410-
	BLK-E3-AC	BLK-E3-AC	BLK-E3-AC
Nom. Power ³ (Pnom)	425 W	415 W	410 W
Power Tol.	+5/0%	+5/0%	+5/0%
Module Efficiency	22.0%	21.5%	21.2%
Temp. Coef. (Power)		−0.29%/°C	
Shade Tol.	Integrated module-level max. power point tracking		

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/m² back	
	Snow: 5400 Pa, 551 kg/m² front	
Impact Resistance	25 mm diameter hail at 23 m/s	
Microinverter	Class II double-insulated, corrosion	
enclosure	resistant polymeric enclosure	

Warranties, Certifications (Pending)			
and Compliance			
Panel Warranties ¹	 40-year limited power warranty 40-year limited product warranty 		
Microinverter Warranty	· 25-year limited product warranty covered by Enphase warranty ⁵		
	· IEC 61215, 617306 · IEC 62109-1, 62109-2		
Certifications and	· IEC 61000-6-3		
Compliance	· 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	Panels can contribute additional points		
Certification	towards LEED and BREEAM		
contribution	certifications		
EHS Compliance	RoHS, OHSAS 18001:2007, REACH SVHC-201		





(A) Long Side: 32 mm Short Side: 24 mm



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



^{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/ m^2 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.