

# maxeon

SPR-MAX3-XXX-BLK-R

## MAXEON 3 SOLAR PANEL

405–420 W | Up to 22.2% Efficient



Ideal for residential applications



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 Durability

Engineered to power through all types of weather conditions with crack-resistant cells and reinforced connections that protect against fatigue and corrosion, to an electrical architecture that mitigates the impact of shade and prevents hot-spot formation.



### Superior Sustainability

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



### The Industry's Longest Warranty

Maxeon panels are covered by a 40-year warranty<sup>1</sup> 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%

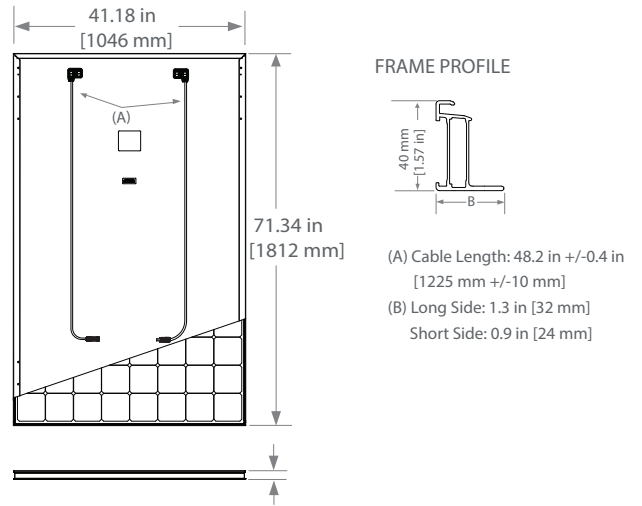


**MAXEON 3 POWER: 405–420 W | EFFICIENCY: Up to 22.2%**

Electrical Data				
	SPR-MAX3-420-BLK-R	SPR-MAX3-415-BLK-R	SPR-MAX3-410-BLK-R	SPR-MAX3-405-BLK-R
Nominal Power (P <sub>nom</sub> ) <sup>2</sup>	420 W	415 W	410 W	405 W
Power Tolerance	+5/0%	+5/0%	+5/0%	+5/0%
Panel Efficiency	22.2%	21.9%	21.6%	21.4%
Rated Voltage (V <sub>mpp</sub> )	35.5 V	35.3 V	35.1 V	34.9 V
Rated Current (I <sub>mpp</sub> )	11.82 A	11.75 A	11.68 A	11.61 A
Open-Circuit Voltage (V <sub>oc</sub> )	40.7 V	40.7 V	40.7 V	40.7 V
Short-Circuit Current (I <sub>sc</sub> )	12.65 A	12.64 A	12.63 A	12.62 A
Max. System Voltage	1000 V UL & 1000 V IEC			
Maximum Series Fuse	25 A			
Power Temp Coef.	-0.27% / °C			
Voltage Temp Coef.	-0.236% / °C			
Current Temp Coef.	0.058% / °C			

Operating Condition And Mechanical Data	
Temperature	-40°F to +185°F (-40°C to +85°C)
Impact Resistance	1 inch (25 mm) diameter hail at 52 mph (23 m/s)
Solar Cells	112 Monocrystalline Maxeon Gen 3
Tempered Glass	High-transmission tempered anti-reflective
Junction Box	IP-68, Stäubli (MC4), 2 bypass diodes
Weight	46.7 lbs (21.2 kg)
Max. Load <sup>6</sup>	Wind: 50 psf, 2400 Pa, 244 kg/m <sup>2</sup> back Snow: 112 psf, 5400 Pa, 550 kg/m <sup>2</sup> front
Frame	Class 1 black anodized (highest AAMA rating)

Certifications and Compliance	
Standard Tests <sup>3</sup>	UL 61730, IEC 61215, IEC 61730 (Pending)
Quality Management Certs	ISO 9001:2015, ISO 14001:2015
Ammonia Test	IEC 62716 (Pending)
Desert Test	IEC 60068-2-68, MIL-STD-810G (Pending)
Salt Spray Test	IEC 61701 (maximum severity) (Pending)
PID Test	1000 V: IEC 62804 (Pending)
Available Listings	UL, TUV
IFLI Declare Label	First solar panel labeled for ingredient transparency and LBC-compliance. <sup>4</sup>
Cradle to Cradle Certified™ Silver	First solar panel line certified for material health, water stewardship, material reutilization, renewable energy & carbon management, and social fairness. <sup>5</sup>
Green Building Certification Contribution	Panels can contribute additional points toward LEED and BREEAM certifications.
EHS Compliance	RoHS, ISO 45001:2018, Recycle Scheme, REACH SVHC-163



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 Standard Test Conditions (1000 W/m<sup>2</sup> irradiance, AM 1.5, 25° C). NREL calibration Standard: SOMS current, LACCS FF and Voltage.

3 Type 2 fire rating per UL 61730, Class C fire rating per IEC 61730.

4 Maxeon DC panels first received the International Living Future Institute Declare Label in 2016.

5 Maxeon DC panels are Cradle to Cradle Certified™ Silver -

[www.c2ccertified.org/products/scorecard/maxeon\\_solar\\_panels\\_-\\_maxeon\\_corporation](http://www.c2ccertified.org/products/scorecard/maxeon_solar_panels_-_maxeon_corporation). Cradle to Cradle Certified™ is a certification mark licensed by the Cradle to Cradle Products Innovation Institute.

6 As per IEC 61215-2016 tested and certified.

Made in Philippines (Cells)  
Assembled in Mexico (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](http://maxeon.com/legal).

